**Institute for Educational Research, Belgrade, Serbia**

29th International Scientific Conference
"Educational Research and School Practice"

# TOWARDS A MORE EQUITABLE EDUCATION: FROM RESEARCH TO CHANGE

## BOOK OF PROCEEDINGS

**Editors**
Mladen RADULOVIĆ
Marija TRAJKOVIĆ

December 1st, 2023
Faculty of Philosophy, Belgrade

# PROGRAM BOARD

## Chairman of the Program Board

**Mladen Radulović, PhD,** Research Associate, Institute for Educational Research, Belgrade, Serbia

## Members

- **Jovan Miljković, PhD, Associate Professor**, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia
- **Zorica Šaljić, PhD, Associate Professor,** Faculty of Philosophy, University of Belgrade, Belgrade, Serbia
- **Vera Spasenović, PhD, Full Professor**, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia
- **Isidora Jarić, PhD, Full Professor**, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia
- **Tina Štemberger, PhD, Associate Professor**, Faculty of Education, University of Primorska, Koper, Slovenia
- **Silva Bratož, PhD, Associate Professor**, Faculty of Education, University of Primorska, Koper, Slovenia
- **Sergey Ivanovič Kudinov, PhD, Full Professor**, Faculty of Philology, The Peoples' Friendship University of Russia, RUDN University, Moscow, the Russian Federation
- **Olga Borisovna Mikhailova, PhD, Associate Professor**, Faculty of Philology, The Peoples' Friendship University of Russia, RUDN University, Moscow, the Russian Federation
- **Nebojša Macanović, PhD, Associate Professor**, Faculty of Political Science, University of Banja Luka, Banja Luka, Bosnia and Herzegovina
- **Branislava Baranović, PhD, Senior Scientist**, Institute for Social Research, Zagreb, Croatia
- **Suzana Simonovska, PhD, Full Professor**, Faculty of Philosophy, Ss. Cyril and Methodius University, Skopje, North Macedonia

- **Tatjana Novović, PhD, Full Professor**, Faculty of Philosophy, University of Montenegro, Nikšić, Montenegro
- **Ákos Bocskor, PhD, Postdoctoral Researcher**, Institute of Sociology, Czech Academy of Sciences, Prague, Czech Republic
- **Milja Vujačić, PhD, Senior Research Associate**, Institute for Educational Research, Belgrade, Serbia
- **Rajka Đević, PhD, Research Associate**, Institute for Educational Research, Belgrade, Serbia
- **Nikoleta Gutvajn, PhD, Senior Research Associate**, Institute for Educational Research, Belgrade, Serbia
- **Ivana Đerić, PhD, Senior Research Associate**, Institute for Educational Research, Belgrade, Serbia
- **Marina Kovačević Lepojević, PhD, Research Associate**, Institute for Educational Research, Belgrade, Serbia
- **Dragana Gundogan, PhD, Research Associate**, Institute for Educational Research, Belgrade, Serbia

# ORGANIZATIONAL BOARD

### Chairwoman of the Organizational Board

**Marija Trajković, MA, Research Assistant,** Institute for Educational Research, Belgrade, Serbia

### Members

- **Ana Drobac, MA, Research Trainee**, Institute for Educational Research, Belgrade, Serbia
- **Branka Radovanović, MA, Teaching Assistant**, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia
- **Jovana Katić, MA, Research Trainee**, Institute of Pedagogy and Andragogy Faculty of Philosophy, University of Belgrade, Belgrade, Serbia

- **Dragana Gagić, MA, Research Trainee,** Institute of Pedagogy and Andragogy Faculty of Philosophy, University of Belgrade, Belgrade, Serbia
- **Aleksandra Miljković, Volunteer**, Institute for Educational Research, Belgrade, Serbia

# ORGANIZERS

The Institute for Educational Research (Belgrade, Serbia) in cooperation with the Institute of Pedagogy and Andragogy at the Faculty of Philosophy, University of Belgrade (Belgrade, Serbia), the Faculty of Education, University of Primorska (Koper, Slovenia), and the Faculty of Philology, Peoples' Friendship University of Russia, RUDN University (Moscow, the Russian Federation).

# CONTENT

## ACTORS IN THE EDUCATIONAL PROCESS AS CREATORS
## OF A MORE EQUITABLE EDUCATION

## CLASSROOM AND SCHOOL STRATEGIES FOR PROMOTING EQUITY

## CHALLENGES OF INCLUSIVE EDUCATION

## DEFINING EQUITABLE EDUCATION POLICIES

# PLENARY

# MERITOCRATIC RATIONALITY AND EDUCATION: TENSIONS, PROBLEMS, & CHALLENGES

**Mitja Sardoč**[1]

*Educational Research Institute, Ljubljana, Slovenia*

## Introduction

This presentation aims to address some of the most pressing controversies associated with the idea of equality of educational opportunity and its commitment to a fair allocation of advantaged social positions. In particular, it critically examines the 'standard' egalitarian conception of distributive justice based on the meritocratic equation and its dedication to fairness. Despite its commitment to a fairer distributive arrangement of advantaged social positions, the radical egalitarian conception of distributive justice ultimately fails to articulate a conception of equality of opportunity that would incorporate talents into the meritocratic equation.

## Meritocratic Rationality and Its Problems

Egalitarian accounts of distributive justice are premised on the assertion that unchosen features of our circumstances clash with the commitment to a fair allocation of advantaged social positions. The legitimacy of existing distributive arrangements and the overall fairness of the institutional framework of contemporary societies have been built upon a commitment to ensuring equal opportunities for all. This principled commitment has come to dominate public policy, including education (Brighouse, 2010), housing (Chetty, 2021), employment, health and healthcare (Daniels, 1985) as well as development-oriented mechanisms within the leading intergovernmental organizations. Moreover, a commitment to a merit-based conception of distributive justice has played a central role in major public policy initiatives and educational reforms

---

1    mitja.sardoc@guest.arnes.si

related to desegregation, antidiscrimination, and inclusion. Its historical legacy as one of the most important emancipatory ideas of the 20th century (e.g., the Civil Rights Movement), coupled with an appealing rhetoric, has led to an overall acceptance of the merit-based conception of distributive justice as a default mechanism for allocating advantaged social positions.

The central distinction advanced as a part of this commitment to fairness has been that of legitimate (*morally acceptable*) and illegitimate (*morally unacceptable*) sources of inequality. The key characteristic of this distinction is that morally arbitrary factors such as one's socio-economic background and social class should not affect the distribution of advantaged social positions. In fact, any distributive scenario that runs counter to this arrangement is said to be illegitimate and the resulting outcome unfair. The legitimacy of existing distributive arrangements and the overall fairness of the institutional framework of contemporary societies have been built upon the meritocratic equation [IQ + effort = *merit*] as articulated by Michael Young in *The Rise of the Meritocracy* (1958).

Talents constitute one of the factors challenging this 'standard' conception of equality of opportunity and its commitment to fairness. Given that holding a particular talent is arbitrary from a moral perspective, some proponents of egalitarianism (e.g., Segall, 2013) have started to perceive talents as a form of unfair advantage. On this basis, they have concluded that individuals may not deserve the results of the 'lottery of birth' and have equated talents (as a form of natural inequality) with social inequality.

Nevertheless, this understanding of fairness has multiple drawbacks, including a reductionist conception of talents' anatomy and a distorted characterization of their overall distributive value, a flawed distinction between natural and social factors affecting the distribution of advantaged social positions, and a problematic understanding of the relationship between the two factors within the meritocratic equation (talent and effort). Ergo, the 'standard' merit-based allocation of advantaged social positions and its promise of equality of opportunity are neither unproblematic nor unquestionable. Its alleged inconsistency with a mutual advantage conception of distributive justice and failure to live up to its alleged emancipatory potential have made this distributive mechanism prone to a range of criticisms.

# Talents, Distributive Justice, and Fairness

For much of its history, the notion of talent has been associated with the idea of 'careers open to talent'. Its emancipatory promise of upward social mobility based on individual merit has ultimately radically transformed the distribution of advantaged social positions and has had a lasting influence on the very idea of social status itself. Besides being inextricable linked to equality of opportunity, the notion of talent has come to be associated with the most pressing contemporary issues as diverse as the 'war for talent', brain drain, higher education, immigration policies (Shachar, 2013), talent management (Collings et al., 2017), global meritocracy, the 'excellence gap', the 'ownership' of natural resources (Armstrong, 2017), and ability taxation. Talents have become a central notion in various governmental policies, including the UK's Office for Talents initiative, China's 1000 Talents program, and Finland's Talent Boost Program. In fact, talents play a pivotal role in the higher education knowledge economy with the mobility of scientific talent aiming to attract and retain the 'best and the brightest'. Ultimately, a number of metaphors (e.g., 'war for talent'), buzzwords ('aspiration nation'), slogans, and other thought-terminating clichés are a testament to the importance of talents in global public policy (including education).

Nevertheless, despite its centrality in theoretical discussions over distributive justice (Harel Ben Shahar, 2023), public policy initiatives as well as the entertainment industry (Robb & Archer, 2022), the notion of talent has largely remained at the fringes of scholarly interest to this very day. Unlike concepts traditionally associated with equality of opportunity and distributive justice in general, the notion of talent has received only limited examination (Sardoč & Deželan, 2021). This has led to some of the most trenchant criticisms of meritocracy, including the 'opportunity gap' (Putnam, 2015), the 'meritocracy trap' (Markovits, 2019), and 'meritocratic hubris' (Sandel, 2020).

Based on this evaluation, the engagement with a merit-based allocation and distribution of advantaged social positions has been approached via three separate scenarios. The first scenario aims to address the problems associated with meritocracy with more meritocracy (Wooldridge, 2021). Its basic assumption is that merit-based conceptions of equality of opportunity represent an important step away from mechanisms of allocating advantaged social positions such as hereditary titles and

related privileges, nepotism, clientelism, and corruption and consequently constitute the best possible approximation of a fair distribution of advantaged social positions.

The second scenario questions the overall fairness of the meritocratic equation (IQ + effort = merit) articulated by Young in *The Rise of the Meritocracy*. He offers two diametrically opposite solutions to problems generated by such a conception of merit. Their common goal is to change the meritocratic equation. One possible alternative is the idea of moral arbitrariness and the related assumption of the supposed unfairness of factors or circumstances over which individuals have no control. Recent developments in this area of research (notably, happy accident egalitarianism, e.g., Arneson, 2015; Cohen, 1989; Lippert-Rasmussen, 2016) have particularly focused on the dissociation between legitimate (morally acceptable) and illegitimate (morally unacceptable) forms of inequality.

Thus, proponents of radical egalitarianism (e.g., Segall, 2013) point out that individuals do not choose characteristics such as their socio-economic status, gender, and nationality, nor do they choose the talents they possess. Morally arbitrary factors undermine the legitimacy of existing distributive scenarios, as any outcome related to inequality arising from such arrangements could be argued to be unfair. As Larry Temkin points out, this idea is based on the assumption that it is unfair "when one person is worse off than another through no fault or choice of her own" (Temkin, 1993, p. 13). It is this move towards a fairer conception of distributive justice that challenges the standard egalitarian conceptions of merit. According to this scenario, no morally arbitrary factors should be included in the meritocratic equation. A radical egalitarian conception of fairness equally disqualifies an individuals' socio-economic status, race, gender as well as talents, since holding a particular talent is a part of the 'lottery of birth'. Therefore, the idea of moral arbitrariness is of critical importance for this scenario.

The third, perhaps most radical scenario advocates the abandonment of equality of opportunity as equality of opportunity and social inequality are not mutually exclusive. Kwame Anthony Appiah's article on Michael Young highlights that "[s]orting people by 'merit' will do nothing to fix inequality" (Appiah, 2018). Hence, it is not surprising that most – at least ostensibly – progressive initiatives, which constitute the basic motivational impulse behind various changes and related reforms in the 'brave new world' of the neoliberal social order as the dominant form of political rationality (Sardoč, 2022), often turn out to be their opposite.

# The Triangulation of Merit

The issues explicated above clearly indicate the neglect or outright ignoring of some of the crucial questions associated with merit-based allocation of advantaged social positions (e.g., talents) and equality of educational opportunity in general. Ultimately, these controversies challenge the overall fairness of a merit-based allocation and distribution of advantaged social positions. Therefore, it comes as no surprise that merit-based conceptions of equality of opportunity have come to be justified as 'lesser evils' popularized by Winston Churchill's depiction of democracy as being the worst form of government (except for all the others). Based on this interpretation, merit-based conceptions of equality of opportunity would prove to be the worst form of distribution of advantaged social positions (except for all the others). Hence, it is our task to look for a conceptually coherent account of equality of educational opportunity that would aim to sidestep the most pressing controversies plaguing the 'standard' egalitarian conception of distributive justice.

**Keywords:** education, equality of opportunity, meritocratic (in)equality, human capital, distributive justice

# References

Appiah, K. A. (2018, October 19). The myth of meritocracy: who really gets what they deserve? *The Guardian*. https://www.theguardian.com/news/2018/oct/19/the-myth-of-meritocracy-who-really-gets-what-they-deserve

Armstrong, C. (2017). *Justice & Natural Resources: An Egalitarian Theory*. Oxford University Press.

Arneson, R. (2015). Equality of opportunity. *Stanford Encyclopedia of Philosophy*.

Brighouse, H. (2010). Educational Equality and School Reform. In G. Haydon (Ed.), *Educational Equality* (pp. 5–70). Continuum.

Chetty, R. (2021). Improving equality of opportunity: New insights from big data. *Contemporary Economic Policy*, *39*(1), 7–41. https://doi.org/10.1111/coep.12478

Cohen, G. A. (1989). On the currency of egalitarian justice. *Ethics*, *99*(4), 906–944. https://doi.org/10.1086/293126

Collings, D. G., Mellahi K., & Cascio, W. F. (Eds.) (2017). *The Oxford handbook of talent management*. Oxford University Press.

Daniels, N. (1985). *Just Health Care*. Cambridge University Press.

Harel Ben Shahar, T. (2023). Redefining ability, saving educational meritocracy. *The Journal of Ethics*, *27*, 263–283. https://doi.org/10.1007/s10892-023-09426-9

Lippert-Rasmussen, K. (2016). *Luck egalitarianism*. Bloomsbury Academic.

Markovits, D. (2019). *The meritocracy trap: How America's foundational myth feeds inequality, dismantles the middle class, and devours the elite*. Penguin.

Putnam, R. (2015). *Our kids: The American dream in crisis*. Simon & Schuster.

Robb, C. M., & Archer, A. (2022). Talent, skill and celebrity. *Ethical Perspectives*, *29*(1), 33–63.

Sandel, M. (2020). *The tyranny of merit:What's become of the common good*. Penguin.

Sardoč, M. (2022). The rebranding of neoliberalism. *Educational Philosophy and Theory*, *54*(11), 1727–1731. https://doi.org/10.1080/00131857.2020.1823212

Sardoč, M., & Deželan, T. (2021). Talents and distributive justice: Some tensions. *Educational Philosophy and Theory*, *53*(8), 768–776. https://doi.org/10.1080/00131857.2020.1808021

Segall, S. (2013). *Equality and opportunity*. Oxford University Press.

Shachar, A. (2013). Talent matters: Immigration policy-setting as a competitive scramble among jurisdictions. In T. Triadafilopoulos (Ed.), *Wanted and Welcome? Policies for Highly Skilled Immigrants in Comparative Perspective* (pp. 85–104). Springer.

Wooldridge, A. (2021). *The aristocracy of talent: How meritocracy made the modern world*. Penguin.

Young, M. (1958). *The rise of the meritocracy*. Routledge.

# SOCIAL-STATUS-RELATED INEQUALITIES AS A TOPIC IN CONTEMPORARY EDUCATIONAL RESEARCH[1]

**Mladen Radulović**[2]

*Institute for Educational Research, Belgrade, Serbia*

## Introduction

Throughout the history of sociology of education, the debate on educational inequalities and their effects on social reproduction has dominated scholars' attention (Gevric & Krib, 2012). Constructs such as social class, social status, socioeconomic status (often reduced to only 3 letters – SES), and cultural, social, or economic capital are at the core of what we know as sociology of education. These concepts emphasize different aspects of social status (such as cultural or economic capital) and reflect the perception of social status as more of a structural (class) or individual characteristic (SES). However, they all essentially deal with relations between educational practices and some aspects of *social status*, understood in this paper as "a hierarchical position in a vertical social order, an overall social rank, standing, and social worth" (Pakulski, 2006, p. 585).

## Research Questions and Methodology

In this paper, I intend to analyze: 1. the representation of papers on social-status-related inequalities in education in contemporary mainstream sociology and pedagogy, and 2. the extent to which these papers can provide clear implications for the reduction of social-status-related inequalities.

2   mladjaradulovic89@gmail.com

For the past several decades, *the debate on class* (i.e., the usefulness of this concept) has been highly prominent in sociology (Antonić, 2008; Cvejić, 2002). Hence, I wanted to assess the representation of papers dealing with social-status-related inequalities. The second research question was born out of researching papers dealing with cultural capital (Radulović, 2023). Namely, it would appear that numerous papers have confirmed the effects of cultural capital on different educational practices, but even though the importance of cultural capital for these practices has become evident, very few papers have attempted to test different ways of reducing cultural-capital-related educational inequalities. From a Bourdieusian standpoint, it is quite clear that drastic changes in the educational sphere hinge on commensurate changes in the entire society. Hence, it is surprising that almost no papers have had clear implications regarding the potential of specific educational policies or teaching practices to mitigate the effects of cultural capital. I wanted to test if similar was true for educational studies dealing with different aspects of social status and if papers written by pedagogists or education policy specialists might have offered more "solutions" than the ones written by sociologists.

To answer these questions, I conducted a content analysis of papers published in the most influential international and domestic journals during the current decade, i.e., over the past two and a half years (from January 2021 to June 2023). I analyzed a total of 303 papers published in the American Sociological Review, the Review of Educational Research, Sociology of Education, the Sociologija journal, and Journal of the Institute for Educational Research (see Appendix). In the first step, I examined each paper's title and abstract to determine if it dealt with education. If not, the paper was excluded from further analysis (this step was omitted for papers published in journals that exclusively focus on educational topics). I also excluded papers that included students in their samples or used education levels as independent variables, but focused on topics outside the domain of sociology of education. In the second step, I determined whether social-status-related concepts were central to the research design. Finally, for papers that dealt with education and used social-status-related concepts, I determined each author's field of expertise (sociologists, pedagogists, psychologists…), the kind of methodology used, and arguably most subjective, the extent to which the analyzed research could aid the formulation of education policies or practices that could mitigate inequalities. When assessing a paper's potential contribution to the mitigation of inequalities, the focus was not on determining whether education policies or practices were mentioned in the

paper's discussion, but on analyzing the extent to which the research design and answers to the proposed research questions had clear implications for educational policies and practices.

# Results and Conclusions

## Representation of Papers Analyzing Status-Related Inequalities

Regarding the first research question, 21 out of 303 analyzed papers dealt with social-status-related inequalities in education to an appreciable extent.

When it comes to sociological journals, in the international journal (American Sociological Review), more than 10% of papers dealt with education (12 out of 95), with four of them focusing on social-status-related inequalities. Conversely, in the domestic sociological journal (Sociologija), sociology of education was less represented (one paper out of 71) and there were no papers dealing with social-status-related inequalities. In the international pedagogical journal (Review of Educational Research), five papers (out of 61) dealt with social-status-related inequalities to some extent, though only two of them exclusively focused on social status, while the remaining three analyzed social-status-related inequalities along with other inequalities (e.g., gender inequalities or inequalities concerning disabilities and race – Kim et al., 2021). Similarly, in the domestic pedagogical journal (Journal of the Institute for Educational Research), there was only one paper (out of 33) that dealt with social-status-related inequalities to some extent, i.e., that mentioned class-based inequalities along with inequalities related to gender, race, and ethnicity (Pikić Jugović et al., 2023). Expectedly, papers dealing with social-status-related inequalities were most represented in Sociology of Education (11 out of 41 papers), though many of them (five papers) analyzed social status alongside race.

Generally, the results suggest that papers dealing with social-status-related inequalities in education are still well-represented in mainstream journals. Nonetheless, such papers seem to be more represented in sociological and international journals than in pedagogical and domestic journals. The lower representation of this topic in domestic journals does not necessarily indicate the rejection of this topic (which was

apparent in the Yugoslav sociological scene after the 1950s – Milić, 1959), but may merely reflect the current underdevelopment of domestic sociology of education. The analyzed papers dealing with social-status-related inequalities most frequently used the concept of social class (11 papers using social class), though a significant number of papers relied on concepts reflecting the understanding of social status as more of an individual characteristic, such as SES (6 papers). Finally, it should be noted that there were numerous papers dealing with educational inequalities that featured no mention of social-status-related inequalities. While four papers in the American Sociological Review dealt with social-status-related inequalities, there were another four papers that dealt with different inequalities, mostly based on race, but also gender and sexual orientation. Similarly, in Sociology of Education, nine papers dealt with inequalities based on race. Since five out of 11 papers that dealt with social-position-related inequalities also focused on race-based inequalities, it could be claimed that in this journal, race is a more dominant topic than social status. Bearing in mind that social-status-related inequalities such as income inequalities (United Nations, 2020, p. 3) are on the rise in contemporary societies, it is possible that the representation of race-oriented research is not a consequence of the rise of these inequalities, but of the dominant ideology shifting the focus away from the polarities created by the ways of functioning of contemporary capitalism.

## From Research to Change

Out of 21 selected papers, many did not even seem to intend to offer knowledge that might be useful for reducing social-status-related inequalities in education.

While having in mind the inherent subjectivity, it is my assessment that 10 papers could not offer useful inputs for educational policies or practices. For instance, these papers analyzed the temporal dynamics of economic and racial inequalities (Conwell, 2021) or compared the impacts of racial and cultural-capital-related inequalities (Planson, 2023). This limited their usefulness for effecting educational change to the understanding of the scope of inequalities. Among papers with potentially useful implications for creating a more equitable education, the vast majority (nine out of 11) had implications for educational policies. For example, these papers tested the effects of vouchers (Cheng & Peterson, 2021), charter schools (Haber, 2021), or student tracking

(Terrin & Triventi, 2023) on the equity of the education system. Only two papers might have provided some implications for teaching practices and these papers tested how social class shaped students' peer interactions (Johnson, 2022) and analyzed how students were taught about their social position in different schools (Harvey, 2023).

A lack of papers with clear implications for educational policies and educational practices in particular might be partially explained by the dominance of sociologists (13 papers) and education policy experts (four papers) as authors of these papers and the consequently small number of papers written by pedagogists (one paper) or interdisciplinary teams combining the skills of sociologists and pedagogists (one paper). Excluding meta studies (five papers), quantitative studies dominated the sample (11 out of 17), with only three qualitative studies and two mixed-method studies. In spite of the scarcity of qualitative studies, it should be emphasized that both papers with clear implications for educational practices relied on qualitative research.

Finally, it can be concluded that despite the debate on class, social-status-related inequalities still constitute a prominent topic in educational research. Nonetheless, some other concepts dealing with educational inequalities seem to be (unwarrantedly) even more represented. Even though papers dealing with social status are well-represented in mainstream journals, it seems that authors tend to dwell on the scope of inequalities instead of analyzing education policies and practices that could mitigate them. Hence, it would be beneficial if future studies explored the potential of different educational practices to reduce social-status-related inequalities. Furthermore, it would seem prudent and necessary for such endeavors to involve the work of interdisciplinary teams and avoid exclusive reliance on quantitative methodology.

**Keywords:** social status, educational inequalities, educational research

# References

Antonić, S. (2008). Rasprava o klasi u savremenoj sociologiji. *Sociološki pregled*, *42*(2), 147–169.

Cheng, A., & Peterson, P. E. (2021). Experimentally estimated impacts of school vouchers on educational attainments of moderately and severely disadvantaged students. *Sociology of Education*, *94*(2), 159–174. https://doi.org/10.1177/0038040721990365

Conwell, J. A. (2021). Diverging disparities: Race, parental income, and children's math scores, 1960 to 2009. *Sociology of Education*, *94*(2), 124–142. https://doi.org/10.1177/0038040720963279

Cvejić, S. (2002). Dometi klasne analize na kraju XX veka. *Zbornik filozofskog fakulteta – spomenica Mihaila Popovića*. Univerzitet u Beogradu – Filozofski fakultet.

Gevirc, Š., & Krib, A. (2012). *Razumevanje obrazovanja: sociološka perspektiva*. Fabrika knjiga.

Haber, J. R. (2021). Sorting schools: A computational analysis of charter school identities and stratification. *Sociology of Education*, *94*(1), 43–64. https://doi.org/10.1177/0038040720953218

Harvey, P. F. (2023). "Everyone Thinks They're Special": How Schools Teach Children Their Social Station. *American Sociological Review*, *88*(3), 493–521. https://doi.org/10.1177/00031224231172785

Johnson, A. M. (2022). Collaborating in class: Social class context and peer help-seeking and help-giving in an elite engineering school. *American Sociological Review*, *87*(6), 981–1006. https://doi.org/10.1177/00031224221130506

Kim, E. H., Flack, C. B., Parham, K., & Wohlstetter, P. (2021). Equity in secondary career and technical education in the United States: A theoretical framework and systematic literature review. *Review of Educational Research*, *91*(3), 356–396. https://doi.org/10.3102/0034654321995243

Milić, V. (1959). Socijalno poreklo učenika srednjih škola i studenata. *Statistička revija*, *9*(1–2), 43–84.

Pakulsi, J. (2006). Social status. In B. Turner (Ed.), *The Cambridge Dictionary of Sociology* (pp. 584–586). Cambridge University Press.

Pikić Jugović, I., Matić Bojić, J., Puzić, S., Odak, I., Brajković, S., Dalstrom, H., Galić, G., Gaspar de Matos, M., Goče, K., Kozina, A., & Mlekuž A. (2023). Svest o različitosti i kritička svest nastavnika – sine qua non ostvarivanja društvene pravde u školama. *Zbornik Instituta za pedagoška istraživanja*, *55*(1), 189–210. https://doi.org/10.2298/ZIPI2301189P

Planson, S. (2023). Race, cultural capital, and school achievement in race-blind France. *Sociology of Education*, *96*(1), 19–42. https://doi.org/10.1177/00380407221139220

Radulović, M. (2023). *Kulturni kapital i obrazovne prakse: Od saznanja do otvorenih pitanja*. Institut za pedagoška istraživanja.

Terrin, É., & Triventi, M. (2023). The effect of school tracking on student achievement and inequality: A meta-analysis. *Review of Educational Research*, *93*(2), 236–274. https://doi.org/10.3102/00346543221100850

United Nations. (2020). *World social report 2020 inequality in a rapidly changing world*. https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/02/World-Social-Report2020-FullReport.pdf

# Appendix

**Table 1.** *Impact Factors of Selected Journals*

| Type | Title | IF and Category |
|---|---|---|
| International Journals | American Sociological Review | IF 12.444, the second highest among journals categorized as "Sociology" – journal with the highest IF is Annals of Tourism Research and it was not analyzed due to its specific topic |
| | Review of Educational Research | IF 13.551, the highest among journals categorized as "Education & Educational Research" |
| | Sociology of Education | IF 4.619, the highest among journals explicitly dealing with sociology of education |
| Domestic Journals | Sociologija | IF 0.3, The only domestic sociological journal with a calculated IF |
| | Journal of the Institute for Educational Research | IF 0.3, The only domestic pedagogical journal with a calculated IF |

# TEACHERS' PERSPECTIVES ON CHALLENGES IN INCLUSIVE EDUCATION – A RESEARCH OVERVIEW[1]

**Rajka Đević[2], Dušica Malinić and Milja Vujačić**

*Institute for Educational Research, Belgrade, Serbia*

## Introduction

In 2009, the adoption of the Law on the Fundamentals of the Education System in Serbia established a legal framework for the implementation of inclusive education. Thus, conditions were met for ensuring educational equity and access for all children, including children with developmental disabilities. This legal framework provided a starting point for the practical implementation of inclusive education in which different actors, teachers in particular, face numerous challenges and adopt new roles. Generally, research has shown that during the implementation of inclusive education, teachers face various difficulties that greatly affect their overall attitude towards the process and their success in performing the new roles they are expected to fulfill (Shen et al., 2015). Some of the key problems researchers have highlighted include teachers' insufficient or inadequate preparation for teaching in inclusive settings (Weiss et al., 2018), along with a lack of adequate support at the school and education system levels (Kupper et al., 2020; as cited in Leijen et al., 2021). Teachers tend to struggle with the incongruity between what is expected of them in an inclusive setting and their pre-established understanding of the educational process based on the traditional pedagogical paradigm. Since teachers do not feel sufficiently competent and prepared to adopt a differentiated approach to teaching, what emerges as their greatest concern is how to simultaneously organize joint learning activities for all students in a class (McTighe & Brown, 2005). Insufficient teacher training and a lack of adequate support negatively affect teachers' motivation and lead to various forms of resistance and negative attitudes towards the implementation of inclusive education (Shen et al., 2015).

2    rajkadjevic@gmail.com

Exploring different teacher experiences in the process of implementing inclusive education can aid the development of further activities and the fulfillment of conditions necessary for a quality and efficient inclusive practice at schools. Hence, in this paper, we present the results of an analysis of research conducted in our country after the introduction of inclusive education in regular schools. The aim of the analysis was to gain an insight into teachers' experiences and the challenges they face in the implementation of this process.

## Method

In accordance with the research aim, the methodological procedure of systematic literature review was applied (Littell et al., 2008). The review process encompassed scientific journals from the Psychology, Pedagogy, Andragogy, and Special Education sections of the List of Categorized Scientific Journals for 2022 provided by the Ministry of Education, Science, and Technological Development of the Republic of Serbia[3]. Within 29 journals, a total of 774 issues were analyzed. The selection criteria were as follows: a) original research papers; b) research conducted in Serbia after 2010; c) papers pertaining to inclusive education experiences of subject and class teachers employed at regular primary and secondary schools. The application of these criteria resulted in the selection of 22 papers published in 12 journals from the List, which constituted the material for the analysis (see Appendix). Most of the selected papers were published in the Pedagogija journal (6) and Studies in Teaching and Education (4).

## Analysis Results and Discussion

The analysis of the research presented in the selected papers revealed several key challenges teachers face in the process of implementing inclusive education. First and foremost, in multiple studies, teachers reported a lack of adequate support at the school and education system levels, such as providing the necessary resources, tools, and working conditions, greater availability of defectologists, key actors' team work, and

---

3   The List of Categorized Scientific Journals for 2022 is available at the following link: https://prosveta.gov.rs/wp-content/uploads/2022/10/Lista-naucnih-casopisa-domacih-izdavaca-za-2022.pdf

remedying the shortcomings of the work of interdepartmental commissions (Bogner et al., 2014; Krstić, 2017; Jovanović-Popadić, 2016; Milošević & Maksimović, 2022; Stanisavljević et al., 2013).

Research findings indicate that subject and class teachers are not adequately trained and prepared for the implementation of inclusive education, which negatively affects their competency self-evaluation and readiness to engage in this process (Đorđević & Đorđević, 2014; Jablan et al., 2011; Krstić, 2019; Milačić-Vidojević et al., 2012; Milošević & Maksimović, 2022; Spasenović & Matović, 2015; Stanisavljević et al., 2013). Teachers do not seem to fully understand the concept and essence of inclusion, often reducing this process to designing and formulating individualized education plans (Lazić & Muškinja, 2012). Teachers' insufficient training reduces their capacity to recognize the significance of the application of certain teaching strategies in inclusive education, such as differentiated instruction and individualization (Ilić-Stošović et al., 2014; Milošević & Maksimović, 2022). In some of the selected studies, teachers stated that they were not sufficiently trained for recognizing and identifying students' developmental disabilities in practice (Knežević-Florić et al., 2018; Obradović et al., 2013), devising individualized education plans (Knežević-Florić et al., 2018), and selecting and employing assistive technology in inclusive education (Arsenić et al., 2022).

A study reported on teachers exhibiting anxiety and overwhelming concern as emotional reactions to the challenges and problems they faced in the implementation of inclusive education (Stanković-Đorđević, 2016). In the same vein, other findings indicate that teachers' emotional reactions and attitudes towards students with developmental disabilities depend on the type and severity of students' developmental disabilities (Zobenica & Kolundžija, 2019). What teachers seem to find particularly challenging is working with students with autism and behavioral and emotional functioning difficulties (Ilić-Stošović et al., 2014; Knežević-Florić et al., 2018; Krstić, 2019; Zobenica & Kolundžija, 2019). Hence, teachers tend to support the idea of partial inclusion (Karić et al., 2014) and have a selective approach to accepting students with developmental disabilities. Teachers' insufficient readiness to accept students with developmental disabilities stems from their pre-established, implicit beliefs that are in discord with the contemporary pedagogical paradigm at the core of inclusive education (Vujačić, 2014). It diminishes their readiness and motivation for professional

development in this field (Tančić, 2022) and shapes their beliefs on the benefits of this process for all students in a class (Japundža-Milosavljević et al., 2014), along with their perceptions of social relations between students with developmental disabilities and their peers. Teachers who participated in the analyzed research emphasized that students with developmental disabilities were not equally accepted at school (Stanisavljević, et al., 2013), disrupted the educational process (Japundža-Milosavljević et al., 2014), and required teachers to dedicate a significant portion of their time and attention to them, at the expense of other students in the class (Bogner et al., 2014).

Hence, Serbian teachers' experiences with the implementation of inclusive education align with the experiences of their colleagues in education systems in other countries, having in mind the challenges they most commonly face in this process (McTighe & Brown, 2005; Shen et al., 2015; Weiss et al., 2018). The results of the analysis indicate that the main challenges teachers face in the implementation of inclusive education pertain to a lack of adequate support from their schools and the education system, which has a ripple effect on the teaching practice and causes a myriad of other difficulties teachers face in their work. This lack of support is also reflected in teachers' insufficient training and preparation for working with students with developmental disabilities, due to which teachers feel anxious, insecure, overly concerned, and insufficiently prepared to show full acceptance of all students in a class. Due to the abovementioned challenges, when working with such children, teachers exhibit resistance and a lack of desire to further engage in the process of inclusive education.

## Conclusions and Implications

The continuity and persistence of the previously discussed challenges is reflected in the fact that over the analyzed 12-year period, studies consistently reported similar findings. Although the system continuously introduces additional measures aimed at supporting teachers and schools in the implementation of inclusive education, these measures fall short of the mark, since they do not alleviate the perceived problems and challenges teachers face in their practice and do not effect fundamental changes in teachers' fulfillment of their roles in this process. Therefore, the system should ensure that teachers receive not only professional but also emotional and motivational support

through a series of activities that would help improve teachers' competences and fulfill the conditions necessary for the successful implementation of inclusive education.

**Keywords:** inclusive education, teachers, challenges, research overview, Serbia

# References

Leijen, A., Arcidiacono, F., & Baucal, A. (2021). The dilemma of inclusive education: Inclusion for some or inclusion for all. *Frontiers in Psychology*, *12*(633066), 1–10. https://doi.org/10.3389/fpsyg.2021.633066

Littell, J. H., Corcoran, J., & Pillai, V. (2008). *Systematic reviews and meta-analysis.* Oxford University Press.

McTighe, J., & Brown, J. L. (2005). Differentiated instruction and educational standards – is detente possible? *Theory into Practice*, *44*(3), 234–244. https://doi.org/10.1207/s15430421tip4403_8

Shen, B., McCaughtry, N., Martin. J., Garn. A., Kulik, N., & Fahlman,M. (2015). The relationship between teacher burnout and student motivation. *British Journal of Educational Psychology, 85*(4), 519–532. https://doi.org/10.1111/bjep.12089

Weiss, S., Markowetz, R., & Kiel, E. (2018). How to teach students with moderate and severe intellectual disabilities in inclusive and special education settings: Teachers' perspectives on skills, knowledge and attitudes. *European Educational Research Journal*, *17*(6), 837–856. https://doi.org/10.1177/1474904118780171

# Appendix

## Analyzed Papers

Arsenić, I., Jovanović-Simić, N., & Daničić, Z. (2022). Primena asistivne tehnologije za komunikaciju u edukaciji učenika sa smetnjama u razvoju: samoprocena nastavnog osoblja. *Nastava i vaspitanje*, *71*(2), 267–282. https://doi.org/10.5937/nasvas2202267A

Bogner, I., Jablan, B., & Praštalo-Dimitrov, B. (2014). Barijere u inkluzivnom obrazovanju. *Beogradska defektološka škola*, *20*(2), 367–379.

Đorđević, S., & Đorđević, L. (2014). Teorija i praksa inkluzivnog obrazovanja. *Godišnjak Pedagoškog fakulteta u Vranju*, *5*, 115–125.

Ilić-Stošović, D., Nikolić, S., & Popadić, M. (2014). Teachers'sense of efficacy and implications for implementation of inclusive education. *Specijalna edukacija i rehabilitacija*, *14*(3), 345–365. https://doi.org/10.5937/specedreh14-9565

Jablan, B., Jolić-Marjanović, Z., & Grbović, A. (2011). Uticaj iskustva i obučenosti nastavnika na njihove stavove prema obrazovanju dece sa oštećenjem vida u srednjim školama. *Zbornik Instituta za pedagoška istraživanja*, *43*(1), 122–138. https://doi.org/10.2298/ZIPI1101122J

Japundža-Milosavljević, M., Đurić-Zdravković, A., & Milanović-Dobrota, B. (2022). Stavovi prosvetnih radnika prema inkluziji. *Specijalna edukacija i rehabilitacija*, *21*(1), 15–30. https://doi.org/10.5937/specedreh21-34279

Jovanović-Popadić, A. (2016). Inkluzivno obrazovanje: ideja i praksa. *Sinteze*, 10, 35–46. https://doi.org/10.5937/sinteze0-12363

Karić, T., Mihić, V., & Korda, M. (2014). Stavovi profesora razredne nastave o inkluzivnom obrazovanju dece sa smetnjama u razvoju. *Primenjena psihologija*, *7*(4), 531-548. https://doi.org/10.19090/pp.2014.4.531-548

Knežević-Florić, O., Ninković, S., & Tančić, N. (2018). Inkluzivno obrazovanje iz perspektive nastavnika: uloge, kompetencije i barijere. *Nastava i vaspitanje*, *67*(1) 7–22. https://doi.org/10.5937/nasvas1801007K

Krstić, K. (2017). Stavovi učitelja prema ulozi interresorne komisije u inkluzivnom obrazovanju. *Pedagogija*, *72*(2), 166–176.

Krstić, K. (2019). Osposobljenost učitelja za pružanje dodatne podrške učenicima sa smetnjama u razvoju. *Pedagogija*, *74*(1), 133–146.

Lazić, S., i Muškinja, O. (2012). Inkluzija u osnovnoj školi: između želje i mogućnosti. *Pedagogija*, *67*(2), 210–219.

Milačić-Vidojević, I., Dragojević, N., & Colić, M. (2012). Značaj iskustva i obučenosti nastavnika za stavove i interakciju s osobama s ometenošću, za zabrinutost i procenu samoefikasnosti u sprovođenju inkluzivnog obrazovanja. *Beogradska defektološka škola*, *18*(2), 369–378.

Milenović, Ž. (2012). Motivacija nastavnika za rad u inkluzivnoj nastavi. *Zbornik radova Učiteljskog fakulteta u Prizrenu – Leposavić*, 6, 89–101.

Milošević, D., & Maksimović, J. (2022). Inkluzivno obrazovanje u Republici Srbiji iz ugla nastavnika razredne i predmetne nastave: kompetencije, prednosti, barijere i preduslovi. *Nastava i vaspitanje*, *71*(1), 7–27. https://doi.org/10.5937/nasvas2201007M

Obradović, S., Zlatić, L., & Vučetić, M. (2013). Osposobljenost vaspitača, učitelja i studenata–budućih učitelja za rad sa decom sa specifičnim smetnjama u učenju. *Zbornik radova Pedagoškog fakulteta u Užicu*, *16*(15), 325–342.

Spasenović, V., & Matović, N. (2015). Pripremljenost nastavnika razredne i predmetne nastave za rad s decom sa smetnjama u razvoju. *Nastava i vaspitanje*, *64*(2), 207–222. https://doi.org/10.5937/nasvas1502207S

Stanisavljević-Petrović, Z., & Lukić, G. (2013). Pripremljenost školske sredine za proces inkluzije. *Pedagogija*, *68*(1), 68–78.

Stanković-Đorđević, M. (2016). Karakteristike ličnosti nastavnika i njihov odnos prema inkluziji. *Pedagogija*, *71*(2), 214–228.

Tančić, N. (2022). Prediktori profesionalnog razvoja nastavnika u inkluzivnoj školi. *Inovacije u nastavi*, *35*(1), 1–16. https://doi.org/10.5937/inovacije2201001T

Vujačić, M. (2014). Implicitne pedagogije nastavnika: mogućnost ili ograničenje za inkluziju. *Pedagogija*, *69*(3), 379–386.

Zobenica, A., & Kolundžija, K. (2019). Menjaju li se stavovi nastavnika prema inkluziji? *Pedagoška stvarnost*, *65*(2), 177–185. https://doi.org/10.19090/ps.2019.2.177-185

# EDUCATIONAL PRIVATIZATION: RISKS FOR EQUITY

**Vera Spasenović**[1]

*Department of Pedagogy and Andragogy, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia*

## Introduction

The past several decades have seen a growing involvement of the private sector in public primary and secondary education in many countries around the world. The increase in educational privatization has emerged as a policy response to neoliberal and managerial imperatives aimed at spending cuts, deregulation, liberalization and commercialization, outsourcing, and the introduction of new providers of school services (Alexiadou, 2013, p. 415). The involvement of private actors in public education is expected to be beneficial per many proponents of educational privatization (e.g., international organizations, policymakers, and scholars) (Robertson et al., 2012). Since educational privatization takes various forms and manifests differently across the globe, we first need to consider what is meant by educational privatization, before discussing its impact on equity in education.

## Forms of Educational Privatization

Generally speaking, educational privatization implies an increased and more active participation of private organizations and individuals in a range of educational activities and responsibilities that have traditionally fallen within the remit of the state (Verger et al., 2016). It is a complex process with various manifestations. One well-known distinction is made between privatization *in* public education and the privatization *of* public education (Ball & Youdell, 2007, pp. 7–8). The first phenomenon is also known

---

as 'endogenous' privatization and refers to importing ideas, techniques, and practices from the private sector into the public sector. The second phenomenon is commonly referred to as 'exogenous' privatization and involves the opening up of public services to private sector participation. In the education policy literature, a distinction is also made between drastic and gradual modes of privatization (Verger et al., 2023, p. 174). While drastic privatization means that both service ownership and management responsibilities are largely transferred from the public sector to the private sector, gradual privatization refers to a progressive or partial transfer of service ownership and/or management and delivery responsibilities from the public sector to the private sector, while the State retains complete or significant ownership. In most education systems, the gradual mode of privatization is more pronounced than its drastic counterpart.

Public-private partnerships (PPPs) constitute a special form of privatization typically referring to gradual privatization processes (Verger et al., 2023). PPPs in education imply contracting-type arrangements between the government and non-state providers, in which public funds are allocated for an educational service and a private entity assumes responsibility for its implementation (Verger et al., 2023; Zancajo et al., 2021). This concept has become a part of the global education agenda supported by a number of international organizations (Verger & VanderKaaij, 2012; Zajda, 2006). Among the numerous education policies and programs encompassed by the PPP framework, the most prominent are: (1) contracted schools (private schools that have direct agreements with the government and offer educational services in return for complete or partial public funding); (2) vouchers (public funding for private schools, based on the number of students enrolled); (3) charter schools (state-owned schools that are managed by private entities) (Zancajo et al., 2021).

## The Impact of Private Education Provision on Educational Equity

Proponents of educational privatization maintain that such initiatives foster efficiency, effectiveness, and equity in education, while encouraging innovative teaching methods and expanding the variety of educational options available. An additional argument is that private education delivery does not only widen access to education but also contributes to a more equitable distribution of educational opportunities (LaRocque, 2008; Patrinos et al., 2009; Verger & VanderKaaij, 2012; UNICEF, 2011). On the

other hand, privatization initiatives also evoke concerns and draw criticism (Pedró et al., 2015; Verger et al., 2023; Zancajo et al., 2021).

Studies investigating the benefits and risks of PPPs have yielded mixed and inconclusive results (Verger et al., 2023; Zancajo et al., 2021). Some of them have pointed to a positive impact on learning outcomes, while others have indicated that the influence of PPPs in this realm is almost negligible. However, when it comes to educational equity, research has rendered much more convincing results (Verger et al., 2023; Zancajo et al., 2021).

Based on a research literature review covering empirical studies on the effects of PPPs on education published between 1992 and 2018, Verger and his colleagues (Verger et al., 2020) concluded that the various modalities of PPPs seem to produce similar effects on equity in education. Most of them have negative impacts on learning equalities, the inclusion of students with special needs, and especially school segregation. In the same vein, practices involving parental co-funding, student selection, and add-on tuition fees within PPP schools tend to further amplify inequalities. Research evidence likewise indicates that policies oriented towards market principles, which promote school competition and school choice, often have adverse effects on equity. These policies exacerbate school segregation and social stratification within both public and private educational institutions, as evidenced in different contexts, such as Chile, New Zealand, and Sweden (Zancajo & Bonal, 2021).

Analyses of social stratification within private schools have revealed that students in private institutions are more likely to originate from affluent socioeconomic backgrounds compared to students in public schools (Pedró et al., 2015). A study investigating the achievement effects of public-private partnerships in education in 17 countries showed that PPP students outperformed their peers from public schools, not by virtue of superior or innovative practices, but through sorting of more capable students (Baum, 2018). In a majority of education systems, PPP schools perpetuate social disparities by primarily serving students in the upper-income quintiles (Baum, 2018, p. 24).

A recent comparative study focusing on European countries found that education systems with a large proportion of privately managed primary schools face elevated levels of academic segregation, which is more pronounced in systems characterized by limited public investment in education (Eurydice, 2020). In other words, increased public

funding and a smaller private school sector are linked to reduced levels of academic segregation and, in turn, a smaller gap between high- and low-achieving students.

# Conclusion

Although the engagement of private actors in the education sector is justified by their potential to improve the effectiveness and efficiency of public education without negatively impacting educational equity, this obviously is not the case in reality. Research findings indicate that pro-market and privatization policies tend to aggravate school segregation, social stratification among schools, and the marginalization of the most socioeconomically disadvantaged students (Verger et al., 2023). However, the outcomes of educational privatization depend on multiple factors, including the modalities of private provision in schooling, the regulatory mechanisms implemented, administrative capabilities, the socioeconomic context, and previous experiences with working with the private sector and contracting (Spasenović, 2019). Having in mind that schooling is a public good, education policymakers should carefully consider the benefits as well as the risks of private sector involvement in education.

**Keywords:** educational privatization, public-private partnerships, equity impact

# References

Alexiadou, N. (2013). Privatising public education across Europe – Shifting boundaries and the politics of (re)claiming schools. *Education Inquiry*, *4*(3), 413–422. https://doi.org/10.3402/edui.v4i3.22610

Ball S. J., & Youdell, D. (2007). *Hidden privatisation in public education: Education International 5th World Congress* (Preliminary report). University of London, Institute of Education.

Baum, D. (2018). The effectiveness and equity of public-private partnerships in education: A quasi-experimental evaluation of 17 countries. *Education Policy Analysis Archives*, *26*(105), 1–32. https://doi.org/10.14507/epaa.26.3436

Eurydice (2020). *Equity in school education in Europe: Structures, policies and student performance*. Publications Office of the European Union.

LaRocque, N. (2008). *Public-private partnerships in basic education: An international review*. CfBT Education Trust.

Patrinos, H. A., Barrera-Osorio, F., & Guáqueta, J. (2009). *The role and impact of public- private partnerships in education*. World Bank.

Pedró, F., Leroux, G., & Watanabe, M. (2015). *The privatization of education in developing countries: evidence and policy implications.* UNESCO.

Robertson, S., Mundy, K., Verger, A., & Menashy, F. (Eds.) (2012). *Public private partnerships in education: New actors and modes of governance in a globalizing World*. Edward Elgar Publishing.

Spasenović, V. (2019). *Obrazovna politika – globalni i lokalni procesi*. Institut za pedagogiju i andragogiju Filozofskog fakulteta Univerziteta u Beogradu.

UNICEF (2011). *Non-state providers and public-private partnerships in education for the poor*. UNICEF East Asia and Pacific Regional Office and Asian Development Bank.

Verger, A., & VanderKaaij, S. (2012). The national politics of global policies: Public-private partnerships in Indian education. In A. Verger, M. Novelli & H. Kaltinyelken (Eds.), *Global education policy and international development: New agendas, issues and policies* (pp. 245–266). Bloomsbury.

Verger, A., Fontdevila, C., & Zancajo, A. (2016). *The privatization of education: A political economy of global education reform*. Teachers College Press.

Verger, A., Moschetti, M. C., & Fontdevila, C. (2020). How and why policy design matters: Understanding the diverging effects of public-private partnerships in education. *Comparative Education*, *56*(2), 278–303. https://doi.org/10.1080/03050068.2020.1744239

Verger, A., Fontdevila, C., & Zancajo, A. (2023). The privatization of education. Drivers, social effects and regulatory challenges of private sector participation in schooling. In R. Tierney, F. Rizvi & K. Ercikan (Eds.), *International encyclopedia of education* (fourth edition*)* (pp. 174–182). Elsevier Science. https://doi.org/10.1016/B978-0-12-818630-5.01030-7

Zajda, J. (Eds.) (2006). *Decentralisation and privatisation in education: The role of the state*. Springer.

Zancajo, A., & Bonal, X. (2020). Education markets and school segregation: A mechanism-based explanation. *Compare: A Journal of Comparative and International Education*, *52*(8), 1241–1258. https://doi.org/10.1080/03057925.2020.1858272

Zancajo, A., Fontdevila, C., Verger, A., & Bonal, X. (2021). *Regulating public-private partnerships, governing non-state schools: An equity perspective*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000380092

# SOCIAL INEQUALITIES AND EDUCATION

# THE ROLES OF GENDER AND SOCIOECONOMIC STATUS IN SECONDARY SCHOOL ACADEMIC ACHIEVEMENT AND WELL-BEING[1]

**Jovan Mihojević**[2]

*Department of Psychology, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia*

**Nataša Simić**

*Institute of Psychology, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia*

**Danijela Petrović**

*Department of Psychology, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia*

## Introduction

### Equity in Education – The Roles of Gender and Socioeconomic Status

Equity in the context of educational research pertains to ensuring fairness and impartiality in educational opportunities and outcomes for all students, regardless of their backgrounds, characteristics, or circumstances. Gender and socioeconomic status (hereinafter SES) are particularly relevant to achieving equity in a school environment due to their association with access to educational resources and opportunities.

According to Reardon (2013), SES is a fundamental determinant of educational equity, as it significantly influences a student's access to quality schools, extracurricular activities, and educational support systems. Disparities in SES harm students' academic

---

2   jokimihojevic@gmail.com

resilience (Hunsu et al., 2023), reading trajectories (Aikens & Barbarin, 2008), and overall academic success (Sirin, 2005).

The role of gender is not as unambiguous. While some studies have indicated that girls face many more obstacles in their educational trajectories, especially as they progress towards tertiary education (e.g., Baily & Holmarsdottir, 2015), other studies have shown that girls outperform boys in a variety of subjects and tasks (e.g., Jackmen & Morrain-Webb, 2019). What has been demonstrated is that gender-related biases and stereotypes hinder equitable access to educational experiences (Hyde, 2014), both boys and girls succumb to stereotype threats (e.g., Bedyńska et al., 2018; Good et al., 2008), and boys' and girls' academic achievements greatly depend on family support and expectations (Ortiz-de-Villate et al., 2021).

Despite inclusive education policies, Serbian students from marginalized and disadvantaged backgrounds (especially Roma) are still underrepresented in education, particularly at the secondary and tertiary education levels (Simić & Vranješević, 2022; Sokolovska & Jarić, 2014). There are also gaps between students from different socioeconomic backgrounds (Baucal, 2012; Jovanović, 2021). However, notwithstanding Serbian students' suboptimal performance on PISA assessments relative to their OECD counterparts, a recent analysis identified a comparatively higher degree of equity within the educational system, particularly concerning students' socioeconomic status (SES) and gender (Videnović & Čaprić, 2020).

## Well-Being and Education

Well-being can be defined as a multidimensional construct that encompasses various aspects of an individual's life satisfaction, such as physical health, emotional well-being, material well-being, and social connectedness (Cummins, 1997). Studies have typically shown that low SES backgrounds and the female gender tend to be associated with lower scores on well-being/ life satisfaction (Chen et al., 2020; Erdem & Kaya, 2021).

A positive and supportive school environment, especially teacher-student relationships, school safety, and a sense of belonging can enhance students' emotional and psychological well-being (Datu et al., 2023; Renshaw et al., 2015). The COVID-19 pandemic highlighted the heightened relevance of well-being in students (Brooks et al., 2020; Cusinato et al., 2020).

Like in other countries, Serbian education policies emphasize the relevance of improving students' socio-emotional competencies and well-being through education. However, in practice, teaching is teacher- and curriculum-centered, while socio-emotional learning is not adequately integrated into the curriculum and everyday practice (Tošić Randev & Pešika, 2017).

# Present Research

Despite evidence that SES and gender are associated with students' academic achievement (see e.g., OESD, 2020; Sirin, 2005), relatively few studies have examined the interrelationship between SES, gender, and student well-being. This research aimed to fill this gap by exploring the relationship between SES, gender, and different aspects of well-being, including life satisfaction. Building on current knowledge, it further explored gender and SES-related influences on academic achievement, operationalized through the GPA and the number of unjustified absences from school.

## Research Method

### Participants

Participants in this study were 1,329 students (54.3% female) from 16 secondary schools (four grammar schools and 12 vocational schools) from various regions of Serbia. Students were mostly first- and third-graders, with a mean age of $M = 16.33$ ($SD = 1.87$).

### Data Collection and Analyses

Data were collected during May and June 2023, using questionnaires that included different scales and questions on student school experience, identity, and well-being. We applied the translated and adjusted *Personal Well-Being Index* – the school children version (*PWI-SC*, Cummins & Lau, 2005), which proved to have good metric characteristics in previous studies in Serbia (Simić et al., 2017). This 11-point Likert-

type scale consists of one item referring to overall life satisfaction and seven items referring to different aspects of life.

Students noted their GPA at the end of the previous semester (six-category variable; 1 being *I was not graded in several subjects* and 6 signifying *excellent*) and the number of unjustified absences (four-category variable, with 1 signifying *almost never* and 4 signifying *several times a week*). We asked for their SES through a question with six options (1 meaning *We barely cover expenses for food* and 6 meaning *We have enough money for a luxurious life, including traveling to exotic destinations and investing*). Due to the number of participants per category, in further analyses, we merged the two lowest categories into one, so the variable we used had five categories (1 indicating the lowest and 5 indicating the highest SES). We asked about participants' gender by offering the options *Male*, *Female,* and *Other*, but for the purpose of this paper, we only used the first two categories.

After conducting descriptive statistics, a multivariate analysis of variance (MANOVA) with the Scheffe post-hoc test was employed to assess the impact of SES and gender on students' overall life satisfaction and different aspects of well-being. SES- and gender-based differences in students' GPA and truancy were assessed using the Chi-Square Test of Independence. Moreover, we employed supplementary measures of comparison, namely the Contingency Coefficient, Cramer's V, and Pearson's R.

## Results

The values of means and standard deviations showed that students were most satisfied with their health ($M$ = 8.16, $SD$ = 2.55), being a part of the community ($M$ = 7.86, $SD$ = 2.54) and future prospects ($M$ = 7.84, $SD$ = 2.59). Students were least satisfied with the standard of living ($M$ = 7.36, $SD$ = 2.85) and overall life satisfaction ($M$ = 7.38, $SD$ = 2.77). Most of the students had very good achievements (23.2%), and most of the students stated that they "almost never" had unjustified absences (35.8%). When assessing the mean difference between genders using an independent sample t-test, significant differences were observed when comparing total life satisfaction ($F$ = 4.483, $p$ = .034), achievement satisfaction ($F$ = 6.46, $p$ = .01), and security satisfaction ($F$ = 7.32, $p$ = .01).

Analyses revealed differences in students' well-being across all measured dimensions based on SES. While gender differences were observed, they were not statistically significant for standards of living. This was expected, given that gender has little effect on determining standards of living. In the areas of safety, relationships, and achievements, female participants had lower scores and also reported lower satisfaction with life in general (Table 1).

**Table 1** *MANOVA Results for SES and Gender Effects on Life Satisfaction and Different Aspects of Well-Being*

| Variables | SES | | | | Gender | | | |
|---|---|---|---|---|---|---|---|---|
| | df | F | p | η² | df | F | p | η² |
| Life Satisfaction | 4 | 4.987 | .001 | 0.053 | 1 | 17.594 | 0 | .010 |
| Standard of Living | 4 | 10.954 | .001 | 0.101 | 1 | 2.027 | .155 | .001 |
| Personal Health | 4 | 11.106 | .001 | 0.081 | 1 | 4.931 | .027 | .001 |
| Achievement in Life | 4 | 4.405 | .002 | 0.059 | 1 | 10.169 | .001 | .002 |
| Personal Relationships | 4 | 4.495 | .001 | 0.044 | 1 | 16.718 | 0 | .003 |
| Personal Safety | 4 | 6.57 | .001 | 0.059 | 1 | 10.547 | .001 | .008 |
| Being a Part of the Community | 4 | 4.427 | .002 | 0.059 | 1 | 5.721 | .017 | .001 |
| Future Prospects | 4 | 2.467 | .043 | 0.041 | 1 | 6.615 | .01 | .001 |

The post-hoc test indicated that there were no significant differences between groups of lower SES. The absence of significant differences was also noted when comparing the satisfaction of students of higher SES.

Chi-squared scores demonstrate statistically significant variations among different SES groups when assessing their association with absence and GPD. Gender was related to the GPA, but not to absence (Table 2).

**Table 2** *Chi-Squared Results for SES, Gender, GPA, and Unjustified Absence*

| | SES | | | Gender | | |
|---|---|---|---|---|---|---|
| | Value | df | Asymptotic Significance (2-Sided) | Value | df | Asymptotic Significance (2-Sided) |
| Absence | 61.107a | 12 | .001 | 2.126a | 3 | .547 |
| GPA | 134.744a | 20 | .001 | 27.410a | 5 | .001 |

As for academic achievement, we determined that students with the lowest SES tended to be ungraded significantly more often than students of a higher SES and that they typically skipped classes three to four times a month. The best achievers tended to come from the highest SES families, but they also tended to skip classes often. The higher the GPA, the greater was the gender gap in favor of female participants, while gender differences in terms of truancy were not significant.

## Discussion and Conclusions

This study confirmed the results of previous studies (Baucal, 2012; Chen et al., 2020; Erdem & Kaya, 2021; Jovanović, 2021) regarding the pivotal role of SES in shaping students' well-being as well as academic success operationalized through the GPA. Female students achieved better academic results, which is again in accordance with previous studies and possibly stems from gender role expectations (Jackmen & Morrain-Webb, 2019; Kessels & Steinmayr, 2013). On the other hand, they had lower well-being, probably due to fewer opportunities to thrive in society and/or (introjected) higher expectations of themselves. Our results also suggest a discrepancy between the objective measures of academic success (GPA) and satisfaction with achievements (measured as an item in the PWI-SC).

Conclusions regarding the relationships between truancy (not strictly an objective measure, but students' self-assessment), SES, and gender are in line with some previous studies, suggesting that these relationships are more nuanced (Maynard et al., 2017). Therefore, individual and contextual roots of truancy in the Serbian context need to be further explored using qualitative methods and more sophisticated statistical analyses.

Our findings highlight the urgency of addressing gender and particularly socioeconomic disparities in education policies and practices to ensure equal access and opportunities to learn and thrive for all students. Implementing targeted (educational and psychological) support systems, scholarships, and mentorship programs can help bridge the gap in satisfaction levels and achievements between different SES groups. Additionally, fostering safe and supportive school environments with an awareness of gender-related biases can improve the well-being of female students.

**Keywords:** wellbeing, academic achievement, gender, socioeconomic status, students

# References

Aikens, N. L., & Barbarin, O. (2008). Socioeconomic differences in reading trajectories: The contribution of family, neighborhood, and school contexts. *Journal of Educational Psychology, 100*(2), 235–251. https://doi/10.1037/0022-0663.100.2.235

Baily, S., & Holmarsdottir, H. B. (2015). The quality of equity? Reframing gender, development and education in the post-2020 landscape. *Gender and Education*, 1–18. https://doi/10.1080/09540253.2015.1103842

Bedyńska, S., Krejtz, I., & Sedek, G. (2018). Chronic stereotype threat is associated with mathematical achievement on representative sample of secondary schoolgirls: The role of gender identification, working memory, and intellectual helplessness. *Frontiers in Psychology*, *9*(428), 1-11. https://doi.org/10.3389/fpsyg.2018.00428

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, *395*(10227), 912–920. https://doi.org/10.1016/S0140-6736(20)30460-8

Chen, X., Cai, Z., He, J., & Fan, X. (2020). Gender differences in life satisfaction among children and adolescents: A meta-analysis. *Journal of Happiness Studies*, *21*, 2279–2307. https://doi.org/10.1007/s10902-019-00169-9

Cusinato, M., Iannattone, S., Spoto, A., Poli, M., Moretti, C., Gatta, M., & Miscioscia, M. (2020). Stress, resilience, and well-being in Italian children and their parents during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, *17*(22), 1–17. https://doi.org/10.3390/ijerph17228297

Datu, J. A. D., Mateo, N. J., & Natale, S. (2023). The mental health benefits of kindness-oriented schools: School kindness is associated with increased belongingness and well-being in Filipino high school students. *Child Psychiatry & Human Development*, *54*(4), 1075–1084. https://doi.org/10.1007/s10578-021-01299-z

Erdem, C., & Kaya, M. (2021). Socioeconomic status and wellbeing as predictors of students' academic achievement: Evidence from a developing country. *Journal of Psychologists and Counsellors in Schools, 33*(2), 1–19. https://doi.org/10.1017/jgc.2021.10

Hunsu, N. J., Oje, A. V., Tanner-Smith, E. E., & Adesope, O. (2023). Relationships between risk factors, protective factors and achievement outcomes in academic resilience research: A meta-analytic review. *Educational Research Review*, *41*(100548). https://doi.org/10.1016/j.edurev.2023.100548

Hyde, J. S. (2014). Gender similarities and differences. *Annual Review of Psychology*, *65*, 373–398. https://doi.org/10.1146/annurev-psych-010213-115057

Jackman, W. M, & Morrain-Webb, J. (2019). Exploring gender differences in achievement through student voice: Critical insights and analyses. *Cogent Education*, *6*(1), 1–13. https://doi.org/10.1080/2331186X.2019.1567895

Jovanović, V. (2021). *Analiza dugotrajnog siromaštva u Republici Srbiji*. Tim za socijalno uključivanje i smanjenje siromaštva Vlade Republike Srbije. https://socijalnoukljucivanje. gov.rs/wp-content/uploads/2021/11/Analiza_dugotrajnog_siromastva_u_Republici_ Srbiji.pdf

Kessels, U. & Steinmayr, R. (2013). Macho-man in school: Toward the role of gender role self-concepts and help seeking in school performance. *Learning and Individual Differences*, *23*, 234–240. https://doi.org/10.1016/j.lindif.2012.09.013

Maynard, B. R., Vaughn, M. G., Nelson, E. J., Salas-Wright, C. P., Heyne, D. A., & Kremer, K. P. (2017). Truancy in the United States: Examining temporal trends and correlates by race, age, and gender. *Children and Youth Services Review*, *81*, 188–196. https://doi. org/10.1016/j.childyouth.2017.08.008

McLoyd, V. C., & Wilson, L. (1990). Maternal behavior, social support, and economic conditions as predictors of distress in children. *New Directions for Child and Adolescent Development*, *1990*(46), 49–69. https://doi.org/10.1002/cd.23219904605

OECD (2020). Girls' and boys' performance in PISA. *PISA 2018 Results (Volume II): Where All Students Can Succeed* (pp. 141–155). OECD Publishing.

Ortiz-de-Villate C, Rodríguez-Santero J, & Torres-Gordillo J-J. (2021). Contextual, personal and family factors in explaining academic achievement: A multilevel study. *Sustainability*. *13*(20), 11297. https://doi.org/10.3390/su132011297

Reardon, S. F. (2011). The widening academic achievement gap between the rich and the poor: New evidence and possible explanations. *Whither opportunity, 1*(1), 91–116.

Renshaw, T. L., Long, A. C., & Cook, C. R. (2015). *Assessing school climate: A guide for principals*. National Professional Resources.

Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, *75*(3), 417–453. https://doi. org/10.3102/00346543075003417

# LIMITATIONS OF CONTEMPORARY SOCIOLOGY OF EDUCATION RESEARCH

**Miloš Janković**[1]

*Institute of Philosophy and Social Theory, University of Belgrade, Belgrade, Serbia*

Sociologists generally approach the issues of a just education and education for a just society from two perspectives. The first approach is more empirical and involves documenting data on: 1) the exclusion of certain social groups from the education system; 2) the lower academic achievements of students from lower classes; and 3) various forms of domination (especially gender-based) manifested in textbook content, the curriculum, and the organization of the school as an institution (Ahearn, 2021; Carbonaro et al., 2023; Daniels & Cole, 2010; Gast, 2022; Jackson & Schneider, 2022; Johnson, 2022; Mbekeani, 2023; Passaretta & Skopek, 2021; Sarah et al., 1988; Tarabini et al., 2018). The second approach is more theoretical and aims to explain the collected empirical data through various economic, social, cultural, and political processes and structures (Apple, 1993; 1996; 2012; Bernstein, 1977; Bourdieu, 1984; Bourdieu & Paseron, 2014; Feinberg & Soltis, 2009; Gevirc & Krib, 2012; McRobbie, 1978; Willis, 1981).

There are three fundamental assumptions underlying sociological research on class-related problems in education, from exclusion to disparity in test achievements. First, it is believed that one of the primary functions of the education system is to select students for specific positions in the social and economic stratification (Bowles & Gintis, 1976; Carnoy & Levin, 1985; Davis & Moore, 1945; Parsons, 1992; 2017). Second, a just education system guarantees equal opportunities for all students (Kim & Choi, 2017; Parsons, 1992; 2017). Equality of opportunity is here understood in two senses, narrow and broad. In the narrow sense, the principle of equal opportunities implies universal access to education and it is crucial for understanding the issue of exclusion. On the other hand, the broad principle of equal chances implies eliminating the influence of socioeconomic status on academic achievements (Davis & Moore,

---

1    milos.jankovic@ifdt.bg.ac.rs

1945; Jary & Jary, 1991; Kim & Choi, 2017; Parsons, 1992; 2017). The third assumption directly derives from the previous two and concerns the justness of society as a whole. A society is considered just if it is meritocratic and meritocracy presupposes that the education system has a selective function, while being based on the principle of equal opportunities in the narrow and broad senses (Janković, 2022). In other words, in a meritocracy, all members of society have the opportunity to reach the most prestigious social and economic positions through their effort and talent.

One serious problem lies at the core of this group of assumptions and the sociological research based on it. The methodology of Amartya Sen can be of assistance in shedding light on this issue. Sen uses the case-implication critique to examine the quality of the principles of justice (Sen, 1979). This methodology entails the application of the principles of justice to specific situations that are seen as intuitively just or unjust, followed by an assessment of the principles themselves. Since the second and third assumptions discussed previously are related to the principles of justice (a just education and a just society), they can be analyzed using Sen's case-implication critique.

To emphasize once again, the third assumption concerns the just distribution of society members into positions within the existing social and economic stratification. The principle of distribution is based on merit, in this case, the academic achievements of society members. In a just education system (the second assumption), academic achievements embody only students' effort and talent. The problem with such a distributive logic lies in its complete disregard for "the structure of the division of labor" (Young, 1990, p. 16). Let us take the example of the structure of labor division in Serbia from the perspective of income inequality. Eurostat data from 2016 showed that the earnings of the highest decile were higher than the combined earnings of the entire lower half of the population. More strikingly, the combined incomes of the wealthiest two percent were higher than the incomes of the lowest thirty percent combined (as cited in Krek, 2018). In a comparative view, data for the same year showed that "Serbia has a higher income inequality than any European Union country" (Arandarenko et al., 2017, p. 1). In the meantime, income inequality in Serbia has decreased and Serbia is comparatively doing better, but the Gini coefficient has remained high.

Aside from these income inequality figures, it is essential to note that "70 percent of the population earns less than the official minimal consumer basket", indicating a high level of poverty (Krek, 2018). This was also demonstrated by a recent CRTA study.

When asked by researchers, "What are the biggest problems you and your family are facing?", 51 percent of respondents stated living standards (poverty), high prices, and unemployment as their first response (Mihailović et al., 2023).

The state of social and economic structures in Serbia is intuitively unjust. Consequently, any attempt to define a supposedly just principle of selecting people within unjust structures must be unsuccessful, since in the given circumstances (case-implication), it cannot lead to an intuitively just society. Even if the influences of socioeconomic status on academic achievement were eliminated, the education system would have a minuscule effect on social justice in Serbia. High levels of inequality and poverty would remain (almost) untouched, while the change would only be reflected in the class composition of different income percentiles, which would become significantly more diverse. In other words, the issues of educational justice and the impacts of education on social justice cannot be limited to the question of (potential) intergenerational class reproduction. To be just, education must play a significant role in social transformation and the reduction of economic inequalities from a distributive justice perspective.

How schools can contribute to creating a more just society is a central question in critical pedagogy. The basic idea of this theory is to transform schools into agents of social change (Cho, 2012, p. 1). This is achieved through a series of practices that help students develop "habits of thought, reading, writing, and speaking which go beneath surface meaning, first impressions, dominant myths, official pronouncements, traditional clichés, received wisdom, and mere opinions, to understand the deep meaning, root causes, social context, ideology, and personal circumstances of any action, event, object, process, organization, experience, text, subject matter, policy, mass media or discourse" (Shor, 1992, p. 129). The dispositions, values, and skills developed by critical pedagogy are not worthy in themselves. They must "serve as a point of departure for a politics of resistance and counterhegemonic struggle" (McLaren, 1998, p. 448). The ultimate goal is the "transformation of structures and conditions" that reproduce social injustice (Darder et al., 2009, p. 2). To reiterate, schools organized according to critical pedagogy models prepare students to engage in the political life of their community and thus influence decisions that shape the structure of labor division and consequently, levels of inequality and poverty.

The analysis of unequal educational opportunities cannot be the final frontier of sociological research on education that rests on the premise that structures and institutions in Serbia are fundamentally unjust and produce unacceptably high levels of inequality and poverty. Critical pedagogy can provide a solid foundation for a range of new research questions that surpass the limitations of existing research.

**Keywords:** sociology of education, critical pedagogy, inequality, social transformation

# References

Ahearn, C. E. (2021). Planning for college and careers: How families and schools shape the alignment of postsecondary expectations. *Sociology of Education*, *94*(4), 271–293. https://doi.org/10.1177/00380407211039272

Apple, M. W. (1993). *Official knowledge: Democratic education in a conservative age.* Routledge & Kegan Paul.

Apple, M. W. (1996). *Education and cultural politics.* Teachers College Press.

Apple, M. W. (2012). *Ideologija i kurikulum*. Fabrika knjiga.

Arandarenko, M., Krstić, G., & Žarković Rakić, J. (2017). *Dohodna nejednakost u Srbiji*. Friedrich Ebert.

Baltodano, M., Darder, A., & Torres, R. D. (Eds.). (2009). *The critical pedagogy reader*. Routledge.

Bernstein B. B. (1977). *Class codes and control. vol. 3 towards a theory of educational transmissions (Second revised)*. Routledge and Kegan Paul.

Bourdieu P. (1984). *Distinction: a social critique of the judgement of taste*. Routledge & Kegan Paul.

Bowles, S., & Gintis, H. (1976). *Schooling in capitalist America: educational reform and the contradictions of economic life*. Basic Books.

Burdije, P., & Paseron, Ž. K. (2014). *Reprodukcija. Elementi za jednu teoriju obrazovnog sistema*. Fabrika knjiga.

Carbonaro, W., Lauen, D. L., & Levy, B. L. (2023). Does cumulative exposure to high-poverty schools widen test-score inequality?. *Sociology of Education*, *96*(2), 81–103. https://doi.org/10.1177/00380407221147889

Carnoy, M., & Levin, H. (1985). *Schooling and work in the democratic state*. Stanford University Press.

Cho, S. (2012). *Critical pedagogy and social change: Critical analysis on the language of possibility*. Routledge.

Daniels, H., & Cole, T. (2010). Exclusion from school: short-term setback or a long term of difficulties?. *European Journal of Special Needs Education*, *25*(2), 115–130. https://doi.org/10.1080/08856251003658652

Dardar, A., Baltodano, M., & Torres, R. (2003). Critical pedagogy: An introduction. In A. Dardar, M. Baltodano & R. Torres (Eds.), *The Critical Pedagogy Reader*. Routledge.

Davis, K., & Moore, W. E. (1945). Some principles of stratification. *American Sociological Review*, *10*(2), 242–249.

Feinberg, W., & Soltis, J. F. (2009). *School and society*. Teachers College Press.

Gast, M. J. (2022). Reconceptualizing college knowledge: Class, race, and Black students in a college-counseling field. *Sociology of Education*, *95*(1), 43–60. https://doi.org/10.1177/00380407211046053

Gevirc, Š., & Krib, A. (2012). *Razumevanje obrazovanja: sociološka perspektiva*. Fabrika knjiga.

Jackson, M. I., & Schneider, D. (2022). Public investments and class gaps in parents' developmental expenditures. *American Sociological Review*, *87*(1), 105–142. https://doi.org/10.1177/00031224211069975

Janković, M. (2022). Državna matura, funkcionalizam i ideologija. *Godišnjak za sociologiju*, *18*(29), 119–141.

Jary, D., & Jary, J. (1991). *Harper Collins dictionary of sociology*. Harper Perennial.

Johnson, A. M. (2022). Collaborating in class: Social class context and peer help-seeking and help-giving in an elite engineering school. *American Sociological Review*, *87*(6), 981–1006. https://doi.org/10.1177/00031224221130506

Kim, C. H., & Choi, Y. B. (2017). How meritocracy is defined today?: Contemporary aspects of meritocracy. *Economics & Sociology*, *10*(1), 112–121. https://doi.org/10.14254/2071789X.2017/10-1/8

Krek, M. (2018, January 4). Šta znači "prosečna zarada" ako je većina nema?. *Peščanik*. https://pescanik.net/sta-znaci-prosecna-zarada-ako-je-vecina-nema/

Mbekeani, P. P. (2023). Income-based gaps in college-going activities: High school classes of 1992 and 2004. *Sociology of Education*, *96*(1), 62–79. https://doi.org/10.1177/00380407221138051

McLaren, P. (1998). Revolutionary pedagogy in postrevolutionary times: Rethinking the political economy of critical education. *Educational Theory*, *48*, 431–462.

McRobbie, A. (1978). Working class girls and the culture of femininity. In Centre for Contemporary Cultural Studies women's group, *Women take issue* (pp. 96–108). Hutchison.

Mihailović, V., Ilić, V., & Pavićević, G. (2023). *Stavovi građana Srbije o učešću u demokratskim procesima 2022*. Crta.

Parsons, T. (2017). The school class as a social system: Some of its functions in American society. In A. R. Sadovnik, P. Cookson Jr, S. Semel & R. Coughlan (Eds.), *Exploring Education* (pp. 151–164). Routledge.

Parsons, T., Cicmil, S., & Pešić, V. (1992). *Moderna društva*. Gradina.

Passaretta, G., & Skopek, J. (2021). Does schooling decrease socioeconomic inequality in early achievement? A differential exposure approach. *American Sociological Review*, *86*(6), 1017–1042. https://doi.org/10.1177/00031224211049188

Sarah, E., Scott, M., & Spender, D. (1988). The education of feminists: The case for single-sex schools. In D. Spender and E. Sarah (Eds), *Learning to lose: Sexism and education*. Women's Press.

Sen, A. (1979). Equality of what?. *The Tanner lecture on human values*, *1*, 1–26.

Shor, I. (1992). *Empowering education: Critical teaching for social change*. University of Chicago Press.

Tarabini, A., Jacovkis, J., & Montes, A. (2018). Factors in educational exclusion: Including the voice of the youth. *Journal of Youth Studies*, *21*(6), 836–851. https://doi.org/10.1080/13676261.2017.1420765

Willis, P. (2017). *Learning to labour: How working-class kids get working class jobs*. Routledge.

Young, I. M. (2011). *Justice and the politics of difference*. Princeton University Press.

# ASSESSING EDUCATIONAL OPPORTUNITIES: FROM THE FIRST STATISTICAL ANALYSIS IN SERBIA

**Aleksandra Ilić Rajković[1] and Ivana Jeremić**

*Department of Pedagogy and Andragogy, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia*

## Introduction

In 1882, Serbia's Law on Primary Schools established a six-year schooling requirement for every child between the ages of 7 and 11. The intent was to ensure equal access to education for all children and achieve full school enrollment by 1892 (Ilić Rajković, 2021). This paper uses official statistical data to explore the equality of educational chances in the years immediately following the adoption of the law. Specifically, we delve into the indicators of equal educational opportunities and their interpretation by statisticians. The paper has two primary objectives: to illuminate the notion of *equal chances* at this transformative juncture in Serbian educational history and to highlight pertinent methodological and statistical approaches.

## Research Source and Data Analysis

The earliest analysis of school education in Serbia appeared in 1833. Subsequent systematic data collection efforts were spearheaded by prominent figures like Petar Radovanović, Milovan Spasić, and Milan Đ. Milićević. Between 1875 and 1909, detailed data on schools were organized and published, with the system largely initiated by Bogoljub Jovanović and later continued by Zaharije Popović. They prepared a serial publication entitled Statistics of Public Education (1875). The data were collected using forms filled out by teachers, supervisors during school visits, and school principals

---

1  avilic@f.bg.ac.rs

within annual reports. The primary source in our research is the Statistics of Teaching for the School Year of 1884/85 by Bogoljub Jovanović (Jovanović, 1894). We conducted a content analysis to identify the indicators of equality recognized in the statistical report's section on primary schools.

## Dimensions of Educational Equality in Jovanović's Statistical Report

Jovanović does not directly address the concept of equal educational opportunities for all children. Yet, his interpretation of the results of statistical analyses positions equality as a foundational objective in the context of late 19th-century educational policies. He evaluates equality across multiple dimensions, including schools, teachers, students, classroom furnishings, educational materials, libraries, and funding strategies for education. In the domain labeled Schools, equality could be recognized in indicators such as the number of schools, their geographical distribution, school condition and comfort levels, the number of classes, the space and volume allocated to school departments, and the student count. In the Teachers domain, some of the equality indicators we identified include the teacher count, teachers' educational background, their professional success, salary, and age, teachers' reasons for leaving their jobs at schools, and teacher reprimands and transfers. Regarding the Students domain, the indicators of equality comprise factors such as the student count, grade repetition, school dropouts, student reprimands, absences, academic performance, rewards, parents' professions, and the distance between a student's home and school. Under the category labeled School Furniture, Materials, and Libraries, the indicators of equality include the condition of school furniture, the number and state of school materials, and the book count in libraries. In the Expenditure on Primary Schools domain, equality indicators encompass remuneration for teacher accommodation and state and municipal expenditures on different schools.

Data on the characteristics of the school network provide crucial insights into the equality of educational opportunities at this specific historical moment, shedding light on the accessibility of schools for all students. In this context, Belgrade was notably well-situated, with one school per 800 m², whereas in the Toplica district, there was one school per 459.9 km². Concerning school funding, urban schools received four times

the funding of rural schools. Rural student education was also less costly than urban student education in 20 out of 22 districts.

The education of rural female students emerges as a pressing concern in the Students domain. Data reveal that cities educated 60 times more girls than rural areas. Nearly 80% of children aged between 6 and 11 years did not attend school. Jovanović also examines student absences and performance, noting that female students and rural children were absent more often, despite girls achieving better average results than boys. He further analyzes the factors leading to student attrition, emphasizing health issues and noting high mortality rates, particularly among students who were travelers. He states that in certain districts, poor school building conditions contributed to student mortality and illness, a significant concern given that some students slept at school.

In terms of school materials and equipment quality, there was no significant variation between schools. However, only in Belgrade and the Aleksinac district were all materials in good condition. A total of 45 schools had no libraries, while others averaged around 86 books, with urban school libraries generally hosting twice as many books as their rural counterparts.

## Some Methodological Characteristics of the Statistical Report

In light of contemporary requirements for structuring research reports (Banđur & Potkonjak, 1999), Jovanović's report contains elements of the three basic sections – theoretical introduction, methodology, and research findings – even though these structural elements are not explicitly delineated. The report showcases a wide array of analyses concerning primary schools, from 16 focusing on classroom furnishings, teaching aids, and libraries to more than 150 centering on students. Most of these analyses are accompanied by tables that provide both quantitative and qualitative descriptions. Additionally, some data are visually represented through six cartograms and ten diagrams, rendered in various colors and featured on distinct pages within the report. Compared to contemporary statistical methods, Jovanović's approach primarily consists of calculating frequencies, percentages, averages, and ratios. Though seemingly basic, he enriches his methodology with detailed explanations, data comparisons across multiple analyses, time periods, and a reasoned amalgamation of different data

categories for more poignant results. For instance, while commenting on the number of medium-quality buildings, Jovanović remarked: "Of this percentage, we could easily add one half to the poor-quality buildings, because what is qualified as average always leans more towards poor than good" (Jovanović, 1894, p. 98). Such an approach might seem unconventional in today's statistical reporting but should be understood in the context of being among the first of its kind in Serbia.

## Conclusions

From the analyzed source, it is evident that the accessibility of educational opportunities was significantly influenced by students' living environment or school location. Three years after making education compulsory, there was still a significant gap in school attendance, especially among female students. However, it is not possible to make reliable generalizations based on this small and selective set of indicators. It might only be relevant to note these trends, especially since some might still be relevant today, considering the urban-rural divide and the disparity between more and less developed districts. The diversity of statistical data and analyses in Jovanović's report shows how important such reports are for highlighting problems in education. Not only that, but Jovanović occasionally transitions from description to content interpretation (Vuletić, 2017), creating room for translating words into deeds. Undoubtedly, the report encourages further exploration of the potential of statistical analyses.

**Keywords:** statistics of public education, equality of educational opportunities, Serbia, 1884/5

## References

Banđur, V., i Potkonjak, N. (1999). *Metodologija pedagogije.* Savez pedagoških društava Jugoslavije.

Ilić Rajković, A. (2021). Školska obaveza u Srbiji između propisa i prakse. U A. Ilić Rajković i S. Petrović Todosijević (Ur.), *Bez škole šta bi mi?! Ogledi iz istorije obrazovanja u Srbiji i Jugoslaviji od 19. veka do danas* (str. 23–59). Institut za noviju istoriju Srbije i Institut za pedagogiju i andragogiju Filozofskog fakulteta Univerziteta u Beogradu.

Jovanović, B. (1984). *Državopis Srbije – sveska XX; Statistika nastave u Kraljevini Srbiji za 1884-85. školsku godinu*. Državna štamparija Kraljevine Srbije.

Vuletić, A. (2017*). Statistika u službi državne uprave i unapređenja narodnog blagostanja u Srbiji 19. veka*. U P. Krestić (Ur.), *Država i politike upravljanja (18–20. vek)*. Istorijski institut.

# THE IMPORTANCE OF SOCIODEMOGRAPHIC CHARACTERISTICS FOR THE DEVELOPMENT OF ENVIRONMENTAL LITERACY[1]

**Milica Marušić Jablanović[2], Jelena Stanišić, Dragana Gundogan**
*Institute for Educational Research, Belgrade, Serbia*

**Sanja Blagdanić, Zorica Veinović**
*Teacher Education Faculty, University of Belgrade, Belgrade, Serbia*

**Dragana Đorđević**
*Institute for Chemistry, Technology and Metallurgy (ICTM), University of Belgrade, Belgrade, Serbia*

**Vera Županec**
*Faculty of Sciences, University of Novi Sad, Novi Sad, Serbia*

**Slađana Savić**
*Faculty of Chemistry, University of Belgrade, Belgrade, Serbia*

## Introduction

Environmental problems have gained prominence in light of the emerging global environmental crisis and its devastating impact on all living beings (Beck, 1992; Ehrlich & Ehrlich, 2013; Rockstrom et al. 2009). Therefore, there is a need for environmentally literate citizens who understand the essence of these problems and are ready to respond to the challenges they pose. Research has shown that societies and social groups react to ecological problems differently. Socioeconomic factors are important since social groups

---

2    milica.m.jablanovic@gmail.com

differ in terms of their ecological knowledge and awareness as well as environmental affect, behavior, and activism.

Many countries have looked to environmental education (EE) as a solution to the environmental threats faced locally and globally (Brennan, 1994). It is essential to address these issues at an early age, since studies have shown that the early teenage years are a crucial period for developing emotional relations with living beings in nature (Eames et al., 2018; Kals & Ittner, 2003). The main goal of EE is to improve environmental literacy (EL) (Stevenson et al., 2013). McBeth et al. (2008) operationalize EL comprehensively, encompassing four components: (1) ecological knowledge, (2) affect, (3) cognitive skills, and (4) behavior.

Research has shown that gender influences EL in many contexts. In Serbia, studies have found women to be more willing to engage in various activities aimed at resolving environmental problems (Mišković, 1997). A study conducted in Poland also identified gender differences in EL, with girls obtaining higher scores on knowledge, attitudes, and behavior (Svobodová, 2023). A Czech study reported similar findings, with girls scoring better on pro-environmental sensitivity, attitudes, and behaviors than boys (Svobodová, 2023; Svobodová & Chvál, 2022). In Turkey, research has shown that female students generally obtain higher scores on the EL scale's dimensions of Knowledge and Concern, while scores on the dimensions of Attitudes and Sensitivity tend to be similar among male and female students (Genc & Akilli, 2016; Teksoz, 2014). However, not all studies have found a relationship between gender and EL (Grúňová et al., 2018; Nastoulas et al., 2017; Svobodová, 2023). In Serbia, studies have reported no gender differences in knowledge, but girls have been found to be more committed to pro-environmental activism (Mišković, 1997; Stanišić, 2008). Despite these mixed findings, the prevailing view in the literature is that gender influences EL.

Concerning other background factors such as regional and residential differences, many researchers have reported that EL components differ according to cultural and social factors (Barraza & Walford, 2002; Deng et al., 2006; Olli et al., 2001; Van Petegem & Blieck, 2006). For example, a study in China found that environmental issues varied depending on regional and economic differences and local characteristics (Clayton, 2019). In Serbia, research has shown that students from urban dwellings are better informed about environmental problems compared to students from rural areas (Kundačina, 2006; Mišković, 1997). Furthermore, a study found respondents from

villages to be more inclined towards environmental engagement than urban residents (Kundačina, 2008).

# Method

In this study, we focused on several sociodemographic factors (gender, settlement type, and region of Serbia) and aimed to explain their effects on scores on the four components of EL (knowledge, behavior, and cognitive and affective aspects). Our study participants were seventh-grade students of primary schools in Serbia (13–14 years old). The number of participants was 877 participants. Data were collected using the Middle School Environmental Literacy Survey – MSELS[3] (McBeth et al., 2008). The instrument consists of seven segments with 77 closed-ended questions. Questions on the key sociodemographic characteristics are situated at the beginning of the survey, followed by a test of general ecological knowledge, the scale of affective relationship with the environment (measures verbal commitment, environmental sensitivity, and environmental feeling), and the behavior scale (measures actual commitment). In the data analysis process, we conducted a T-test and ANOVA.

# Results

The first step in the analysis entailed a gender comparison of EL results. Compared to boys, girls obtained higher scores on all four components of EL: ecological knowledge ($p$ = .002), affect ($p$ < .001), cognitive skills ($p$ < .001), and pro-environmental behavior $p$ < .001). Consequently, girls obtained higher overall EL scores ($p$ < .001).

The achievements of respondents from urban and rural areas were compared in terms of the total score and scores on the individual components of EL. In line with previous findings, students from urban settlements had slightly higher scores on ecological knowledge ($p$ = .004) and cognitive skills ($p$ = .002), while students from rural dwellings showed a higher affinity for nature ($p$ = .001) and a greater tendency

---

3    Permission to use this instrument was given on February 18, 2022, by Thomas Marcinkowski, professor and the Program Chair of the STEM Education Program at the Florida Institute of Technology, USA.

towards pro-environmental behavior ($p$ = .001). There were no significant differences in the total score on EL depending on the settlement type.

Furthermore, ANOVA was performed comparing students from four regions: Belgrade, Vojvodina, Southern and Eastern Serbia, and Šumadija and Western Serbia. The post-hoc test revealed that students from Vojvodina obtained better results on the cognitive skills test compared to students from Belgrade ($p$ = .031) and Šumadija and Western Serbia ($p$ = .013). Concerning affect, a significant difference was found in favor of Southern and Eastern Serbia compared to Belgrade ($p$ = .022). Finally, students from Vojvodina obtained slightly higher total scores than students from Belgrade ($p$ = .047).

## Conclusion and Implications

The relationship between gender and EL is complex and influenced by a variety of factors. Concerning knowledge, according to TIMSS 2007 data obtained on eighth-graders, even though girls performed better in science internationally, in Serbia, there were no statistically significant differences in achievement between girls and boys. However, there were differences in achievement at the school-subject level. Specifically, boys performed better in physics and geography, while girls outperformed boys in biology and chemistry (Gašić-Pavišić et al., 2011, p. 36). Since the content of the MSELS knowledge test belongs to the domain of biology and girls performed better in our study, our results are in line with the results of TIMSS 2007 obtained in Serbia. In terms of the other components of EL, our results aligned with previous findings showing that girls tend to obtain higher scores on pro-environmental behavior and affect (Svobodová, 2023; Svobodová & Chvál, 2022; Svobodová, 2023; Genc & Akilli, 2016; Teksoz, 2014). Various explanations have been proposed for women's higher levels of EL. One explanation is that women have a higher ethic of care (Gilligan, 1982). Another explanation is that women's inferior position in society and experience of oppression make them more empathetic to others (Kalof, 2000).

Having in mind that students from rural areas proved to have less information and knowledge compared to their peers from cities but still showed greater readiness to act, we can assume that the everyday knowledge and experience students obtained by living close to nature was a more significant motivator for environmental activism

than school knowledge and knowledge from other sources (Stanišić, 2008). Kundačina (2006) found that respondents from rural areas were more ready to take part in pro-environmental activities because they were more emotionally connected to nature, home, and family and thus more active in pro-environmental practices with their families.

Environmental literacy is essential for addressing the environmental challenges of our time. By improving the environmental literacy of children and the youth, we can help create a more sustainable future for all. Nevertheless, the aims of environmental education must be supported by political, technical, and infrastructural conditions. Furthermore, education at an early age cannot replace the role of adult education, since it is adult education that can bring quicker changes in the processes of citizen participation and decision-making. The development of environmental education should be connected with promoting equity, inclusion, and the quality of education in general. Schools should offer influential role models and the possibility to frequently spend time in nature, especially because it is not available to all families (Stevenson et al., 2014). For this reason, it is crucial to simultaneously work on the development of EE, environmental justice, and social equity (Klawinski, 2022).

**Keywords:** environmental literacy, environmental education, gender, settlement type, regions of Serbia

# References

Barraza, L., & Walford, R. A. (2002). Environmental education: A comparison between English and Mexican school children. *Environmental Education Research*, *8*(2), 171–186. https://doi.org/10.1080/13504620220128239

Beck, U. (1992). *Risk Society*. Sage.

Brennan, A. (1994). Environmental literacy and educational ideal. *Environmental values*, *3*(1), 3–16. https://doi.org/10.3197/096327194776679827

Clayton, S., Bexell, S. M., Xu, P., Tang, Y. F., Li, W. J., & Chen, L. (2019). Environmental literacy and nature experience in Chengdu, China. *Environmental Education Research*, *25*(7), 1105–1118. https://doi.org/10.3197/096327194776679827

Deng, J., Walker, G. J., & Swinnerton, G. (2006). A comparison of environmental values and attitudes between Chinese in Canada and Anglo-Canadians. *Environment and Behavior*, *38*(1), 22–47. https://doi.org/10.1177/0013916505278458

Eames, C., Barker, M., & Scarff, C. (2018). Priorities, identity and the environment: Negotiating the early teenage years. *The Journal of Environmental Education*, *49*(3), 189–206. https://doi.org/10.1080/00958964.2017.1415195

Ehrlich, P. R., & Ehrlich, A. H. (2013). Can a collapse of global civilization be avoided? *Proceedings of the Royal Society of London B Biological Sciences*, *280*(1754), 20122845.

Gašić- Pavišić,S., Stanković, D., & Malinić, D. ( 2011). TIMSS 2007 u Srbiji-opis istraživanja i glavi rezultati [TIMSS 2007 in Serbia – description of research and main results]. U S. Gašić- Pavišić & D. Stanković (Ur.), *TIMSS 2007 u Srbiji* (11–40). Institut za pedagoška istraživanja.

Genc, M., & Akilli, M. (2016). Modeling the relationships between subdimensions of environmental literacy. *Applied Environmental Education & Communication*, *15*(1), 58–74. https://doi.org/10.1080/1533015X.2016.1141724

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Harvard.

Kalof, L. (2000). The multi-layered discourses of animal concern. In H. Addams & J. Proops (Eds.), *Social discourse and environmental policy: An application of Q methodology* (pp. 174–195). Edward Elgar.

Kals, E., & Ittner, H. (2003). Children's environmental identity: Indicators and behavioral impacts. In S. Clayton & S. Opotow (Eds.), *Identity and the Natural Environment The Psychological Significance of Nature* (pp. 135–157). The MIT Press.

Klawinski, T. P. (2022). *Achieving Environmental Literacy: An Evidenced-Based Model for Public Schools.* Wilmington University.

Kundačina, M. (2006). *Činioci ekološkog vaspitanja i obrazovanja učenika* [Factors of environmental education and education of students]. Učiteljski fakultet.

McBeth, B., Hungerford, H., Marcinkowski, T., Volk, T., & Meyers, R. (2008). *National Environmental Literacy Assessment Project: Year 1: National baseline study of middle grades students final research report*. https://www.epa.gov/sites/default/files/documents/masternela_year1report_081208_.pdf

Mišković, M. (1997). *Ekološka kriza i ekološka svest omladine* [Environmental crisis and environmental awareness of youth]. Viša škola za obrazovanje vaspitača, Ekocentar.

Nastoulas, I., Marini, K., & Skanavis, C. (2017). Middle school students' environmental literacy assessment in Thessaloniki, Greece. In *Health and Environment Conference Proceedings* (pp. 198–209). Hamdan Bin Mohammed Smart University.

Olli, E., Grendstad, G., & Wollebaek, D. (2001). Correlates of environmental behaviors: Bringing back social context. *Environment and Behavior*, *33*(2), 181–208. https://doi.org/10.1177/0013916501332002

Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S., Lambin, E. F., Lenton, T. M., Scheffer, M., Folke, C., Schellnhuber, H. J., Nykvist, B., de Wit, C. A., Hughes, T., van der Leeuw, S., Rodhe, H., Sörlin, S., Snyder, P. K., Costanza, R., Svedin, U., Falkenmark,

M. … & Foley, J. A. (2009). A safe operating space for humanity. *nature*, *461*(7263), 472–475. https://doi.org/10.1038/461472a

Stanišić, J. (2008). *Ekološko vaspitanje i obrazovanje učenika u osnovnoj školi* [Environmental education of pupils in primary school] (Unpublished master thesis). University of Belgrade, Faculty of Philosophy.

Stevenson, K., Peterson, N., Carrier, S., Strnad, R., Bondell, H., Kirby-Hathaway, T., & Moore, S. (2014). role of significant life experiences in building environmental knowledge and behavior among middle school students. *The Journal of Environmental Education*, *45*(3), 163–177. https://doi.org/10.1080/00958964.2014.901935

Stevenson, R. B., Brody, M., Dillon, J., & Wals, A. E. J. (2013). *International handbook of research on environmental education*. Routledge.

Svobodová, S. (2020). Environmental literacy of pupils and its investigation in the Czech Republic. *Sociální pedagogika Social Education*, *8*(1), 88–104.

Svobodová, S. (2023). Environmental literacy of ISCED 2 pupils in Poland. *Journal of Elementary* Education, *16*(1), 60–77. https://doi.org/10.18690/rei.16.1.1665

Svobodová, S., & Chvál, M. (2022). Environmental literacy of lower secondary school pupils in the Czech Republic. *Journal of Biological Education*, 1–23. https://doi.org/10.1080/00219266.2022.2067213

Teksoz, T., Boone, J.W., Yilmaz Tuzun, O., & Oztekin, C. (2014). An evaluation of the environmental literacy of preservice teachers in Turkey through Rasch analysis. *Environmental Education Research*, *20*(2), 202–227. https://doi.org/10.1080/13504622.2013.768604

Van Petegem, P., & Blieck, A. (2006). The environmental worldview of children: A cross-cultural perspective. *Environmental Education Research*, *12*(5), 625–635. https://doi.org/10.1080/13504620601053662

# THE RELATIONSHIP BETWEEN FOURTH-GRADERS' AGE AND ACHIEVEMENT ON THE IEA'S PIRLS 2016 READING TEST IN SLOVENIA

**Jure Novak**[1] **and Nina Pertoci**

*Educational Research Institute, Ljubljana, Slovenia*

## Introduction

The age at which children start attending primary school varies from country to country. Countries establish a cutoff date for mandatory enrollment in school. In Slovenia, children born in the same calendar year are enrolled in the same generation. According to the law, children must be enrolled in the first grade of primary school in the calendar year in which they turn six years old (Law on Primary Schools, 1996). Looking at statistical data, in the year 2020, children in 150 world countries began their primary education at the age of six. In 25 countries, children started their education at the age of five (World Bank Open Data, 2020).

Recent years have seen an increase in delayed enrollment in primary school, with more children only starting their nine-year primary education in the year they turn 7, due to health reasons (SiStat, n.d.). Therefore, many parents of Slovenian children are wondering if the statutory age is suitable for enrolling their children in school. In Slovenia, a proposal for the postponement of schooling can be made by parents, the guidance committee, or a health worker (Primary School Act, 1996). If the proposal is accepted, the child's enrollment in primary school is postponed for one year.

In mere four years, between the school years of 2016/2017 and 2019/2020, the percentage of seven-year-olds among first-graders in Slovenia increased by 3.54% (SiStat, n.d.). A 15-year overview can be obtained by comparing the percentages of six-year-old children still enrolled in kindergarten. Over 15 years, the percentage of six-year-olds enrolled in kindergarten increased by 7.8% (SURS, n.d.). These data indicate an upward trend in delaying enrollment in the first grade in Slovenia.

---

1    jure.novak@pei.si

Research has shown that parents with a medium or high income are more likely to choose to delay the start of their children's education, while fewer parents with lower incomes opt for a delay (Hauck & Finch, 1993). Delayed enrollment also occurs in developing countries, but the reasons are different. Children in these countries start school later if they show signs of illness or malnutrition or if their families cannot afford to enroll them in school (Chen, 2015).

Multiple studies have explored differences between younger and older students in the same class or generation, but they have yielded inconsistent results. Findings on differences between younger and older students can be divided into three groups:

1. Older students perform better than their younger classmates – Cameron and Wilson (1993), Kawaguchi (2011), and Bedard and Dhuley (2006).

2. Differences between older and younger students disappear in higher grades – Hauck and Finch (1993) and Stipek and Byler (2001). An extensive study involving 97,000 students showed that differences between younger and older students disappeared by the age of 17 – Longer et al. (1984, as cited in Bickel et al., 1991).

3. Younger students are more successful than their older classmates – ICCS 2006 and ICCS 2009, in which Slovenia participated, showed that in 15 participating countries, younger students achieved better results than their older classmates (Klemenčič & Mirazchiyski, 2020).

## Problem

The increasing trend of postponing enrollment in the first grade in Slovenia is reflected in overcrowded kindergartens and a significant age difference among classmates, which can amount to more than one year. A one-year age difference also means one more year of development (Hauck & Finch, 1993).

Does delaying the start of education affect a child's success in primary school and later in life? Do factors other than the relative age at school entry have a greater influence on a child's success? We formulated the following research question:

RQ1: How does the month of birth affect the reading literacy of Slovenian fourth-graders?

# Method

PIRLS data collection took place in April and the beginning of May 2016. A total of 4,499 Slovenian fourth-graders from 160 schools were tested. According to Pečjak (2010), fourth-graders are at the point of transitioning from "understanding how to read" to "reading to understand".

In the analysis, we aimed to determine whether there was a connection between students' age (in months) and their reading test results in the PIRLS 2016 survey. Since the testing took place over a period of one and a half months, we could not accurately determine the children's age at the time of testing, which resulted in differences of up to a month and a half. To limit the influence of this factor, we recoded the months of birth and grouped students into 3 groups. The first group included students born between January and April 2006. The second group encompassed students born between May and August 2006, while the third group included students born between September and December 2006. As a dependent variable, we determined the score on the PIRLS reading literacy test, which is evaluated with points on a scale and has a range of 0 to 630 points.

To answer the research question, we performed a regression analysis. We used the IEA IDB Analyzer, which is a tool specifically designed to handle the complex sampling of the IEA's large-scale assessments.

# Results

The recoded variable is presented in a contingency table, which shows the mean values of test results by group, the number of tested students, and standard errors. Firstly, the number of students was similar in the first two groups, but visibly decreased in the third group, among the youngest. We can conclude that the share of these students was smaller due to a portion of students of this age enrolling in the first grade a year later. However, since the secondary analysis sample only included male and female students born in 2006, the table also does not include the share of students who make up for this deficiency (students born in 2005).

The most interesting finding is the decline in the average values of the results on the scale (mean). As age increased, there was a visible decline in the results on the reading test scale, namely, by an average of 11.43 points between the group born in the first third of 2006 (549.67) and the group born in the last third of 2006 (538.24).

**Table 1** *Mean Values of Results on the PIRLS Reading Test by Age Group*

| Month of Birth | N of Cases | Percentage (%) | Percentage (s. e.) | Test Score (Mean) | Test Score (s. e.) |
|---|---|---|---|---|---|
| January-April | 1,562 | 36.55 | .97 | 549.67 | 2.56 |
| May-August | 1,501 | 34.42 | .93 | 545.09 | 2.31 |
| September-December | 1,264 | 29.04 | 1.03 | 538.24 | 3.70 |

To determine how the month of birth affected reading literacy, we performed a linear regression. We recoded the months into three dummy variables and set the variable of January – April as the base category. Achievement on the PIRLS reading test was the dependent variable.

**Table 2** *Regression Analysis of Mean Scores on the Cognitive Reading Test by Age Group – PIRLS*

| Month of Birth | Regression Coefficient | t-value |
|---|---|---|
| January-April | 549.67 | . |
| May-August | -4.58 | -1.56 |
| September-December | -11.43 | -2.93 |

The group of students born between January and April was the reference for the other two groups. The standardized T value of the second group (May-Aug) indicated that the regression coefficient did not statistically significantly differ from the coefficient of the first group (-1.56), but the coefficient of the third group (Sep-Dec) did, with a standardized t value -2.93 at the 95% confidence interval. We can conclude that the month of birth and achievement on the PIRLS reading test were statistically significantly related. It is evident from the analysis that students who were born later in the year scored lower on the PIRLS 2016 reading test.

# Conclusion

The answer to the research question of whether there were differences in the school performance of students of different ages in the same class refers to reading literacy measured by the PIRLS survey and cannot be generalized to the overall academic performance of fourth-graders. However, the linear regression revealed a statistically significant linear relationship between the month of birth and reading literacy test results in the entire population of fourth-graders who were regularly enrolled in school.

These findings suggest that the relative age of fourth-graders in Slovenia may have an impact on their reading literacy. Reading is one of the most important skills for learning and affects the understanding of the learning material in most subjects. Thus, the questions are raised of the age until which these differences persist and the degree to which they can affect the general learning success throughout schooling. The contradictory findings of various studies that have dealt with this issue over the years also suggest that the issue should be tackled systematically, interdisciplinarily, and extensively, with several age cohorts. It is important to acknowledge the limitations of the present study, including the inability to precisely determine student age at the time of testing and the absence of data on certain factors that could influence academic performance. Nevertheless, the results indicate that the age of students in the classroom may be a factor worth considering in the education policy and practice, especially in the context of delayed school entry trends observed in Slovenia.

**Keywords:** PIRLS 2016, reading literacy, student age, fourth-graders

# References

Bedard, K., & Dhuey, E. (2006). The persistence of early childhood maturity: International evidence of long-run age effects. *The Quarterly Journal of Economics*, *121*(4), 1437–1472. https://doi.org/10.1093/qje/121.4.1437

Bickel, D. D., Zigmond, N., & Strayhorn, J. (1991). Chronological age at entrance to first grade: Effects on elementary school success. *Early Childhood Research Quarterly*, *6*(2), 105–117. https://doi.org/10.1016/0885-2006(91)90001-2

Cameron, M. B., & Wilson, B. J. (1990). The effects of chronological age, gender, and delay of entry on academic achievement and retention: Implications for academic

redshirting. *Psychology in the Schools*, *27*(3), 260–263. https://doi.org/10.1002/1520-6807(199007)27:3<260::aid-pits2310270313>3.0.co;2-v

Chen, Q. (2015). Ready for school? Impacts of delayed primary school enrollment on children's educational outcomes in rural China. *International Journal of Educational Development*, *45*, 112–128. https://doi.org/10.1016/j.ijedudev.2015.09.007

Hauck, A. L., & Finch, A. J. (1993). The effect of relative age on achievement in middle school. *Psychology in the Schools*, *30*(1), 74–79. https://doi.org/10.1002/1520-6807(199301)30:1<74::aid-pits2310300112>3.0.co;2-e

Kawaguchi, D. (2011). Actual age at school entry, educational outcomes, and earnings. *Journal of the Japanese and International Economies*, *25*(2), 64–80. https://doi.org/10.1016/j.jjie.2009.02.002

Klemenčič, E., & Mirazchiyski, P. (2020). *Bralna pismenost četrtošolcev in četrtošolk v Sloveniji: Nacionalno poročilo Mednarodne raziskave bralne pismenosti (IEA PIRLS 2016 in ePIRLS 2016)*. Pedagoški inštitut.

Pečjak, S. (2010). *Psihološki vidiki bralne pismenosti: od teorije k praksi*. Znanstvena založba Filozofske fakultete.

*Podatkovna Baza SiStat.* (n.d.). https://pxweb.stat.si/SiStat/sl/Podrocja/Index/192/izobrazevanje

*Primary school starting age (years).* (n.d.), World Bank Open Data. https://data.worldbank.org/indicator/SE.PRM.AGES

Stipek, D. (2002). At what age should children enter kindergarten? A question for policy makers and parents. *Social Policy Report*, *16*(2), 1–20. https://doi.org/10.1002/j.2379-3988.2002.tb00018.x

*Zakon o osnovni šoli /ZOsn/* (1996). (n.d.). Uradni list. https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/1996-01-0570/zakon-o-osnovni-soli-zosn?h=zakon%20o%20osnovni%20%C5%A1oli

# ADULT EAST EUROPEAN IMMIGRANTS IN GREECE: THE RIGHT TO A MORE HOLISTIC INTEGRATION

**Zoe Karanikola**[1]

*Hellenic Open University, University of Patras, Patras, Greece*


**Rania Vasiliadou**

*Athens Sunday School for Immigrants, Hellenic Open University, Athens, Greece*

## Introduction

In the 1990s, the dissolution of the Soviet Union and the collapse of the Eastern Bloc left people with a new uncertainty. For some, fleeing to Greece was the easiest choice, due to its proximity, EU member state status, and perceived affluence (Rovolis & Tragaki, 2006). The Greek state was ill-prepared for such a large influx of immigrants. However, the status quo of being in need of cheap labor resulted in their prompt integration into the workforce (Griffith, 2017). Many chose to stay and join the system to the extent they were allowed (Thoma, 2010).

Now, these immigrants are in their 50s and 60s and seek to expand their horizons into the West, beyond the confines of Greece, and the first step is to learn English. However, the state, social justice, and academic research have failed them in this endeavor (Karanikola & Palaiologou, 2021). They have to rely on volunteers for their linguistic development and accept the concomitant compromises regarding education quality (Lange & Baillie Abidi, 2015).

This paper is a result of the authors' efforts to be effective in teaching English to a group of Eastern Europeans aged 48 to 60 permanently living in Greece. As the literature suggests, educational research (Peel, 2020) is the way forward in improving learning practices. Much of this research should look into learners' needs and the obstacles they have to overcome. So far, the literature has paid some attention to immigrants learning the language of the host country, but has generally neglected their efforts to learn

---

1    karanikola.zoi@ac.eap.gr

English if it is not the official language of their new country. The hope is to take a step towards recognizing everyone's need to be well-versed in English or whatever the lingua franca of their new world may be, irrespective of their age, nationality, and social status.

## Methodology

Given the small number of participants and the amount of time spent teaching and observing them, the researchers opted for a qualitative approach with semi-structured interviews as the optimal solution (Gay et al., 2012). A thematic analysis was conducted, with the researchers recognizing patterns in the data from observations and interviews (Tsiolis, 2018) and analyzing them with a focus on unexpected themes (Lester et al., 2020). The focus group included four women, one of Polish and three of Bulgarian descent, and a man of Bulgarian descent, referred to as P1-5 for confidentiality reasons. At the time of the study, they learned English free of charge at the Sunday School for Immigrants, a volunteer-operated school in Athens. The researchers set out to discover the main communicative needs of this group in English and the obstacles they faced.

## Findings

Below are the findings organized into two themes: needs and obstacles.

### Needs Analysis

The researchers recognize the term "needs analysis" as described by Graves (2020), that is, the continuous analysis of learners' needs and wishes as well as the context in which the new language is to be used.

- *Travel.* Most participants found the safety net of English to be important for traveling independently and avoiding being infantilized by the need to be accompanied by their children.

- *Work.* P3 stated that she would leave Greece to work abroad if she could speak English. Other participants believed that it was too late for such changes at their age. English was not essential to their work but they considered it useful and a matter of self-respect. With Athens being full of foreigners, they wished to speak to them as well instead of only communicating with the Greek population.

- *Culture.* Participants mentioned British and American authors but stated that they could not always find Bulgarian, Greek, or Russian translations of the books they wanted to read. They expressed a love for music and stated that they wanted to understand lyrics in English.

- *Personal growth.* When asked why they decided to learn English, their reply was: "To be educated". They felt that there was a gap in their education that could be bridged by learning English. Their former lingua franca, Russian, was not enough. English would give them a voice in the Western world, where they felt "left behind".

## Obstacles

Participants' progress was slow. P5 stated: "It's our fault that you have to repeat the same things all the time but they have to be drilled into our brains".

Participants took full responsibility for not learning fast. They believed that there was only so much the state, schools, or teachers could do and that their learning progress was ultimately their responsibility.

An obstacle they all shared was age-related memory decline but they believed that homework was a good remedy. However, since English is not a phonetic language, they faced problems with pronunciation and reading. P1 suggested providing audio files for students to listen to at home. Following the suggestion, files were made available, but being unfamiliar with the technology required, none of the participants used them.

## Discussion

Due to the absence of anonymity afforded by quantitative research, one of the key issues remained unexplored. None of the participants mentioned the lack of continuity in

lessons resulting from frequent teacher and student absences. They talked of their own absenteeism as a major problem but if the group was taught by a single teacher, some cohesion would be established.

Viewing the situation critically, it seems crucial for the state to seriously address the issue of the life-long education of both nationals and immigrants (Richards, 2001). English is the lingua franca of the Western world and individuals who are not well-versed in English are compromised in terms of fitting in. They may miss out on the experiences life in the West has to offer, from travel to socializing. Both immigrants and nationals are often in low-paid jobs and cannot afford tuition, which means that social scientists and the state must take action to ensure the welfare of everyone living in its territory (Beste, 2015).

The problem with homework could be addressed through technology and know-how. However, the school follows traditional methods and volunteers are not required to do any work before lessons. This makes it impossible to create an online learning community (Fisher et al., 2020) that would act as a supportive network and would encourage students to discover other sources of learning, sources of particular interest to them.

There is also the issue of poor memory with which the researchers sympathize. Hsiao (2014) reported similar findings among Chinese older adults learning English. The literature suggests multiple solutions, including a method of teaching that encourages making connections between linguistic repertoires, multimodality in teaching so multiple senses are involved, and frequent contact with the language either in real life or through technology. P2 recognized the need to learn English to preserve memory, which is supported by research. Perhaps the state should facilitate and subsidize foreign language learning for everyone and not only for children as Jarvis suggests (Jarvis, 2005).

All participants referred to English as a matter of personal development. Creating an affiliation with their host country came slowly but surely and now they want their deserved share in Greece's connection to the West. They cannot feel fully integrated until they can do what most Westerners can, and to them, this means speaking English. It is about adding to their identities and enjoying the finer things in life – travel, culture, communication, self-fulfillment, and independence – and it is a worthy cause.

The widespread notion that immigrants learn English to find jobs abroad receives little evidence in this study, mainly due to participant age. Despite potential financial difficulties, immigrants do not shy away from claiming a better, more intellectual, more cultured life for themselves in Greece. The state, however, remains ageist. They have as much of a right to education as anyone and a country that claims to provide free education should delve into this issue.

Though commendable, volunteer-based education is insufficient. Preparation is important and it is crucial to take time to familiarize participants with the necessary technology to support their learning autonomy. This requires dedicated, long-term volunteer work, which is not always easy to ensure (Ezell, 2022). Therefore, the state needs to assume responsibility and help people reach their full potential for the benefit of the entire community.

**Keywords:** late adulthood, EFL, state responsibility

# References

Beste, A. (2015). *Education provision for Syrian refugees in Jordan, Lebanon and Turkey -Preventing a 'Lost Generation'*, UNU-GCM International. https://collections.unu.edu/view/UNU:5524

Ezell, J. M., Alsmadi, I., Gosnell, N., & Kaur, A. (2022). The racial and cultural ecology of home and community-based services for diverse older adults. *Journal of Aging Studies*, *61*, 101023. https://doi.org/10.1016/j.jaging.2022.101023

Fisher, L., Evans, M., Forbes, K., Gayton, A., & Liu, Y. (2020). Participative multilingual identity construction in the languages classroom: A multi-theoretical conceptualization. *International Journal of Multilingualism*, *17*(4), 448–466. https://doi.org/10.1080/14790718.2018.1524896

Gay L. R., Mills G. E., & Airasian P. W. (2012). *Educational research: Competencies for analysis and applications* (10th ed.). Pearson.

Graves, K. (2000). *Designing language courses: a guide for teachers*. Heinle and Heinle.

Griffith, A. (2017). *Building a mosaic: The evolution of Canada's approach to immigrant integration.* Retrieved from https://www.migrationpolicy.org/

Hsiao, S. J. (2014). *Investment and Challenges: ESL Learning among Older Adult Chinese-Speaking Immigrants* (Doctoral dissertation). University of Washington.

Jarvis, P. (2005). *Adult education and the state: Towards a politics of adult education*. Routledge.

Karanikola, Z., & Palaiologou, N. (2021). Refugees and adult education: A thematic analysis on UNESCO's latest recommendations. *Andragoške studije*, (1), 57–74. https://doi.org/10.5937/AndStud2101057K

Lange, E., & Baillie Abidi, C. (2015). Rethinking social justice and adult education for welcoming, inclusive communities: Synthesis of themes. *New Directions for Adult and Continuing Education*, *146*(146), 99–109.

Lester, J. N., Cho, Y., & Lochmiller, C. R. (2020). Learning to do qualitative data analysis: A starting point. *Human Resource Development Review*, *19*(1), 94–106. https://doi.org/10.1177/1534484320903890

Peel, K. L. (2020). A beginner's guide to applied educational research using thematic analysis. *Practical Assessment, Research, and Evaluation*, *25*(1), 1-15. https://doi.org/10.7275/ryr5-k983

Richards, J. C. (2001). *Curriculum development in language teaching.* Cambridge University Press.

Rovolis, A., & Tragaki, A. (2006). Ethnic characteristics and geographical distribution of immigrants in Greece. *European Urban and Regional Studies*, *13*(2), 99–111. https://doi.org/10.1177/0969776406062521

Thoma, D. (2010). Understanding migrants' experiences of social exclusion and inclusion: the Case of Bulgarian Immigrants in Greece. *Ethnologia Balkanica*, (14), 27–48.

Tsiolis, G. (2018). Thematic analysis of qualitative data. In G. Zaimakis (Ed.), *Research routes in the social sciences. Theoretical – methodological contributions and case studies* (pp. 97–125). University of Crete – Laboratory of Social Analysis and Applied Social Research.

# CHARACTERISTICS OF VALUES AND ATTITUDE TO MONEY AMONG RUSSIAN AND CHINESE STUDENTS[1]

**Olga Borisovna Mikhailova**[2] **and Elizaveta Sergeevna Farennikova**

*Faculty of Philology, Peoples' Friendship University of Russia (RUDN University),*
*Moscow, Russian Federation*

## Introduction

The study of economic behavior is relevant to modern education and the development of young people. It constitutes the basis for the economic education of future generations (Zhuravlev & Kupreichenko, 2003; Deineka, 2004; Poznyakov & Zhuravlev, 2017; Gorchakova et al., 2021; Saltykova & Deineka, 2022).

Modern Russian economists and psychologists have proposed a structural pattern model of interaction between society and people within which the following areas have been identified: 1) mental; 2) cultural; 3) institutional; 4) cognitive; 5) organizational and technological; 6) imitational; and 7) behavioral (Kleiner et al., 2018). Based on the presented model, the study of economic behavior in all the specified areas, especially mental, cognitive, and behavioral, has demonstrated clear prospects for further research of economic behavior in the context of cross-cultural psychology.

In recent years, there has been an increase in Russian researchers' interest in the correlation between human values and human attitude to money. For instance, N. A. Zhuravleva's research (2021) revealed that the personal value system largely determined the attitude to money.

2   olga00241@yandex.ru

E. V. Kamneva (2014) also discovered correlations among students' attitude to money, life values, and career ambitions. However, the specifics of these correlations were not been fully expounded in this study and necessitate further research.

The study of young people's economic behavior is highly relevant, since the younger generation is the future social capital and economically active population of any state. Thus, our empirical research aimed to study Russian and Chinese students' values and attitude to money as economic behavior indicators and to identify their severity and interrelation.

## Research Methods and Techniques

The study involved third-year and fourth-year undergraduate students and first-year and second-year graduate students attending the Faculty of Philology at the Patrice Lumumba Peoples' Friendship University of Russia (88 respondents in total). The sample comprised groups of Russian and Chinese students, with 44 respondents in each group, aged 20 to 26 years.

Empirical data were obtained using the following techniques: 1) B. Klonts and T. Klonts' Monetary Attitudes questionnaire adapted by D. Bayazitova and T. Lapshova (Bayazitova & Lapshova, 2017); 2) the Portrait Value Questionnaire by Sh. Schwartz (PVQ-RR) adapted by T. P. Butenko, D. S. Sedova, and A. S. Lipatova (Schwartz et al., 2012); 3) the Moral Assessment of Money questionnaire by E. I. Gorbacheva and A. B. Kupreichenko (Gorbacheva & Kupreichenko, 2006). All the questionnaires presented to Chinese respondents were translated into Chinese using the double-blind translation method. Statistical methods of data analysis were also used in the study: Mann-Whitney U-test, Spearman's rank correlation coefficient, and cluster analysis using Ward's method.

## Results and Discussion

Based on the analysis of the data obtained using Sh. Schwarz's Portrait Value Questionnaire (PVQ-RR), Russian and Chinese students demonstrated significant

differences in the levels of manifestation of the following values: 1) *reputation* ($p$ = .036); 2) *personal safety* ($p$ = .048); 3) *conformity – rules* ($p$ = .026); 4) *modesty* ($p$ = .004).

Indicators on the scales of *reputation* and *personal safety* were significantly higher ($p \le 0.05$) for Russian students than for Chinese students. For Russian students, unlike Chinese respondents, personal and professional positioning and promotion were more important, whereas for Chinese students studying in Russia, the value of reputation may have become less significant, since it did not affect their relationships and connections with subjectively significant social groups (e.g., family, friends, and acquaintances). For Russian students, the *personal safety* indicator was high, while Chinese students demonstrated an average level of value prominence on this scale.

Based on the results of Sh. Schwartz's Portrait Value Questionnaire (PVQ-RR), indicators on the *conformity – rules* scale for Chinese students were significantly higher ($p$ = .026) than for Russian students. This may be due to both China's domestic politics and the distinctive characteristics of Chinese culture. Furthermore, the indicator on the *modesty* scale was significantly higher ($p$ = .004) among Chinese students. Compared to Russian students, Chinese students are probably more inclined to avoid public attention – they do not normally demonstrate their achievements publicly. The analysis of the data obtained using B. Klonts and T. Klonts' Monetary Attitudes questionnaire showed that the *money avoidance* indicator was significantly higher for Chinese students ($p$ = .008) than for Russian students. This may be because it is not customary to discuss financial issues in Chinese culture.

In the Russian student group, the results of Spearman's correlation analysis revealed the following correlations: 1) *avoidance of money – hedonism* ($r$ = -0.300), *modesty* ($r$ = 0.298), *benevolence* ($r$ = -0.353); 2) *money as a status – modesty* ($r$ = -0.333); 3) *money worship – independence of thought* ($r$ = 0.375), *independence of action* ($r$ = 0.331), *hedonism* ($r$ = 0.341), *power – dominance* ($r$ = 0.351), *safety – personal* ($r$ = 0.336), *benevolence – duty* ($r$ = 0.330); 4) *money avoidance – safety – personal* ($r$ = -0.419), 5) *money as status – power – resources* ($r$ = 0.502); 6) *money worship – stimulation* ($r$ = 0.394), *achievement* ($r$ = 0.387), *power – resources* ($r$ = 0.506); and 7) *vigilance about money – independence of thought* ($r$ = 0.389).

In the Chinese student group, the following correlations were identified: 1) *money as status – power – resources* ($r$ = 0.312), *traditionalism* ($r$ = 0.302); 2) *worship of money – independence of thought* ($r$ = 0.31), *conformity – rules* ($r$ = 0.32), *conformity*

– *interpersonal* ($r$ = 0.372), *modesty* ($r$ = 0.318); 3) *vigilance about money – achievement* ($r$ = 0.315), *power – resources* ($r$ = 0.309), *conformity – rules* ($r$ = 0.304), *conformity – interpersonal* ($r$ = 0.318). The following correlations were also revealed: 4) *money as a status — achievement (r = 0.395)*; 5) *money worship – independence of action* ($r$ = 0.487), *stimulation* ($r$ = 0.392), *hedonism* ($r$ = 0.387), *achievement* ($r$ = 0.470), *power – resources* ($r$ = 0.431), *power – dominance* ($r$ = 0.401), *reputation* ($r$ = 0.488), *public safety* ($r$ = 0.399), *personal safety* ($r$ = 0.419), *benevolence – duty* ($r$ = 0.391), *benevolence – care* ($r$ = 0.496); and 6) *vigilance about money – reputation* ($r$ = 0.466), *modesty* ($r$ = 0.431).

In both Russian and Chinese student groups, there was a significant correlation between students' attitude to money as a status and their value orientation towards power as a resource. The more control over resources (material and social) was expressed by both groups of respondents, the more they tended to view money as an indicator of their reputation, public safety, as well as opportunity and achievements.

Among Chinese students, the money worship attitude significantly correlated with the values of *reputation, public safety, conformity regarding the rules and interpersonal conformity, modesty,* and *benevolence as care*. These correlations may be due to specific characteristics of Chinese culture. Thus, Chinese students may see the focus on saving money and goods as a reflection of their culture.

   In relation to the use of A. B. Kupreichenko and E. I. Gorbacheva's Moral Assessment of Money questionnaire, we conducted a cluster analysis to identify clusters – types of moral and value attitudes to money. Among Russian students, two types of money evaluation were identified: *positive* and *morally conflictual*. Students who had a positive attitude to money saw it as a way to qualitatively improve their lives and perceived it as a source of power and responsibility. The morally conflictual attitude to money recognized among Russian students can be characterized as a state of financial dependence that generates an intrapersonal conflicting attitude to money.

Similarly, using cluster analysis, two types of money evaluation were identified among Chinese students: *morally uncertain* and *compromise-positive*. The morally uncertain type of money assessment includes the perception of money as a source of conflict associated with injustice, deceit, and intolerance, but at the same time, money is seen as a means to ensure personal well-being.

The compromise-positive type of money assessment identified among Chinese students implies the perception of money as a means of comfortable existence and a source of power, with which dependence is inevitably associated.

## Conclusion

Taking into account the specifics of correlations between values and attitude to money among Russian and Chinese students, we can offer the following recommendations for developing and correcting economic behavior among young people:

1. Certain methods of improving students' knowledge in the sphere of financial literacy should be introduced into the higher education teaching practice. These methods can be implemented in all forms of group work (open lectures, seminars, round tables discussions).

2. There is a need for the development of civic identity and patriotic feelings, which act as psychological support for students on their way to professional development and financial success in their state.

3. It seems reasonable to support students in forming a positive attitude to money as a result of personal and professional self-realization. This can be implemented in the form of group training sessions, business games, and various interactive forms of education.

4. Foreign students should be provided information and education in the sphere of economic behavior in Russia in order to successfully adapt to the foreign cultural environment.

**Keywords:** attitude to money, value orientations, Russian and Chinese students

## References

Bayazitova, D. A., & Lapshova, T. A. (2017). Adaptation of B. and T. Klonts' questionnaire of monetary attitudes for the Russian-language sample. *St. Petersburg Psychological Journal*, (19), 112–132.

Deineka, O. S. (2004). Symbolization of money: the experience of empirical research. *Problems of Economic Psychology*, *5*(1), 207–241.

Gorbacheva, E. I., & Kupreichenko, A. B. (2006). The personal attitude to money: moral contradictions in assessments and associations. *Psychological Journal*, *27*(4), 26–27.

Gorchakova, O. Yu., Larionova, A. V., Obukhovskaya, V. B., & Kozlova, N. V. (2021). The study of economic behavior of personality: The connection of psychological characteristics and monetary attitudes. *Psychologist*, (5), 18–35.

Kamneva, E. V. (2014). On the threshold of life: Attitude to money and career orientation. *Humanities. Bulletin of the Financial University*, *3*(15), 65–68.

Kleiner, G. B., Rybachuk, M. A., & Ushakov, D. V. (2018). Psychological factors of economic behavior: A systemic view. *Terra Economicus*, (1), 20–36.

Poznyakov, V. P., & Zhuravlev, A. L. (2017). Socio-psychological dynamics of personality and group in the conditions of economic reforms in Russia. *Science. Culture. Society*, (2), 5–17.

Saltykova, V. S., & Deineka, O. S. (2022). The current state of money in Russian literature. *World of Pedagogy and Psychology*, *1*(66), 6–22.

Schwartz, Sh., Butenko, T. P., Sedova, D. S., & Lipatova, A. S. (2012). A refined theory of basic individual values: its application in Russia. *Journal of the Higher School of Economics*, *9*(1), 43–70.

Zhuravlev, A. L., & Kupreichenko, A. B. (2003). *Moral and psychological regulation of economic activity.* Institute of Psychology at the Russian Academy of Sciences.

Zhuravleva, N. A. (2023). Dynamics of personal life values in the context of macroeconomic changes. *Humanitarian Scientific Journal*, (1–1), 15–20.

# ACTORS IN THE EDUCATIONAL PROCESS AS CREATORS OF A MORE EQUITABLE EDUCATION

# JUSTICE IN EDUCATION AND SOCIAL JUSTICE – PERSPECTIVES ON TEACHER EDUCATION

**Lidija Radulović**[1] **and Luka Nikolić**

*Teacher Education Centre, Department of Pedagogy and Andragogy, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia*

## Introduction

This paper provides an overview of different conceptions of what initial teacher education should look like in order to prepare teachers to contribute to equitable education. Due to the diversity of conceptions of equitable education, the basic ideas about appropriate teacher education often diverge. In this paper, the criterion for classifying approaches to equitable education is the role of education in relation to social (in)justice. Two approaches can be identified: 1) reducing educational inequalities by remedying the consequences of social injustice (Edgar, 2022; Levinson et al., 2022); 2) contributing to equitable education by transforming unjust social relations (Cochran Smith, 2009; Soo Hoo, 2004). Since different conceptions of education imply different views of the role of the teacher, these two approaches to equitable education yield two approaches to teacher education: *Teacher Education for Justice in Education* and *Teacher Education for Social Justice.*

The aforementioned approaches to equitable education were selected based on a review of research aiming to present, analyze, or categorize conceptions of what education should be to be equitable, whether by using or analyzing the relationship between the concepts of equity, equality, and social justice (Cochran Smith, 2009; Edgar, 2022; Levinson et al, 2022; Soo Hoo, 2004, Stančić, 2017) or by challenging equity by conceptualizing approaches to multicultural education (Gorski, 2009; Gorski & Parekh, 2020). Approaches to Teacher Education (TE) are categorized based on their compatibility with approaches to equitable education and papers addressing the topic of teacher education for equitable education (Childs et al., 2011; Cochran Smith et al., 2016; Sondel et al., 2017; Soo Hoo, 2004).

---

1    liradulo@f.bg.ac.rs

We base our analysis on one of the basic elements of the *theory of teacher preparation for social justice* (Cochran Smith, 2009). This theory relates to selection, the curriculum, structures, and outcomes, but our analysis only focuses on the curriculum, which we understand to include aims, content, teaching methods, assessment, and outcomes. Consequently, our paper aims to analyze curricular elements in regard to the two approaches to TE (Teacher Education for Justice in Education and Teacher Education for Social Justice) and offer suggestions for the development of TE programs.

## Two Approaches to TE for Equitable Education

In our analysis, we take into account the main elements of the two approaches to TE, in terms of aims and outcomes, the selection of content, and teaching and assessment methods. We are aware that there are certain limitations in terms of the scope, as only the basic features of the abovementioned elements are included and the elements only relate to equitable education. This does not mean that these curricula should not include other elements that are not specific to equitable education. Furthermore, it is difficult to precisely identify differences between these two approaches because some features are common to both of them. Moreover, features within the two approaches could be seen as contradictory, as Teacher Education for Justice in Education is based on different approaches to equality and equity, while Teacher Education for Social Justice is plagued by the dilemma of whether it is sufficient to deconstruct the context that leads to injustice or whether it is important to develop strategies and take concrete action to build a more just society. The results of the analysis are presented in Table 1.

**Table 1** *The Key Principles of Developing a TE Curriculum for Equitable Education*

| | |
|---|---|
| **TE for Justice in Education** | Raising awareness of cultural diversity and individual differences; emphasizing the importance of building a positive classroom climate and promoting inclusiveness (De Luca, 2012; OECD, 2010) |
| | Promoting the principles of differentiation, individualization, and engagement of all students (Edgar, 2022) |
| | Preparing teachers to work effectively with students of different ethnicities, races, cultures, and knowledge levels and use strategies that help students achieve common learning outcomes/ develop individual potentials |
| | ▶ |

**TE for Justice in Education**

Selecting culturally sensitive content (Gorski, 2009)

The content should include equity and equality issues in education, diverse cultures (Gorski & Parekh, 2020), legislative and program frameworks, curriculum development, strategies for culturally sensitive classroom management (Gorski, 2009), a broad range of instructional methods, and examples of good practices

Using a variety of teaching methods, especially class and group discussions, debates, the analysis of different text sources, and peer learning.

Field practice assignments aimed at observing and adopting examples of good practices

Practical assignments, during TE courses

Promoting an unbiased and objective approach to assessment, honing the necessary skills for the use of tests and summative assessments, and instructing teacher candidates in the use of various formative assessment tools to achieve the desired outcomes (Stančić, 2020)

**TE for Social Justice**

Developing the identity of teachers as critical reflective practitioners, researchers, and agents of social change (Cochran Smith, 2009)

Raising awareness to recognize inequalities and the mechanisms that reproduce them

Empowering teacher candidates to develop curricula in collaboration with students, parents, and the local community (Cochran Smith et al., 2016)

Empowering teacher candidates to act against school policies and practices that marginalize certain students (Soo Hoo, 2004) by building capacities for articulating their own moral stance, deliberation, disagreement, and interpretation (Cochran Smith, 2009), developing action plans and considering potential barriers, and forming partnerships with colleagues and community members

Encouraging the appreciation of students as active participants in the decision-making process regarding classroom and school activities

The content should include the general content of teacher education but with an emphasis on re-examining the social, political, economic, and cultural origins of knowledge, focusing on their impacts on educational inequalities (Cochran Smith, 2009; Soo Hoo, 2004)

Socio-political content; issues related to equality, equity, and social justice (Gorski & Parekh, 2020).

Using a variety of teaching methods, especially class and group discussions, debates, the analysis of different text sources, peer learning, case studies, and field projects

Promoting and using alternative assessment practices (different assessment methods, emphasizing the importance of formative assessment) and assessment practices of the future  (contextual sensitivity, student participation in assessment and evaluation, peer assessment, and self-assessment) (Mitrović, 2017; Stančić, 2020)

Raising awareness and developing a critical stance towards assessment as an instrument of social reproduction (Stančić, 2020)

# Conclusion

The analysis presented has several important implications for designers of teacher education programs and teacher educators who want to contribute to equitable education. First of all, to understand TE for equitable education, we first need to understand how we perceive equitable education. More importantly, we need to understand that the development of teacher education programs should be guided by the principles of equitable education, without reducing the approach to individual outcomes, content, or methods. Furthermore, teacher educators should engage in a collaborative critical re-examination of the context in which teacher education takes place in order to understand potential obstacles to achieving program goals.

We hope that this analysis can contribute to the visibility of TE for equitable education, both in academia and the general public. We would also like to encourage teacher educators and researchers to rethink the existing teacher education programs and practices and the context of the development and implementation of teacher education programs. Furthermore, we hope that this paper can inspire teacher educators not only to contribute to equity in education but also to try to change society and contribute to social justice, which would make education more equitable.

**Keywords:** teacher education, equity, equitable education, education for social justice

# References

Childs, R. A., Broad, K., Gallagher-Mackay, K., Sher, Y., Escayg, K. A., & McGrath, C. (2011). Pursuing equity in and through teacher education program admissions. *Education Policy Analysis Archives*, *19*(24), 1–22. https://doi.org/10.14507/epaa.v19n24.2011

Cochran Smith, M. (2009). Toward a theory of teacher education for social justice. In A. Hargreaves, A. Lieberman, A. Fullan, & D. Hopkins (Eds.), *Second International Handbook of Educational Change* (pp. 445–467). Springer.

Cochran-Smith, M., Ell, F., Grudnoff, L., Haigh, M., Hill, M., & Ludlow, L. (2016). Initial teacher education: What does it take to put equity at the center?. *Teaching and Teacher Education, 57*(1), 67–78. http://dx.doi.org/10.1016/j.tate.2016.03.006

De Luca, C. (2012). Selecting inclusive teacher candidates: Validity and reliability issues in admission policy and practice. *Teacher Education Quarterly*, *39*(4), 7–31.

Edgar, S. (2022). The tricky concept of 'educational equity' – In search of conceptual clarity. *Scottish Educational Review*, *54*(1), 3–25. https://doi.org/10.1163/27730840-54010002

Gorski, P. C. (2009). What we're teaching teachers: An analysis of multicultural teacher education coursework syllabi. *Teaching and Teacher Education*, *25*(2), 309–318. https://doi.org/10.1016/j.tate.2008.07.008

Gorski, P. C., & Parekh, G. (2020) Supporting critical multicultural teacher educators: Transformative teaching, social justice education, and perceptions of institutional support. *Intercultural Education*, *31*(3), 265–285. https://doi.org/10.1080/14675986.2020.1728497

Levinson, M., Geron, T., & Brighouse, H. (2022) Conceptions of educational equity. *AERA Open*, *8*(1), 1–12. https://doi.org/10.1177/23328584221121344

Mitrović, M. (2017). *Reformski potencijal ocenjivanja u nastavi*. Institut za pedagogiju i andragogiju, Filozofski fakultet, Univerzitet u Beogradu.

OECD (2010). *Educating teachers for diversity: Meeting the challenge*. OECD Publishing.

Sondel, B., Koch, J. G., Carrier, S., & Walkowiak, T. A. (2017). Toward a theory of teacher education for justice-oriented STEM. *Catalyst: A Social Justice Forum*, *7*(1), 38–52.

Soo Hoo, S. (2004). We change the world by doing nothing, *Teacher Education Quarterly*, *31*(1), 199–211.

Stančić, M. (2020). *Lica i naličja pravednosti u ocenjivanju*. Institut za pedagogiju i andragogiju, Filozofski fakultet, Univerzitet u Beogradu.

# THE AUTHORITY OF THE TEACHER – ARE TEACHERS IN MODERN SOCIETY LOSING THEIR AUTHORITY IN THE CLASSROOM?

**Tomaž Vec**[1]

*Faculty of Education, University of Ljubljana, Ljubljana, Slovenia*

## Introduction

Effective classroom management can have a significant impact on student learning, but it is by no means an easy task (Esmaeili et al., 2015). Often, effective leadership is associated with the teacher maintaining order and calm, directing attention, and ensuring a positive classroom climate, leading to healthy student and teacher development and motivation, healthy communication, and healthy discipline (Nakammura, 2000), all of which we associate with teacher authority. The term authority comes from the Latin *auctor*, which has various meanings, such as the founder of a family, city, or country, but also a teacher, advisor, composer, father, ancestor, or creator. Hence, it stands for someone whose opinion others automatically respect and follow. From the term *auctor* derives the term *auctoritas*, which also has many meanings, including origin, coercion, persuasion, guarantee, credibility, importance, reputation, dignity, fame, example, and in a political sense, above all, will, decision, power, and command (Cerar, 2011).

In Slovenian pedagogical practice, the concept of authority is most often associated with a relationship based on power (which is rooted in various predetermined hierarchical roles) and realized through obedience (Kroflič, 1997; Medveš, 2007; Wiesthaler, 1993). Of course, authors have gone beyond the concept of authority as obedience and tried to connect it to inner strength or personal influence (Gogala, 2005), exemplariness and respect (Kovač Šebart, 2013; Kroflič et al. 2009; Makovec, 2014; Medveš, 2007), charisma (Kroflič, 1999; Makovec, 2014), and reason and truth (Kovač Šebart, 2013). Since we believe that a social-psychological consideration of different

---

1    tomaz.vec@pef.uni-lj.si

forms of social power (which can be equated with different authorities) contributes significantly to teachers' understanding of authority as well as their effective classroom management, we present it below.

Crucial to the definition of social power (as cited in Raven, 1992, pp. 9–10) was Lewin's definition of power as "the ability to exert a certain persuasive power over another person" and Festinger's conclusion that "under certain circumstances, social influence on behavior occurs even when a person does not privately accept the change." John R. P. French and Bertram H. Raven (as cited in Raven, 1992, p. 9) were the first to propose what is still the best-known definition of social power: "Social power is potential influence, the ability and opportunity to exert influence, potential influence that is sometimes used and sometimes not." Such a definition implies that influence is "power used and manifested, realized power" and that "influence means… changing the behavior of a person over whom someone's power is manifested". Even today, French and Raven's definition of the various forms of social power is the most frequently cited and thus the most influential.

## Forms of Social Power/Authority

French and Raven (1959) assumed the existence of various forms of social power (summarized by Dickson et al., 1993, pp. 143–157 and Raven, 1992, pp. 13–16). What follows is an examination of these forms with a particular emphasis on the context of teacher authority.

*1. Reward power/authority.* A person (e.g., a teacher) may grant rewards to others (e.g., students) if they behave according to his or her expectations /or restrain them if they do not/. The most common reward (as well as punishment) in school is related to grades. However, we must not forget that rewards can take other forms, such as attention or expressions of affection. Later, French and Raven introduced the distinction between:

- impersonal rewarding (when it is merely a matter of giving a prize); and
- personal rewarding (when the reward is associated with a specific positive or negative relationship between the rewarder and the rewarded).

*2. Coercive power/punishment authority.* Someone has the power to use negative conditioning and punishment against others. Punishment covers the entire spectrum ranging from physical punishment to verbal and subtle nonverbal messages of non-acceptance, such as ignoring. Similar to awards, a distinction is made between:

- impersonal oppression; and

- personal suppression.

*3. Legitimate power/legal authority, sometimes called formal power.* This form of social power may stem from the power holder's position, formal role, title, or authority. It results from the internalized belief of the individual (O) that the other individual (P) has a legitimate right to influence (O), which the latter must accept and take into account (e.g., in the army) – even if P is not present. "Authority is often equated with this form of social power" (as cited in Rot, 1983, p.156). However, we emphasize that such authority is only one of the possible types of power, which naturally loses its meaning in the modern world, not only in teachers but also in parents, doctors, policemen, and other holders of this type of power. This form of power is further differentiated into:

- formal legitimacy (refers to the legitimate power that stems from a person's formal position);

- reciprocity legitimacy (according to Raven, it is based on social norms that act as a kind of obligation to do something; for example: "I did it for you, so you should feel obligated to do it for me.");

- legitimacy of justice (for example: "I worked hard and suffered, so I have the right to ask you to do something for me."); and

- legitimacy of dependence or helplessness (according to which we are "normatively obligated" to help those who cannot help themselves and are dependent on us).

*4. Expert power/ authority.* In this case, the power holder has knowledge and/or skills that are important to other members of the group. Teachers' expert power in their subject area (knowledge about the subject they teach) is usually not questioned. In practice, their professional strength in classroom management, managing conflict, resolving behavior problems, and communicating with parents often proves problematic. Depending on the impact, professional strength can be divided into:

- positive expert power (when someone does what the expert expects them to do); and

- negative expert power (when someone does exactly the opposite of what the expert asks them to do, which is also known as the *boomerang effect*).

*5. Power of reference/reference authority.* It can be exercised by people with whom there is a positive emotional relationship (it usually involves imitation and identification), such as parents and teachers. Since this type of power is based on a relationship, more time is needed to establish it. The teacher and the student must have several different experiences with each other, in different situations (pure teaching situations are usually insufficient), which only gradually build and strengthen their mutual respect and trust. Similar to expert power, reference power was later divided into:

- positive reference power; and

- negative reference power.

As Levin and Nolan (2014) point out, students perceive the teacher as a decent person who cares about them and their learning and has students' best interests in mind.

In 1965, Raven added another form of power:

*6. Information power/authority.* Here, the power holder has information that holds some value for the other members of the group, who do not possess it. Compared to students, the teacher usually has a larger amount of information that is relevant to students. However, compared to the past, the teacher's loss of power in this area is noticeable, as students have virtually all information at their fingertips. Still, it is also true that students often cannot evaluate information for importance and relevance as well as adults (teachers) do. According to Raven, a distinction can be made between:

- the power of direct information; and

- the power of indirect information.

Many authors have studied the pressures associated with social power, but they have mainly focused on the individual level (the social power that an individual has to influence another individual or group). For example, according to Dickson and co-authors (1993, p. 144): "A powerful person is one who has the ability to act intentionally to effect change in others... which means that a person may or may not use his or her ability. ...When used, it is not always effective, and even when used successfully, the effect is not necessarily exactly the opposite of what is desired."

# Conclusion

We can conclude that in modern, more democratic societies, which are more oriented towards the needs of children, class teachers are indeed losing the authority that prevailed in the past, that is, the authority stemming from their position (legitimate authority). To a lesser extent, the authority of punishment is also likely to be present (although punishment is shifting from its earlier, more physical forms to more subtle forms, as well as to punishment with grades). Information-based authority is not clear-cut (more information is available at a click, but it is harder to judge its relevance – which is still more in the hands of the teacher). In any case, there are other forms of authority available to the teacher that are much more sustainable and constructive, although not as easy to achieve as legitimation, punishment, and reward. Above all, these include subject and reference authority, the establishment of which requires time, good interactions and communication between the teacher and students, and the persistent building of a respectful and trusting relationship (which can also be quickly destroyed by mistakes made by the teacher).

**Keywords**: authority, teachers, social power, professional knowledge, reference

# References

Cerar, M. (2011, Seprember 19). Avtoriteta. https://www.iusinfo.si/medijsko-sredisce/kolumne/72403

Dickson, D., Saunders, C., & Stringer, M. (1993). *Rewarding people. The Skill of responding positively*. Routledge.

Esmaeili, Z., Mohamadrezai, H., & Mohamadrezai, A. (2015). The role of teacher's authority in students' learning. *Journal of Education and Practice*, *6*(19), 1–15.

French, J. R. P., & Raven, B. H. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in social power* (pp. 150–167). University of Michigan.

Gogala, S. (2005). *Izbrani spisi*. Društvo 2000.

Kovač Šebart, M. (2013). Kaj v javno vzgojno-izobraževalno ustanovo prinaša zahteva po spoštovanju vrednotnega okvira človekovih pravic? *Sodobna pedagogika*, *64*(2), 32–47. https://www.sodobna-pedagogika.net/arhiv/nalozi-clanek/?id=926

Kroflič, R. (1997). *Avtoriteta v vzgoji*. Znanstveno in publicistično središče.

Kroflič, R. (1999). *Med poslušnostjo in odgovornostjo*. Vija.

Kroflič, R., Makovec, D., Jeznik, K., Štirn Janota, P., Štirn Koren, D., & Mažgon, J. (2009). *Avtoriteta poklicne šole in učitelja*. http://www.cpi.si/files/cpi/userfiles/RazvojniProjekti/AvtoritetaPoklicneSoleInUcitelja1.pdf

Levin, J., & Nolan, J. F. (2014). *Principles of classroom management: A professional decision-making model (7*th edition*)*. Pearson.

Makovec, D. (2014). Avtoriteta učitelja in koncept spoštovanja. *Sodobna pedagogika*, *65*(3), 72–92.

Medveš, Z. (2007). Vzgojni koncept med vrednotno matrico in moralno samopodobo. *Sodobna pedagogika*, *58*(1), 6–29.

Nakammura, R. M. (2000). *Healthy classroom management: Motivation, communication, and discipline*. Cengage Learning.

Raven, B. H. (1992). The bases of power: Origins and recent developments. *A presentations in honor of John R. P. French on the occasion of his receiving the Kurt Lewin award*. Annual Meeting of the American Psychological Association. ERIC.

Wiesthaler, F. (1993). *Latinsko-slovenski slovar*. Kres.

# TEACHERS' ROLE IN SOCIAL JUSTICE: IMPROVING THE LIVES OF ROMA STUDENTS

**Nina Jovanović**[1]

*Faculty of Education, Charles University, Prague, Czech Republic*

## Introduction

Nowadays, schools are called to adopt a transformative and emancipatory role (Liasidou, 2012) and teachers are expected to become the agents of change (Pantić & Florian, 2015). This paper aims to present the literature on teachers' role in building a just society. The first section discusses peer-reviewed articles in English based on a search in Scopus and Web of Science with a combination of keywords such as *the role of the teacher*, *critical theory*, *social justice*, and *agents of change*. No time range was applied, but the selected papers were published in the period of 2001–2017. Papers not discussing teachers' role in social justice and papers related to specific subjects were eliminated, leaving seven empirical studies and one review paper for analysis. Secondly, this paper reflects on teachers' role in the education of Roma children. The Roma commonly have more difficulties accessing their rights in comparison to other minorities in Serbia, facing exclusion and discrimination in many aspects, including education, employment, and participation in the community (Perišić & Vidojević, 2015). Thus, a vital question is how schools and teachers can improve Roma students' learning and life opportunities. As no articles have directly addressed teachers' role in promoting social justice for Roma students in Serbia, this role is considered in the context of relevant findings related to teachers and Roma students.

---

1    ninajovanovic1995@gmail.com

# Teachers as Agents of Social Justice

Theories of education for social justice see teachers as educators and advocates of their students. Teachers should help students think critically, consider multiple perspectives, engage in discussions (Cochran-Smith et al., 2009), develop empathy, and participate in social change (Burke & Collier, 2017). Teaching is always a political act (Cochran-Smith et al., 2010; Katz, 2014; Kelly & Brandes, 2001; Picower, 2011) and teachers have the social responsibility to challenge learning barriers, educational policies, and cultural hegemony in the curriculum (Cochran-Smith et al., 2010). Yet, these efforts cannot depend on teachers alone and require collaborative efforts (Burke & Collier, 2017; Cochran-Smith et al., 2009; Cochran-Smith et al., 2010; Kelly & Brandes, 2001). Collaboration with various actors can be a resource or an obstacle depending on the coordination of their efforts to influence social justice (Pantić, 2015).

Pittard's (2015) literature review on critical pedagogy in teacher education and teachers' attempts to use critical pedagogy showed teachers to be much more likely to read articles positioning them as unable to engage in critical pedagogy than articles motivating them to apply it. Studies have often positioned teachers as objects in teacher education and attributed the failure of critical pedagogy to them, while rarely focusing on the process of becoming justice-oriented educators.

Empirical studies have shown that even without social justice training, teachers often intuitively value its principles such as deconstructing student-teacher identity and including social justice topics and students' experiences in lessons (Burke & Collier, 2017; Katz, 2014). Regardless of their formal education, teachers rarely feel comfortable discussing the political nature of knowledge (Katz, 2014) and try to remain neutral in classroom discussions (Kelly & Brandes, 2001). Cochran-Smith et al. (2009) found that when defining social justice, beginner teachers educated in social justice tended to talk about students' learning and respectful relationships but seldom criticized school structures (e.g., grading and tracking) or spoke of activism. Teachers believed that they could make a difference in the classroom by questioning the curriculum, embracing diverse perspectives, addressing student needs, setting high expectations, and committing to enhancing learning and life opportunities. Furthermore, teachers and teacher candidates educated in social justice programs were devoted to their students' learning (Cochran-Smith et al., 2009; Cochran-Smith et al., 2010), created complex and challenging learning opportunities

(Cochran-Smith et al., 2010), used primary sources, led respectful discussions, and created materials to engage students (Cochran-Smith et al., 2009). Picower (2011) also found that teachers dedicated to social justice were not able to influence changes on the macro level. Still, in a controlling environment, teachers tried to find alternative sources for social justice topics and real-life issues, prepared their students for activism, and occasionally publicly expressed commitment to social justice. Studies have warned that neoliberal policies (high-stakes tests, mandatory curriculum, and monitoring) discourage teachers (Cochran-Smith et al., 2009; Katz, 2014; Picower, 2011), but inquiry groups support them to teach for social justice (Burke & Collier, 2017; Picower, 2011).

## Teachers' Role in Enhancing the Life Chances of Roma Students

The dominant topic of teacher attitudes provides insight into teachers' motivation and potential to effect social change for Roma students. Findings indicate that Serbian teachers and teacher candidates often believe that the Roma are responsible for their own position (Jovanovic, 2018; Petrović et al., 2010, as cited in Dimitrijević & Macura, 2016; Peček et al., 2014), that they are privileged (Simić & Vranješević, 2022), and that they abuse their minority status (Dimitrijevic et al., 2017). Sometimes, teacher candidates do not fully understand the poverty of the Roma (Dimitrijević & Macura, 2016; Peček et al., 2014). Furthermore, teachers rarely consider themselves responsible for Roma students' achievements (Jovanovic et al., 2014; Peček & Macura-Milovanović, 2012), often transfer responsibility to families (Dimitrijevic et al., 2017; Jovanovic et al., 2014; Peček & Macura-Milovanović, 2012), and believe that Roma students are lazy, unmotivated, or less intelligent (Petrović et al. 2010, as cited in Dimitrijević & Macura Milanović, 2016). With such beliefs, teachers are unlikely to try to effect changes in the position of Roma students. However, Dimitrijević and Macura (2016) demonstrated that field experience raised teacher candidates' awareness of students' living circumstances and reinforced their commitment to social justice and inclusion. Furthermore, unlike in the case of students with disabilities, teachers and teacher candidates often believe in Roma students' abilities (Jovanovic et al., 2014) and maintain that they should attend mainstream schools (Macura Milovanović & Vujisić Živković, 2011).

Simić and Vranješević (2022) identified teacher support (psychological and instructional) as the most important school, community, and system factor for Roma

students' success in higher education, alongside scholarships and affirmative measures. Students talked about teachers as their role models, who had high expectations, valued the Roma culture, and understood their unprivileged position. However, many students also faced discrimination and stereotyping from peers or teachers.

Jovanović (2018) found that teachers in Serbia marked their role in reducing inequalities in society as the least important in comparison to knowledge transmission, care for students, work preparation, and cognitive development. When interviewed, teachers did not mention reducing inequalities, but some teachers agreed it should be their goal when asked about it. Still, teachers explained that many factors obstruct these aims (e.g., the social status of the profession, material conditions, job security, teacher autonomy, and work overload).

## Conclusion

There has been little to no progress in resolving the issues the Roma people face in Europe, especially in education (FRA, 2023). The complexity of the long-prevailing problems in the education of Roma students requires further exploration of teachers' role in their achievements and well-being. Teachers in Serbia are expected to help students develop competencies to live in a democratic and just society (Law on the Fundamentals of Education System, 2017), but researchers have devoted little attention to teachers' perspectives on this role and the process of achieving these goals. Reviewed articles indicate that Roma students' education can be hindered by negative teacher attitudes, while supportive teachers play a critical role in Roma students' success. Unfortunately, teacher education does not sufficiently focus on inclusion, minority education, and intercultural skills (Dimitrijević & Macura, 2016). There is an imbalance between the high expectations of teachers and their position in society. Lingard and Mills (2007) explain that education policies often indicate a lack of trust in teachers while imposing high demands. Finally, school is not isolated from society. Although education and teachers have transformative roles, they cannot be solely responsible for societal changes. Comprehensive research is needed to understand the necessary changes at the classroom, school, community, and wider society levels.

**Keywords:** social justice, critical theory, teachers, Roma students

# References

Burke, A., & Collier, D. R. (2017). 'I was kind of teaching myself': Teachers' conversations about social justice and teaching for change. *Teacher Development*, *21*(2), 269–287. https://doi.org/10.1080/13664530.2016.1235607

Cochran-Smith, M., Gleeson, A. M., & Mitchell, K. (2010). Teacher education for social justice: What's pupil learning got to do with it? *Berkeley Review of Education*, *1*. https://doi.org/10.5070/B81110022

Cochran-Smith, M., Shakman, K., Jong, C., Terrell, D. G., Barnatt, J., & McQuillan, P. (2009). Good and just teaching: The case for social justice in teacher education. *American Journal of Education*, *115*(3), 347–377. https://doi.org/10.1086/597493

Dimitrijević, B., & Macura, S. (2016). Cross-cultural field experience as a pre-service teacher preparation strategy for teaching Roma pupils in Serbia. *Journal of Contemporary Educational Studies*, *2016*(2), 46–62.

Dimitrijevic, B., Petrovic, D., & Leutwyler, B. (2017). Teachers' implicit beliefs about the students of the Roma and the Hungarian cultural group. *Zbornik Instituta Za Pedagoska Istrazivanja*, *49*(1), 55–76. https://doi.org/10.2298/ZIPI1701055D

FRA. (2023). *Roma in 10 European countires: Main results*. Publications Office of the European Union.

Jovanovic, O. (2018). *Stereotipi nastavnika o učenicima iz marginalizovanih grupa: Provera dvodimenzionalnog modela* [Doktorska disertacija]. Univerzitet u Beogradu, Filozofski fakultet.

Jovanovic, O., Simic, N., & Rajovic, V. (2014). Students at risk: Perceptions of Serbian teachers and implications for teacher education. *European Journal of Teacher Education*, *37*(2), 220–236. https://doi.org/10.1080/02619768.2013.858693

Katz, L. (2014). Teachers' reflections on critical pedagogy in the classroom. *InterActions: UCLA Journal of Education and Information Studies*, *10*(2). https://doi.org/10.5070/D4102017865

Kelly, D. M., & Brandes, G. M. (2001). Shifting out of "neutral": Beginning teachers' struggles with teaching for social justice. *Canadian Journal of Education / Revue Canadienne de l'éducation*, *26*(4), 437. https://doi.org/10.2307/1602176

Liasidou, A. (2012). Inclusive education and critical pedagogy at the intersections of disability, race, gender and class. *Journal for Critical Education Policy Studies*, *10*(1), 168–184.

Lingard, B., & Mills, M. (2007). Pedagogies making a difference: Issues of social justice and inclusion. *International Journal of Inclusive Education*, *11*(3), 233–244. https://doi.org/10.1080/13603110701237472

Macura Milovanović, S., & Vujisić Živković, N. (2011). Stavovi budućih učitelja prema inkluziji: Implikacije za inicijalno profesionalno obrazovanje. *Pedagogija*, *4*(11), 633–647.

Pantić, N. (2015). A model for study of teacher agency for social justice. *Teachers and Teaching*, *21*(6), 759–778. https://doi.org/10.1080/13540602.2015.1044332

Pantić, N., & Florian, L. (2015). Developing teachers as agents of inclusion and social justice. *Education Inquiry*, *6*(3), 331–351. https://doi.org/10.3402/edui.v6.27311

Peček, M., & Macura-Milovanović, S. (2012). Who is responsible for vulnerable pupils? The attitudes of teacher candidates in Serbia and Slovenia. *European Journal of Teacher Education*, *35*(3), 327–346. https://doi.org/10.1080/02619768.2012.686105

Peček, M., Macura-Milovanović, S., & Vujisić-Živković, N. (2014). The cultural responsiveness of teacher candidates towards Roma pupils in Serbia and Slovenia – case studies. *Journal of Education for Teaching*, *40*(4), 359–376. https://doi.org/10.1080/02607476.2014.929383

Perišić, N., & Vidojević, J. (2015). Divided by poverty and social exclusion – Roma and persons with disabilities in Serbia. *Croatian Political Science Review*, *52*(4–5), 142–159.

Picower, B. (2011). Resisting compliance: Learning to teach for social justice in a neoliberal context. *Teachers College Record: The Voice of Scholarship in Education*, *113*(5), 1105–1134. https://doi.org/10.1177/016146811111300503

Pittard, E. (2015). Who does critical pedagogy think you are? Investigating how teachers are produced in critical pedagogy scholarship to inform teacher education. *Pedagogies: An International Journal*, *10*(4), 328–348. https://doi.org/10.1080/1554480X.2015.1066679

Simić, N., & Vranješević, J. (2022). I fight, therefore I am: Success factors of Roma university students from Serbia. *Psiholoska Istrazivanja*, *25*(2), 205–223. https://doi.org/10.5937/PSISTRA25-38004

*Zakon o osnovama sistema obrazovanja i vaspitanja* (2017). "Sl. Glasnik RS", Br. 88/2017, 27/2018 - Dr. Zakon, 10/2019, 27/2018 - Dr. Zakon, 6/2020 i 129/2021.

# INTERGENERATIONAL COMMUNITIES: ADVANCING EDUCATIONAL EQUITY THROUGH COMMUNITY LEARNING

**Nikola Koruga**[1] **and Tamara Nikolić**

*Department of Pedagogy and Andragogy, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia*

## Introduction

Senior education in Serbia has seen positive developments with the recognition of lifelong learning as a valuable concept for older adults. Universities of the Third Age (U3As) and government initiatives have played significant roles in generating educational opportunities for seniors. However, continued efforts are needed to address funding challenges, expand course offerings, and ensure equitable access to education for all seniors. While equality in senior education focuses on sameness and equal treatment, equity takes into account the diverse needs and circumstances of older learners, aiming to provide the support and resources required for their fair access to educational opportunities and benefits. Equity recognizes that fairness may require different approaches for different individuals to ensure equal access to educational benefits. This paper aims to present the educational work of the Intergenerational Volunteering Center (IVC) as an example of good practice in terms of fostering equity in educational endeavors in the field of adult and community learning.

## Senior Education in Serbia Between State Support and Democratic Empowerment

At the policy level, senior education provision in Serbia is mostly promoted by the government in the form of an institutional state-supported model based on public adult

---

1    koruganikola.ae@gmail.com

education provision, intervention by the welfare state, and an emphasis on providing second chances and lifelong learning for all. Apart from the social care sector and its daily clubs for seniors, the most prominent representatives of this model are U3As organized by AE institutions within the non-formal sector (Medić, 2004). These stand in contrast to the democratic emancipatory model, in which democratic participation and a critical approach to education are of paramount importance to learning activities at an older age, evident in the popular form of community education provided by the IVC.

The new paradigm of intergenerational learning is linked to the concept of community education, which is characterized by active participation for the common good, social and collaborative learning, empowerment, community renewal, solidarity and social equity, cohesiveness and inclusion, active citizenship, and social capital (Kump & Jelenc Krašovec, 2014). The goal is to establish ties between the young and the old in the hope that one or both groups would benefit. This can take the form of the young helping the elderly, the elderly helping the young, or reciprocal intergenerational help or learning. Here, the community entails both similarities and differences, with a focus on relationships (Tett, 2010). According to Kump and Krašovec (2014), intergenerational learning programs have an influence on both program participants and the local community.

The IVC embodies community education by opening its door not only to older people but to all generations of learners. Its open calendar approach involves daily, weekly, and annual activities proposed by the community itself, including but not limited to drawing workshops, art colonies, and community theater. Program units cover arts, digital literacy, and recreation. Its organization is rooted in equal participation, volunteering, and providing free programs, allowing members to take on leadership roles. The IVC advocates for ecological living, adapted care, and intergenerational cooperation, thus addressing the quality of life in later years.

Lima and Guimarães (2011) explain that the institutional state-supported model sees adult education and thus senior education as a civil right and supports the integration of non-formal education into the public education system, seeing education as a means of promoting equal opportunities and chances among different age groups. According to the same authors, the democratic emancipatory model sees adult education as a sector characterized by heterogeneity and diversity, which promotes the ethical and

political dimensions of learning, with the aim of democratization, transformation of power relations, social change, and empowerment. It is often characterized by action research and participatory projects, the educational nature of action, and taking actions with a deep appreciation of collective knowledge and experience.

This study compares the two approaches to senior education and learning – U3As and the IVC – in relation to educational equity. The analytical framework employed the two approaches to contrast democratic participatory education with the institutional state-supported model, focusing on the authors' reflections and experience in collaborating with the aforementioned organizations.

## The Role of the IVC in Promoting Equity in Senior Education

Given the failure of welfare state education to offer sustainable learning for senior citizens, self-organized community centers like the IVC may represent a viable future in senior education. Community learning significantly promotes educational equity by addressing the diverse needs of senior learners. Here is how the IVC enhances educational equity:

**1. Accessibility:** Located in a local neighborhood, the IVC mitigates travel-related barriers, enhancing accessibility for individuals who might face difficulties traveling to distant educational institutions due to injuries, illnesses, or time constraints. Despite the U3A network's aim to promote accessibility, the lack of adequate support has led to the stagnation and decline of newly established U3As, while centers like the IVC have managed to sustain community engagement.

**2. Customized Curricula:** Community-based programs like the IVC allow for curriculum co-creation and the selection of culturally relevant courses, making education more engaging for diverse learners. Unlike predefined U3A programs with a required minimum number of participants, IVC programs evolve based on participants' expressed interests, providing a more personalized learning experience.

**3. Flexible Schedules:** While U3As have fixed morning schedules, the IVC offers flexible timetabling, including evening and weekend timeslots, accommodating learners with varying commitments. Despite room availability being a factor, flexibility is maintained through smaller, adaptable groups and optimizing available spaces.

**4. Affordability:** U3A programs aim for affordability through lower fees or financial aid. The IVC takes this a step further by offering completely free, volunteer-based programs, ensuring access for everyone and encouraging volunteer teaching. This approach removes financial barriers for the majority of the retired population, thus promoting inclusivity.

**5. Lifelong Learning:** By enrolling older individuals as students and offering specialized educational programs tailored to their needs, U3As have successfully achieved the fundamental objective of adult education, which is lifelong learning (Živanić, 2004). The IVC also emphasizes lifelong learning, recognizing that education is not limited to the traditional age ranges. This includes adults seeking to improve their skills or change, their family members who occasionally participate in activities, teachers who volunteer, members of the community who engage occasionally, students, and various professionals supporting the organization of programs and activities.

**6. Intergenerational Learning:** The IVC promotes intergenerational learning opportunities where older adults can share their wisdom and experiences with younger generations. This fosters a sense of belonging and mutual respect. At U3As, the young learn from older adults and vice versa on special occasions. Conversely, intergenerational learning at the IVC is based on reciprocity and cooperation between generations along the way.

**7. Inclusivity and Diversity:** Community-based education at the IVC fosters a sense of inclusivity and diversity, bringing together individuals of various ages, abilities, and backgrounds (Grummell, 2007). This promotes a more inclusive and enriching learning environment as opposed to the U3A tradition of homogeneity.

**8. Local Resources:** IVC members often leverage local resources, including partnerships with schools, universities, nonprofit organizations, and government agencies. These collaborations expand educational opportunities and resources available to learners. Additionally, this promotes practical skill development, which goes far beyond certain program learning outcomes.

In summary, community learning at the IVC contributes to educational equity by removing various barriers to education, customizing educational experiences, and actively engaging with the diverse needs and backgrounds of learners within a community (Sparks & Butterwick, 2004). This approach ensures that education is accessible, relevant, and inclusive, ultimately promoting equal opportunities for

all members of the community to pursue their learning aspirations. Without senior education, the world is at risk of facing the dependency and exclusion of senior citizens (Nikolić Maksić, 2006). Intergenerational learning can enable seniors to lead fulfilling lives in late adulthood and continue to play an active role in social and community development.

**Keywords:** intergenerational cooperation, community learning, seniors, educational equity

# References

Grummell, B. (2007). The 'second chance' myth: Equality of opportunity in Irish adult education policies. *British Journal of Educational Studies*, *55*(2), 182–201. https://doi.org/10.1111/j.1467-8527.2007.00374.x

Kump, S. & Jelenc Krašovec, S. (2014). Intergenerational learning in different contexts. In B. Schmidt-Hertha, S. Jelenc Krašovec & M. Formosa (Eds.), *Learning across generations in Europe contemporary issues in older adult education* (pp. 167–178). Sense Publishers.

Lima, L. C., & Guimarães, P. (2011). *European strategies in lifelong learning: A critical introduction*. Verlag Barbara Budrich. https://www.doi.org/10.5937/nasvas2203329K

Medić, S. (2004). University of the third age – agent of change in the education of the elderly. In S. Živanić (Ed.), *University of the Third Age* (pp. 19–24). U3A – Peoples University "Braća Stamenković" & Adult Education Society.

Nikolić Maksić, T. (2006). Evropske dimenzije obrazovanja starih: Holandija - Slovenija - Italija. *Andragoške studije*, (2), 70–90.

Sparks, B., & Butterwick, S. (2004). Culture, equity and learning. In G. Foley (Ed.), *Dimensions of adult learning* (pp. 276–289). Routledge.

Tett, L. (2010). *Community education, learning and development.* Dunedin Academic Press.

Živanić, S. (2004). Network of the university of the third age. In S. Živanić (Ed.), *University of the Third Age* (pp. 36–38). U3A – Peoples University "Braća Stamenković" & Adult Education Society.

# CHATGPT AND ACADEMIC WRITING IN HIGHER EDUCATION[1]

**Bojan Ljujić[2], Jovan Miljković and Vukašin Grozdić**

*Institute of Pedagogy and Andragogy, Department of Pedagogy and Andragogy, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia*

## Research Problem Background In Brief

The invention of ChatGPT constitutes the most significant stride in the field of artificial intelligence (AI) in recent years. It was launched in November 2022 as an open-source chatbot able to generate human-like texts while engaging in deep learning (Deng & Lin, 2022; Eke, 2023). Developed to impact every aspect of society (Zhai, 2023), ChatGPT has quickly become the subject of educational endeavors (Mhlanga, 2023b) as well as controversies, dividing the education community into dystopians and optimists (Mhlanga, 2023a; Sejnowski, 2023). The debate has focused on the issue of academic writing, offering different views on how this AI tool might influence phenomena such as intellectual property (Bjork, 2023; Hill-Yardin et al., 2023), plagiarism (Yu, 2023), authenticity, originality and creativity in learning (Rahman & Watanobe, 2023), and critical and analytical thinking (Mhlanga, 2023a; Rudolph et al., 2023, Shidiq, 2023). Namely, education actors should respect ethical principles (Eke, 2023) and incorporate them into the inevitable educational use of ChatGPT in order to uphold equity and responsibility in education (Cohen, 2023; A. A. Jadhav & A. N. Jadhav, 2023; Kasneci, 2023).

2   bojangljujic@gmail.com

# Methodology

The present research focused on the dominant controversy surrounding the educational use of ChatGPT for the purpose of accomplishing academic writing tasks. The research goal was to investigate ChatGPT's performance in writing academic assignments and compare it to corresponding higher education students' performance. The descriptive research included the application of a comparative method and the content analysis research technique. Relevant data sources were: (1) pre-exam assignments written by final-year andragogy students at the University of Belgrade who received excellent grades and submitted their assignments in 2022, before ChatGPT was launched; (2) ChatGPT-generated essays. Both students and ChatGPT were tasked with writing an andragogical analysis of specific multimedia content. Units of qualitative comparative content analysis were derived from criteria for the assessment of the abovementioned pre-exam written assignments: grammar and fluency in expression; content structuration and organization; scientific relevancy; referencing; depth of knowledge and understanding; theoretical, research, and experiential foundations; argumentation and discussion; reflectiveness and critical positioning; and originality and creativity.

# Results

ChatGPT possesses linguistic and semantic algorithms that enable automatic evaluation, correction, and feedback regarding grammar, vocabulary, and sentence composition adequacy (Yu, 2023). Hence, it generated essays that were largely correct in terms of *grammar* and *expressional fluency* and could be deemed slightly more precise compared to students' assignments. Although fairly *structured* and logically *organized,* ChatGPT-generated essays comprised rather elementary textual units (introduction, elaboration, and conclusion). Conversely, students' essays were more complex in structure, with more elements organized using different levels of headings, which clearly revealed ideas expounded in corresponding sections. Similarly, recent research results have indicated that ChatGPT essays lack structure and are poorly organized compared to those written by humans (Rudolph et al., 2023).

In ChatGPT-generated essays, andragogical *scientific relevancy* was evident, but it was quite general, random, superficial, unconvincing, wrongly indicative, and thematically inappropriate (Hill-Yardin et al., 2023), while the opposite was true for students' assignments. When prompted, ChatGPT was able to report the usage of certain *references,* but the accuracy, relevancy, and quality of citations seemed poorly contextualized (A. A. Jadhav & A. N. Jadhav, 2023; Zhai, 2023) compared to students' essays. ChatGPT offered general statements, simple presentations of information, and plenty of universalities poorly interconnected within *knowledge networks,* lacking demonstration of contextual *understanding* of implied ideas (Rudolph et al., 2023), while students' assignments were thoughtful, meaningful, and comprehensively relational in terms of connecting ideas in a complex manner. ChatGPT was unable to incorporate texts into comprehensive *theoretical frameworks*, find meaningful relations with relevant *scientific studies* (Hill-Yardin et al., 2023), and reflect on any kind of *experience* (Rudolph et al., 2023), contrary to students, who were distinctively successful in this domain. This clearly indicates that human intervention and interaction are irreplaceable in composing experiential written content (Rahman & Watanobe, 2023; Shidiq, 2023). Furthermore, ChatGPT offered inconclusive and unconvincing *arguments* and the *discussion* only provided an answer to the question of "What?", without answering "Why?" and "How?" (Hill-Yardin et al., 2023). Hence, ChatGPT-generated essays were predominantly descriptive and devoid of problematizing or polemicizing orientations, which were conspicuously present in students' assignments as a result of the engagement of human intellectual capacities.

ChatGPT-generated essays were uniform, brief, and limited in terms of composing *reflective insights* (Hill-Yardin et al., 2023) or *critical observations* (Rahman & Watanobe, 2023). Conversely, students' assignments featured complex ideas covering different aspects and potential relations within the given subject, with various demonstrations of critical attitudes, which gave their written accomplishments a more personal tone. Since ChatGPT-generated essays merely contained existing insights, observations, and reproductions of materials available online, they seemed *unoriginal* and lacked the distinctive *creative* or *innovative* elements observed in students' assignments. This was to be expected, as ChatGPT does not possess the human ability to engage creative, analytic, problem-solving, and collaborative skills (Mhlanga, 2023a; Rudolph et al., 2023; Shidiq, 2023) to produce innovative and unique written elaborations.

# Concluding Implications

ChatGPT could reduce teachers' workload regarding instruction, assistance, and correction and it could support students in composing written assignments in a grammatical and fluent manner. However, it offers limited support in structuring and organizing a holistic essay (Rahman & Watanobe, 2023). ChatGPT-generated essays could serve as a starting point for further inquiry directed towards stronger scientific foundations in academic writing. However, teachers and students need to employ human capacities in instructing, learning, and higher-level thinking to reach an appreciable level of interconnection of information within knowledge systems enriched with genuine human understanding of internally influencing ideas. Cautious application of ChatGPT suggestions is needed to avoid inappropriate citations and poor contextualization (Mhlanga, 2023a), which could inspire experiential experimentation in instruction and learning processes (Rudolph et al., 2023). When using ChatGPT in academic writing, it is necessary to foster critical thinking skill development (Carvalho et al., 2022; Shidiq, 2023) in order to demonstrate conceptual and practical understanding of responsible positioning in relation to the issue of academic fairness (Eke, 2023). Thus, ChatGPT-generated texts could exclusively be useful in highlighting convergent concepts from the diverse literature available online, which could be analyzed and encompassed within theoretical and research frameworks through human experiential instructional or non-linear learning engagement. If not taken for granted, ChatGPT-generated ideas could inspire teachers and students to unleash their creativity in instruction and learning (Yu, 2023; Zhai, 2023) with the aim of permanently developing creative and problem-solving skills and producing original and innovative learning outcomes, particularly in the form of academic writing accomplishments (A. A. Jadhav & A. N. Jadhav, 2023) enriched with sustainable and practically applicable ideas.

Responsible use of ChatGPT should foster equity in education by minimizing time and space barriers, empowering learners in personal development regardless of their learning abilities (Cohen, 2023), making the learning process more individualized since educational topics could be critically observed, and obligating teachers to be au courant with technologies so they can overcome issues related to data protection, intellectual property, and a lack of activation in critical thinking development and engagement (Kasneci, 2023). As Bjork (2023) argues, ChatGPT is not particularly

friendly toward indigenous languages, while being highly cooperative with the English language. Furthermore, since the latest version of this AI tool (GPT-4) is not open-source, its availability is diminished by the economic factor, while some countries have completely banned the use of ChatGPT in the education system. Therefore, to achieve greater equity in education through the application of ChatGPT, the abovementioned disadvantages need to be properly addressed.

**Keywords:** ChatGPT, academic writing, higher education, andragogy students

# References

Bjork, C. (2023, April 5). *Don't fret about students using ChatGPT to cheat – AI is a bigger threat to educational equality.* The Conversation. https://theconversation.com/dont-fret-about-students-using-chatgpt-to-cheat-ai-is-a-bigger-threat-to-educational-equality-202842

Carvalho, L., Martinez-Maldonado, R., Tsai, Y. S., Markauskaite, L., & De Laat, M. (2022). How can we design for learning in an AI world? *Computers and Education: Artificial Intelligence*, *3*, 1–9. https://doi.org/10.1016/j.caeai.2022.100053

Cohen, Z. (2023, January 17). *Can Chat GPT Be the Key to Achieving Educational Equity?* The Core Collaborative. https://thecorecollaborative.com/can-chat-gpt-be-the-key-to-achieving-educational-equity/

Deng, J., & Lin, Y. (2022). The Benefits and Challenges of ChatGPT: An Overview. *Frontiers in Computing and Intelligent Systems*, *2*(2), 81–83. https://doi.org/10.54097/fcis.v2i2.4465

Eke, O. D. (2023). ChatGPT and the rise of generative AI: Threat to academic integrity? *Journal of Responsible Technology*, *13*, 1–4. https://doi.org/10.1016/j.jrt.2023.100060

Hill-Yardin, E. L., Hutchinson, M. R., Laycock, R., & Spencer, S. J. (2023). A Chat(GPT) about the future of scientific publishing. *Brain, Behavior, and Immunity*, *110*, 152–154. https://doi.org/10.1016/j.bbi.2023.02.022

Jadhav, A. A., & Jadhav, A. N. (2023). A responsible use of Open AI ChatGPT in education. *Journal of Emerging Technologies and Innovative Research (JETIR)*, *10*(3), 46–49. https://www.jetir.org/view?paper=JETIR2303609

Kasneci, E. (2023, July 2). *ChatGPT can lead to greater equity in education*. Technical University of Munich. https://www.tum.de/en/news-and-events/all-news/press-releases/details/chatgpt-kann-zu-mehr-bildungsgerechtigkeit-fuehren

Mhlanga, D. (2023a). Open AI in Education, the responsible and ethical use of ChatGPT towards lifelong learning. *SSRN Electronic Journal* (2023, February 11). http://dx.doi.org/10.2139/ssrn.4354422

Mhlanga, D. (2023b). The Value of Open AI and Chat GPT for the Current Learning Environments and the Potential Future Uses. *SSRN Electronic Journal* (2023, May 5). https://dx.doi.org/10.2139/ssrn.4439267

Rahman, M., & Watanobe, Y. (2023). ChatGPT for Education and Research: Opportunities, Threats, and Strategies. *Applied Sciences*, *13*, 1–21. https://doi.org/10.3390/app13095783

Rudolph, J., Tan, S., & Tan, S. (2023). ChatGPT: Bullshit spewer or the end of traditional assessments in higher education? *Journal of Applied Learning & Teaching*, *6*(1), 342–363. https://doi.org/10.37074/jalt.2023.6.1.9

Sejnowski, T. J. (2023). Large language models and the reverse turing test. *Neural Computation*, *35*(3), 309–342. https://doi.org/10.1162/neco_a_01563

Shidiq, M. (2023). The use of artificial intelligence-based ChatGPT and its challenges for the world of education: From the viewpoint of the development of creative writing skills. *Proceeding of International Conference on Education, Society and Humanity*, *1*(1), 353–357. https://ejournal.unuja.ac.id/index.php/icesh/article/view/5614

Yu, H. (2023). Reflection on whether Chat GPT should be banned by academia from the perspective of education and teaching. *Frontiers in Psychology*, *14*, 1–12. https://doi.org/10.3389/fpsyg.2023.1181712

Zhai, X. (2023). ChatGPT user experience: Implications for education. *SSRN Electronic Journal* (2023, January 4). https://dx.doi.org/10.2139/ssrn.4312418

# PEDAGOGY STUDENTS AS AGENTS OF CHANGE: INITIAL EDUCATION AS SUPPORT IN ACTION AND FOR ACTION

**Andrea Gašić**[1]

*Institute of Pedagogy and Andragogy, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia*

## Introduction

We believe that progress toward equity can only be achieved through changes in the conception and practice of education that would involve dialogue and the adoption of a participatory approach by all stakeholders in the education system (Klees & Qargha, 2014). That is why we, as pedagogists, do not seek to define equity, but rather question our own role in advancing it in education. We rely on the premises that pedagogists can instigate change in education (Krnjaja et al., 2023) and that the focus should be redirected to pedagogists' role in supporting changes in education and developing their professional practice in an ethical direction (Pavlović Breneselović, 2013).

For individuals to develop as advocates for justice, their initial education must foster the critical analysis of their own practices, education, and society (Stančić, 2020). This means that pedagogists who initiate change need opportunities for action, reflection, and participation in their initial education. Research on student participation has highlighted the need for higher education institutions to continuously seek ways to enhance student participation in both academic and extracurricular activities (Weaver & Qi, 2005). What is a better way to examine the education of pedagogists than having them examine it with us? Studies have found that recognizing students as partners and granting them more opportunities for self-reflection during education can help increase their engagement and reinforce the continuity between their initial education and subsequent professional work (Cook Sather, 2007). Drawing on the core ideas of

---

1    andrea.gasic@f.bg.ac.rs

*listening to students' voices* – treating their perspective as a form of raw knowledge and focusing on a change in which young individuals are in charge of the activity (Cook Sather, 2002; Cook Sather, 2006) – the main purpose of this paper is to examine students' views on the importance and modes of their participation in changing the Serbian school system and society.

## Method

In this article, we present a part of a qualitative study conducted in Belgrade in June 2023 that explored pedagogy students' perspectives on the engagement of pedagogists in improving the Serbian school system. The study involved 53 pedagogy students from the Faculty of Philosophy, University of Belgrade, including bachelor's students ($N$ = 39), master's students ($N$ = 9), and doctoral students ($N$ = 5). Utilizing our pre-established contact with students, we sent invitations via email and interested students responded voluntarily.

The data were collected using an online questionnaire covering three main sections: (1) necessary school system changes; (2) pedagogists' involvement in initiatives to improve the school system; and (3) the participation of pedagogy students in changing the school system and society. This paper centers on the third section, or more specifically, the following questions: *Do you perceive opportunities for engaging pedagogy students in shaping educational and societal changes?* and *If so, how would you describe this engagement?* During the data analysis process, we examined survey responses and conducted a thematic content analysis to identify recurring patterns, code responses, and categorize them (Lochmiller, 2021). We adopted an inductive approach, meaning that coding and category creation were based on the raw data obtained, rather than preconceived notions related to initial theoretical assumptions (Saldaña, 2015).

## Results and Discussion

Out of a total of 53 participants, as many as 51 believed that pedagogy students *can* participate in changing the school system and society at large, while only 2 participants held the opposite view (Figure 1).

**Figure 1** *Pedagogy Students' Opinions About Their Participation in Changes*



■ Students of pedagogy can contribute to changes in society and education

■ Students of pedagogy cannot contribute to changes in society and education
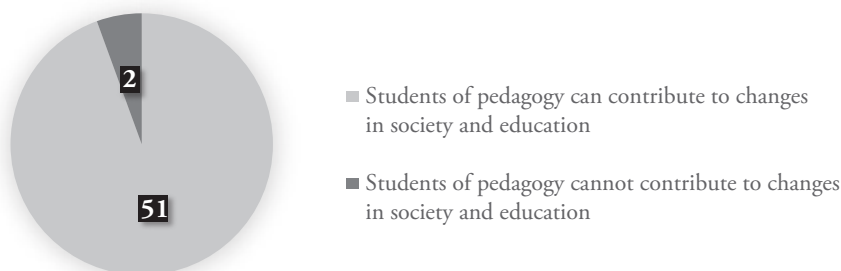
Analyzing positive statements regarding students' potential for participation in change ($N$ = 51), we identified two categories of participation: collaboration with schools and local community engagement (Table 1). The fact that the majority of student responses could be grouped into only two categories indicates a strong consensus that enhances the value of our findings.

**Table 1** *Forms of Pedagogy Students' Participation That Could Lead to Change*

| Category | Excerpts From Students' Answers | F |
|---|---|---|
| Collaboration With Schools[2] | • Visiting schools more frequently to discuss the current issues in education with practitioners[3];<br>• Researching practices in specific schools to assist in improving critical areas;<br>• Having curricular exam tasks relevant to solving the current problems in schools and sharing the results with practitioners;<br>• Reducing classroom-only learning and increasing learning in practice;<br>• Organizing workshops for learning with practitioners;<br>• Collaborating with teachers in lesson planning. | 34 |
| Engagement in the Local Community | • Organizing public gatherings to discuss the current education-related topics;<br>• Raising citizens' awareness of the significance of the teaching and pedagogy professions;<br>• Initiating conversations about school issues on social media;<br>• Hosting events in the local community to promote unity and collaboration as values. | 10 |
| Uncategorized[4] | / | 7 |

2    Which involves all participants in school life: teachers, pedagogists, students, parents, and others.

3    In the text, the term 'practitioners' refers to teachers and school pedagogists.

4    Responses that were too brief or ambiguous to categorize but expressed a positive attitude towards students' potential for participation in changes.

In the Collaboration With Schools category, most responses pertained to the need for a more intensive collaboration with practitioners. Some students focused on their learning: *"We spend too little time at schools. How can we know anything about a pedagogist's work if we are not witnessing it? We should get more opportunities to do things in schools under the supervision of pedagogists and reflect with them on the school issues"* (second-year bachelor's student). Other students focused on helping teachers, parents, and students: *"It could be useful to organize workshops for teachers on topics they suggest, but also to have discussions with parents and students on topics such as conflict resolution, developing tolerance and embracing differences, or recognizing and preventing violence"* (master's student).

Regarding their engagement in the local community, students believed that their role could involve informing the community: "*We, as students, should raise non-expert citizens' awareness of the importance of the teaching and pedagogy professions*" (first-year bachelor's student). They suggested starting conversations on social media and organizing public events: "*We could organize public gatherings focusing on discussions about important questions in education, where the visibility of pedagogists would be crucial*" (fourth-year bachelor's student).

Students listed various forms of participation while highlighting the necessity of support for setting these actions in motion: "*Students are a strong source of motivation, new ideas, and initiatives for change. Honestly, if we get proper support and if we recognize the need to be somewhere and participate, we will carry it through to the end*" (third-year bachelor's student).

Pedagogy students' responses revealed that they already saw themselves as potential leaders. It is our responsibility to make an effort to sustain this perception, primarily through their initial education and by continually listen to their voices. We should support their participation *in action* by improving their school-based professional practice and enabling them to initiate micro-changes, reflect, and collaborate with stakeholders. We should likewise support their capacity *for action* by empowering them to increase proactivity, social involvement, and sensitivity to social issues. The obtained results are in line with previous studies showing that the encouragement of students' participation in social change involves developing a curriculum based on the fundamental values of equity (Cook Sather, 2007; Fonseca et al., 2019).

## Conclusion and Implications

Based on the presented findings, we can conclude that pedagogy students recognized the significance of their participation in supporting changes within the Serbian school system. With the right support, they could see themselves as potential instigators of change. They envisioned their contribution as action through an enhanced collaboration with schools and increased involvement in the local community. One implication of this research pertains to the need for changes in pedagogists' initial education aimed at facilitating their participation. This could be achieved by expanding the scope of professional practice activities during initial education, but also by supporting students' critical reflective thinking to help build their capacities in action and for action. Our exploration of these questions with pedagogy students yielded potential, but not definitive solutions. Still, as stakeholders in the education system, we recognize that it is our duty to persistently listen to and support students' voices, if we truly want to make a change.

**Keywords:** equity, pedagogy students, initial education, participation, change

## References

Cook Sather, A. (2002). Authorizing students' perspectives: Toward trust, dialogue, and change in education. *Educational Researcher*, *31*(4), 3–14. https://doi.org/10.3102/0013189X031004003

Cook Sather, A. (2006). Sound, presence, and power: "Student voice" in education research and reform. *Curriculum Inquiry, 36*(4), 359–390. https://doi.org/10.1111/j.1467-873X.2006.00363.x

Cook Sather, A. (2007). What would happen if we treated students as those with opinions that matter? The benefits to principals and teachers of supporting youth engagement. *NASSP Bulletin, 91*(4), 343–362. https://doi.org/10.1177/0192636507309872

Fonseca, I., Bernate, J., Betancourt, M., Barón, B., & Cobo, J. (2019). Developing social responsibility in university students. In *Proceedings of the 11th International Conference on Education Technology and Computers* (pp. 215–218). Association for Computing Machinery. https://doi.org/10.1145/3369255.3369275

Klees, S.J., & Qargha, O. (2014). Equity in education: The case of UNICEF and the need for participative debate. *Prospects*, *44*, 321–333. https://doi.org/10.1007/s11125-014-9295-0

Krnjaja, Ž., Pavlović Breneselović, D., i Mitranić, N. (2023). Podrška stručnim saradnicima u promeni pristupa obrazovanju. U Z. Šaljić, S. Dubljanin i A. Pejatović (Ur.), *U potrazi za kvalitetnim obrazovanjem i vaspitanjem - izazovi i moguća rešenja* (str. 145–150). Institut za pedagogiju i andragogiju Filozofskog fakulteta Univerziteta u Beogradu i Pedagoško društvo Srbije.

Lochmiller, C. R. (2021). Conducting thematic analysis with qualitative data. *The Qualitative Report*, *26*(6), 2029–2044. https://doi.org/10.46743/2160-3715/2021.5008

Pavlović Breneselović, D. (2013). Čemu služi pedagog? Priča u tri slike. U Ž. Krnjaja, D. Pavlović Breneselović i K. Popović (Ur), *Pedagog između teorije i prakse* (str. 18–26). Institut za pedagogiju i andragogiju Filozofskog fakulteta Univerziteta u Beogradu i Pedagoško društvo Srbije.

Saldaña, J. (2015). *The coding manual for qualitative researchers*. SAGE Publications.

Stančić, M. (2020). *Lica i naličja pravednosti u ocenjivanju*. Institut za pedagogiju i andragogiju Filozofskog fakulteta Univerziteta u Beogradu.

Weaver, R. R., & Qi, J. (2005). Classroom organization and participation: College students' perceptions. *The Journal of Higher Education*, *76*(5), 570–601. https://doi.org/10.1080/00221546.2005.11772299

# CLASSROOM AND SCHOOL STRATEGIES FOR PROMOTING EQUITY

# THE MOST SIGNIFICANT LEARNING STORIES: TIMSS ASSESSMENT ITEMS AS A PROMPT FOR PROFESSIONAL LEARNING[1]

**Nada Ševa**[2] **and Ivana Đerić**

*Institute for Educational Research, Belgrade, Serbia*

## Introduction

Education policymakers in Serbia recognized that schools and teachers should include the results of International Large-scale Assessments (ILSAs) in further plans for improving the quality of teaching (Official Gazette of the Republic of Serbia, 14/2018). According to Đerić et al. (2020) and Mullis et al. (2020), in TIMSS 2019, teachers from Serbia identified Improving Students' Critical Thinking or Problem-Solving Skills (MATH: 54%; SCI: 56%) as one of the greatest needs for further professional development (PD). Thus, it is crucial to design effective PD programs to help teachers connect the TIMSS framework and data with their practice. Moreover, PD programs need to be constructed within a Universal Design for Learning (UDL) framework to promote inclusive pedagogy (Sanger, 2020; Schreffler et al., 2019). With this in mind, we developed a PD program entitled TIMSS 2019 for Teachers: Quest for Quality Questions (TIMSSQs).

The pillars of the program were grounded in the inclusive principles and values promoted within current theoretical models of professional learning and development (Koellner et al., 2023; Patton et al., 2015). This included: a) respecting the needs of teachers expressed in the TIMSS survey; b) encouraging practitioners'[3] active participation in the learning process; c) encouraging practitioners to reflect on their practice through the TIMSS framework and data; d) creating opportunities for building a professional

---

2   nadaseva@gmail.com

3   Term *practitioner* includes all school professionals who work with students in an educational context, i.e., teachers and school counsellors.

learning community at the school level, e) promoting school counsellors' role as PD facilitators at the school level; and f) encouraging practitioners to collaboratively create teaching materials and resources that draw on the TIMSS framework and data.

The purpose of the hybrid TIMSSQs program was twofold. First, inspired by the TIMSS framework, the program aimed to strengthen teachers' competencies for creating quality questions as one of the key elements of critical thinking and problem-solving skills. The program introduced the key characteristics of TIMSS assessment items and empowered teachers to formulate quality questions. Teachers were introduced to the Question Formulation Technique (QFT; Rothstein & Santana, 2011)[4], which promotes equity and inclusion in classroom settings, as confirmed in the Serbian educational context (Ševa & Đerić, 2023). In third step, teachers applied creating assessment items based on the TIMSS framework, emphasizing the quality of the questions (high cognitive domain questions). Finally, they reflected on their learning through technique the Most significant learning stories (MSL; Dart & Davis, 2003).

Another goal of the TIMSSQs program was empowering school counsellors to act as PD facilitators at the school level and support teachers in further plans for improving the quality of teaching. School counsellors participated in workshops and analyzed and selected teachers' most significant learning stories (technique MSL; Dart & Davis, 2003). Based on workshop outcomes, school counsellors were provided with the opportunity to draft an action plan for teachers' application of actionable knowledge inspired by the TIMSSQs program.

The present research aimed to obtain practitioners' insights regarding the most significant professional learning resulting from the implementation of the TIMSSQs program and determine which participant-centered pedagogical strategies were reflected in PD facilitators' methods. The results of the research are to inform the further development of the TIMSSQs program.

---

4   Creative Commons license: The Question Formulation Technique (QFT) was created by the Right Question Institute (rightquestion.org).

# Methodology

Data analysis was based on the following research questions:

1. What do teachers identify as the most significant learning from the program?

2. Which teachers' learning do school counsellors (PD facilitators) deem to be the most significant in the applied program and why?

3. How do school counsellors (PD facilitators) plan to support the sustainability of the program's effects in their professional learning community?

Research participants included 26 class teachers (ISCED Level 1) and subject teachers (STEM, Serbian Language and Literature, History, and other social science subjects; ISCED Level 2) and four school counsellors from two primary schools in Belgrade, Serbia. In Serbia, class teachers are responsible for teaching both mathematics and science in the lower grades of primary school. In the higher grades, each STEM subject is taught by a different teacher.

Data were collected through individual and semi-structured group interviews. Two instruments were used for data collection. The first instrument was an adaptation of the protocol for selecting the most significant learning story (technique MSL; Dart & Davis, 2003), containing eight questions (e.g., How will this new learning change your practice? Describe WHY this learning was the most significant to you). The second instrument was the focus group guide based on the protocol for selecting the most significant learning story (technique MSL; Dart & Davis, 2003). It contained questions like: Of all the listed significant learnings, which one do you think is the most important? Why is it the most significant for you? Why do you like this story?

The analyzed data included: a) teachers' narratives about professional learning experiences during the implementation of the TIMSSQs program in the form of the most significant learning stories (technique MSL; Dart & Davis, 2003) and b) transcripts of the interviews with school counsellors held during the workshop.

A qualitative content analysis was conducted (Elo & Kyngäs, 2009). First, the most significant learning stories were deductively coded using the following categories: Expressed Overall Contentment With the Program, Learning Outcomes, Implications of the PD Program for Further Practice, and Explanation of the Most Significant Learning. Subsequently, the data from the interviews with school counsellors were coded

inductively. Namely, two coders (researchers conducting the study) read the material, defined the categories individually and collaboratively, and reached a consensus on the final decision.

## Results, Discussion, and Conclusion

Teacher perceptions of the PD program suggest that it promotes reflection on teaching methods, an understanding of the importance of questions, and the development of skills required to formulate good research questions. In line with previous findings (Phillips & Duke, 2001; Wragg & Brown, 2001), the results showed that lower cognitive questions dominated teachers' practices. Furthermore, teachers acknowledged the necessity of open-ended research questions of a higher cognitive level. Despite the clear message and video examples showing how the QFT is used in the classroom, students were not credited as creators of open/research questions. Instead, teachers focused on improving their skills in creating TIMSS-like assessments. A majority of participants stated that they would use more open-ended questions of a higher cognitive level that resembled TIMSS assessment items. They believed that such questions could improve students' critical thinking, self-confidence, and motivation in the long run. Despite the inclusive nature of the QFT, teachers did not emphasize this, perhaps due to not having tested this technique in practice (Ševa & Đerić, 2023). Teachers seemed to view the use of the QFT and TIMSS-like assessment items as a means of controlling learning and discipline in the classroom (Hayes, 2002; Roehrig & Luft, 2004; Stokhof et al., 2017), which is not consistent with the participatory and inclusive nature of the UDL. According to school counsellors, the learning story identified as the most significant stated that changes in teachers' practices after professional learning were possible if implemented in a continuous, procedural manner, with experimentation in practice. Furthermore, the most significant learning stories reflected teachers' need for lifelong learning.

Despite the positive effects of the program, school counsellors recognized a need for further learning on the formulation of quality questions and facilitation of critical thinking and problem-solving. They further identified a lack of systematic support in the initial education phase as well as in later in-service professional development. School counsellors did not recognize the QFT as a useful tool for incorporating students'

questions into the teaching process and further development of UDL teaching in their schools. They suggested that the program's continuation should provide teachers with additional support through cyclical meetings in the context of professional learning communities within their schools. School counsellors believed that teachers needed to continuously reflect on the introduced techniques, test them in practice, and exchange initial experiences with colleagues and PD facilitators.

TIMSSQs should be further developed to include the implementation of the QFT in practice, which may provide a deeper understanding of its inclusive nature and enable schools to develop professional learning communities that focus on improving students' and teachers' critical thinking and problem-solving skills.

**Keywords:** Question Formulation Technique (QFT), Universal Design for Learning (UDL), critical thinking, problem-solving skills, PD facilitators

# References

Dart, J., & Davies, R. (2003). A dialogical, story-based evaluation tool: The most significant change technique. *American Journal of Evaluation*, *24*(2), 137–155. https://doi.org/10.1016/S1098-2140(03)00024-9

Đerić, I., Gutvajn, N., Jošić, S., i Ševa, N. (2020). *Nacionalni izveštaj: TIMSS 2019 u Srbiji – Pregled osnovnih nalaza (sa Sažetkom osnovnih nalaza TIMSS 2019)*. Institut za pedagoška istraživanja. [*National report: TIMSS 2019 in Serbia-overview of main results (with Summary of main findings TIMSS 2019)*. Institute for Educational Research.

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, *62*(1), 107–115. https://doi.org/10.1111/j.1365-2648.2007.04569.x

Koellner, K., Jacobs, J., Borko, H., & Nanette Seago, N. (2023). Current trends, tensions and unresolved issues in research on teacher professional learning. In R. J. Tierney, F. Rizvi, K. Erkican (Eds.), *International Encyclopedia of Education* (fourth edition) (pp. 550–561). Elsevier Science.

Mullis, I. V. S., Martin, M. O., Foy, P., Kelly, D. L., & Fishbein, B. (2020). *TIMSS 2019 International Results in Mathematics and Science*. Retrieved from Boston College, TIMSS & PIRLS International Study Centre website: https://timssandpirls.bc.edu/timss2019/international-results/

Official Gazette of the Republic of Serbia (14/2018). *Rulebook about the institution's work quality standards*. https://www.paragraf.rs/propisi/pravilnik-standardima-kvaliteta-rada-ustanove.html

Patton, K., Parker, M., & Tannehill, D. (2015). Helping teachers help themselves: Professional development that makes a difference. *NASSP Bulletin*, *99*(1), 26–42. https://doi.org/10.1177/0192636515576040

Phillips, N., & Duke, M. (2001). The questioning skills of clinical teachers and preceptors: A comparative study. *Journal of Advanced Nursing*, *33*(4), 523–529. https://doi.org/10.1046/j.1365-2648.2001.01682.x

Rothstein, D., & Santana, L. (2011). *Make just one change: Teach pupils to ask their own questions*. Harvard Education Press.

Sanger, C. S. (2020). Inclusive pedagogy and universal design approaches for diverse learning environments. In C. S. Sanger & N. W. Gleason (Eds.), *Diversity and inclusion in global higher education: Lessons from across Asia* (pp. 31–71). Palgrave Macmillan.

Schreffler, J., Vasquez, E. III, Chini, J., & James, W. (2019). Universal design for learning in postsecondary STEM education for students with disabilities: A systematic literature review. *International Journal of STEM Education*, *6*(1), 1–10. https://doi.org/10.1186/s40594-019-0161-8

Ševa, N., & Đerić, I. (2023). A phenomenological analysis of teacher experiences during professional learning on the implementation of the question formulation technique. *Journal of the Institute for Educational Research*, *55*(1), 5–32. https://doi.org/10.2298/ZIPI2301005S

Wragg, E. C., & Brown, G. (2001). *Questioning in the primary school*. Routledge Falmer.

# EQUITY IN THE EDUCATION OF GIFTED STUDENTS

**Radovan Antonijević[1], Nataša Nikolić**

*Department of Pedagogy and Andragogy, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia*

**Ivana Mrvoš**

*Teacher Education Faculty, University of Belgrade, Belgrade, Serbia*

## Introduction

All students are unique in terms of their particular abilities, interests, and learning styles. Equitable education ensures they all have the opportunity to reach their full potential. This includes tailored support that addresses individual needs and enables progress regardless of differences. In this sense, equitable education refers to an education system that provides all students with equal opportunities for development and advancement. To achieve this goal, it is essential to recognize differences among students and identify the special characteristics and needs of particular student groups that require the adaptation of the education system. In this context, gifted students constitute one such group, requiring targeted support to reach their potential. However, the scenario is somewhat different in practice. While some countries have established impressive programs to support the gifted, in many parts of the world, gifted children are ignored or underserved (Parr & Stevens, 2019). Accordingly, Parr and Stevens (2019) note that several countries still lack a robust educational infrastructure that would effectively support the development of tailored programs for the gifted. Even where such an infrastructure exists, conditions for identifying and supporting gifted youth often prove deficient and these deficiencies are compounded by a range of discriminatory, exclusionary, or inhibiting practices.

This paper aims to analyze equity in the education of the gifted and provide answers to the following questions:

---

1    aa_radovan@yahoo.com

- Why is equity in gifted education important?
- What kind of equitable education do gifted students need?

## Why Is Equity in Gifted Education Important?

The education of gifted students should be attuned to their distinct needs, a position reinforced by various justifications. When viewed through the lens of giftedness, education acquires heightened significance in promoting individual growth and the actualization of potential. Customizing gifted students' education empowers them to unlock their utmost potential in their respective areas of excellence. When met with challenges and enriching educational content, gifted individuals are propelled to explore, learn, and achieve more. The feeling of accomplishment and progress fuels their curiosity, fostering an enduring desire for continuous learning. This contributes to bolstering self-confidence, satisfaction, and happiness. Adapting education to their specific needs facilitates enriched peer interactions, enabling connections with like-minded individuals who share their passions, ultimately promoting social integration and the cultivation of positive relationships. From a societal standpoint, gifted individuals constitute a valuable resource. Their cultivated talents and skills can contribute to society through innovation, research, art, science, and diverse fields. Nurturing gifted individuals involves establishing an environment conducive to nurturing their abilities, fostering growth, and enabling contributions that align optimally with both their aspirations and the broader community's needs.

## What Kind of Equitable Education Do Gifted Students Need?

Equity in education for gifted students primarily means ensuring that their giftedness is recognized and acknowledged. To create an environment conducive to their potential development, it is crucial to identify gifted children at an early age and provide them with appropriate educational support, regardless of other characteristics such as gender, economic status, and race.

Moreover, achieving equity in education involves acknowledging students' specific educational needs. Education should be organized to present a challenge for the

gifted. The gifted are owed what all children are owed, namely, a quality education that adequately challenges them (Merry, 2008, p. 58). To meet their intellectual needs, it is important to give them content and tasks that truly challenge them because the gifted often grasp material more quickly and master complex concepts with ease. However, gifted students' school experience is usually the opposite. Their educational path is often characterized by a mismatch between their advanced abilities and the pace of the curriculum. The education of gifted students is "largely characterized by the experience of learning something that is already known and by the unnecessary repetition of established, automated knowledge and skills, which naturally leads to boredom, disinterest, exclusion from activities, apathy, and even conflict with teachers or other stakeholders in the educational process" (Altaras-Dimitrijević & Tatić-Janevski, 2016, pp. 43–44). Furthermore, an education that does not provide challenges negatively affects motivation and learning (Merry, 2008). Teaching activities and content that are tailored to "average" students can have a long-term negative impact on the progress of gifted students and their desire to learn. In addition to challenges and activities tailored to their interests, gifted students should be given opportunities for autonomy in learning and education (Altaras-Dimitrijević & Tatić-Janevski, 2016; Merry, 2008), which reflects their aspiration for independence and controlling their educational experience. Accordingly, Altaras-Dimitrijević and Tatić-Janevski (2016, p. 35) emphasize that while all students have the need to actively participate in the learning process by choosing topics, methods, working partners, and/or the pace of learning, this need is more pronounced among gifted students. Intellectually gifted students have the desire to explore unusual topics that differ from the standard curriculum and learn something different from what the majority of the class is learning and they are able to choose how they present the knowledge they acquire.

This suggests the necessity of creating an environment in which gifted students can experience a differentiated and individualized mode of learning, through additional challenges, advanced curricula, or learning adaptations that allow for the deepening of knowledge and the development of their talents. Pedagogical approaches often recommended for working with gifted students include mentorship, project-based learning, and problem-based learning (Renzulli et al., 2023). In addition to recognizing giftedness and providing support in working directly with the gifted, it is crucial to monitor gifted students' progress, give them feedback, and appropriately support their

development. In this regard, teachers and their competence play an important role. In this sense, Stronge (as cited in Parr & Stevens 2019. p. 5) states that "gifted students need specialized teachers to help them better understand their abilities, to deal with personal and social challenges, and to set appropriate goals".

## Conclusion

Equity in education means providing equal opportunities to all students. Individual differences are not a basis for discrimination but should be recognized to ensure that all students can reach their full potential through education. In this context, gifted students have the right to have their exceptional abilities recognized in the education system. This is achieved by providing educational support that recognizes and appropriately addresses the needs of gifted students through challenging content, adapted teaching methods, and greater autonomy in learning. It is critical to implement individualized and differentiated instruction that not only addresses the unique learning pace and depth of gifted students, but also provides them with opportunities to develop their interests, engage in meaningful projects, and collaborate with like-minded students. This approach not only enhances their educational experience but also promotes their holistic development so that they can realize their full potential.

**Keywords:** gifted students, equity in education, educational needs, individualized learning, autonomy in learning

## References

Altaras-Dimitrijević, S., & Tatić-Janevski, S. (2016). *Obrazovanje učenika izuzetnih sposobnosti: naučne osnove i smernice za školsku praksu*. ZUOV.

Merry, M. S. (2008). Educational justice and the gifted. *Theory and Research in Education*, *6*(1), 47–70. https://doi.org/10.1177/1477878507086730

Parr, J., & Stevens, T. (2019). Challenges of equity and discrimination in the education of gifted children. *Quality Education*, *1*(1), 1–12. https://doi.org/10.1007/978-3-319-69902-8_21-1

Renzulli, J. S., Gubbins, E. J., McMillen, K. S., Eckert, R. D., & Little, C. A. (2023). *Systems and models for developing programs for the gifted and talented*. Taylor & Francis.

# THROUGH AN ATMOSPHERE OF FAIRNESS TO SAFER SCHOOLS[1]

**Marina Kovačević Lepojević[2], Marija Trajković**
*Institute for Educational Research, Belgrade, Serbia*

**Branislava Popović-Ćitić, Lidija Bukvić**
*Faculty of Special Education and Rehabilitation, University of Belgrade, Belgrade, Serbia*

## Introduction

In the post-Columbine era, schools worldwide have come to view school safety through a school security lens. After the recent school shooting in Serbia, we seem to be inclined to repeat the same pattern here, even though it has been shown that formal control in schools (e.g., surveillance measures) is not effective in reducing misconduct, or at least not as effective as a positive school climate might be (Fisher et al., 2019; King & Bracy, 2019; Tanner-Smith et al., 2018). Authoritative discipline theory suggests (Gregory & Cornell, 2009) that schools that set high expectations for behavior (e.g., fairness of school rules) and promote warm support (e.g., good teacher-student relationships) increase school safety and reduce the likelihood of students violating school rules (Bear et al., 2014). Findings indicate that a positive school climate is closely related to greater school safety (Cornell, 2021; Kutsyuruba et al., 2015) and less school victimization, including bullying (Gutvajn et al., 2021) and cyberbullying (Yang et al., 2021). The fairness of school rules is usually considered to be an indicator of informal social control, effective in maintaining school safety (Fisher et al., 2019).

The current study aimed to explore the relationship between students' perception of school safety and different relational and structural aspects of the school climate. Additionally, we sought to determine whether the fairness of school rules can mediate the link between different school climate aspects and the perception of school safety.

2   marina.lepojevic@gmail.com

# Method

## Participants

The study involved 860 secondary school students (grades 1-4) from 11 schools located in the Municipality of Stari Grad, Belgrade. Female and male students were nearly equally represented (59.6% female).

## Measures

The set of measures used comprised seven subscales of the *Delaware School Climate Survey* (Bear et al., 2014). The School Safety subscale of the School Climate scale explores students' perceptions of school safety ($\alpha$ = .87). The Clarity of Expectations subscale ($\alpha$ =.82) and the Fairness of Rules subscale ($\alpha$ = .82) explore the structure of the school climate. The subscales of Teacher–Student Relations ($\alpha$ = .90), Student–Student Relations ($\alpha$ = .83), and Respect for Diversity ($\alpha$ = .72) measure the relational aspects of the school context. Additionally, the Student Engagement Schoolwide subscale ($\alpha$ = .78) was included. The rating response range for the described measures was from 1 (strongly disagree) to 4 (strongly agree).

## Data Analysis

The statistical programs used in the data analysis process included PSPPIRE (descriptive, Pearson's correlation analysis, and regression analysis) and JASP version 0.16 (mediation analysis). The mediation model was estimated via bootstrapping and confidence intervals were calculated employing the bias-corrected percentile method.

## Procedure

Data were collected within a wider school climate assessment conducted as a part of the joint European Union and Council of Europe program entitled Horizontal Facility for the Western Balkans and Turkey 2019-2022: Step up: Youth Voice on Discrimination, Hate Speech, and Equality (realized by the Center for Positive Youth Development).

The data collection process lasted from May 2021 to July 2021. Students were previously instructed orally and in written form. Anonymity was guaranteed. The time needed for completing the questionnaire was 45 minutes (one class period).

## Results and Discussion

The descriptive statistics, correlations, and intercorrelations are presented in Table 1. According to the results, School Safety showed moderate to strong correlations with all the examined school climate domains. School Safety most strongly correlated with Respect for Diversity ($r$ = .708) and had the weakest correlation with Teacher–Student Relations ($r$ = .597). Intercorrelations were identified between all the examined variables, with the sole exception being the absence of an intercorrelation between Teacher–Student Relations and Student–Student Relations. This might be explained by different perceptions of teacher-student relations, since teachers tend to evaluate these relations far more positively than students (Popović-Ćitić et al., 2021). Among the examined school climate domains, Respect for Diversity most strongly correlated with Student–Student Relations ($r$ = .753) while the weakest correlation was found between Clarity of Expectations and Student–Student Relations ($r$ = .524).

**Table 1** *Pearson's Correlation Coefficients, Means, and Standard Deviations*

|  | TSR | SSR | CE | FSR | RD | SES | SS |
|---|---|---|---|---|---|---|---|
| TSR |  |  |  |  |  |  |  |
| SSR | -.012 |  |  |  |  |  |  |
| CE | .542** | .524** |  |  |  |  |  |
| FSR | .682** | .562** | .685** |  |  |  |  |
| RD | .643** | .753** | .604** | .628** |  |  |  |
| SES | .659** | .730** | .599** | .607** | .671** |  |  |
| SS | .587** | .676** | .629** | .663** | .708** | .603** |  |
| Mean | 10.89 | 12.37 | 13.44 | 11.88 | 16.15 | 17.09 | 9.52 |
| SD | 3.70 | 2.97 | 2.90 | 3.29 | 3.50 | 4.46 | 2.62 |

*Note.* TSR – Teacher–Student Relations; SSR – Student–Student Relations; CE – Clarity of Expectations; FSR – Fairness of Rules; RD – Respect for Diversity; SES – Student Engagement Schoolwide; SS – School Safety.

*Notes:* * $p < .05$; ** $p < .01$.

To examine the predictive validity of school climate qualities along with age and gender, a linear regression analysis was performed with School Safety as the dependent variable (Table 2). Teacher–Student Relations, Student–Student Relations, Clarity of Expectations, Fairness of Rules, Respect for Diversity, Student Engagement Schoolwide, age, and gender explained 63% of the variance in School Safety ($R^2$ = .63, $F$(8,711) = 153.65, $p$ < .001).

**Table 2** *Characteristics of School Safety Predictors*

| Criterion SS | B | Se | B | T | Sig. |
|---|---|---|---|---|---|
| Gender | -.80 | .12 | -.15 | -6.42 | .000 |
| Age | .07 | .06 | .03 | 1.28 | .202 |
| TSR | .00 | .02 | -.01 | -.15 | .884 |
| SSR | .23 | .03 | .27 | 6.87 | .000 |
| CE | .18 | .03 | .20 | 6.03 | .000 |
| FSR | .19 | .03 | .25 | 6.86 | .000 |
| RD | .17 | .03 | .23 | 5.97 | .000 |
| SES | .00 | .02 | -.01 | -.17 | .863 |

*Note.* TSR – Teacher–Student Relations; SSR – Student–Student Relations; CE – Clarity of Expectation; FSR – Fairness of Rules; RD – Respect of Diversity; SES – Student Engagement Schoolwide; SS – School Safety.

The results showed that Student–Student Relations, Clarity of Expectations, Fairness of Rules, and Respect for Diversity positively predicted students' reporting greater School Safety. Additionally, gender proved to be a significant predictor, with male students reporting greater school safety compared to female students (Coelho et al., 2020a). This might be explained by the lower decrease in emotional self-concept in girls compared to boys in the transition to middle school (Coelho et al., 2020b). Namely, studies have shown girls to be more likely to communicate about risk situations compared to boys (Racz & McMahon, 2011). Teacher–Student Relations and Student Engagement Schoolwide did not contribute to the explanation of School Safety.

The results revealed that School Safety shared direct links with Student–Student Relations ($z$ = 7.989, $p$ < .001), Respect for Diversity ($z$ = 5.997, $p$ < .001), and Clarity of Expectations ($z$ = 5.227, $p$ < .001) (Figure 1). Fairness of Rules mediated School Safety's links with Teacher–Student Relations ($z$ = 5.299, $p$ < .001) and Clarity of Expectations ($z$ = 5.434, $p$ < .001). The total effects of the model were significant for

Student–Student Relations ($z$ = 7.903, $p$ < .001), Respect for Diversity ($z$ < .001), Clarity of Expectations ($z$ = 8.238, $p$ < .001), and Teacher–Student Relations ($z$ = 3.05, $p$ < .01). The full mediation of Fairness of Rules in explaining the link between Teacher-Student Relations and School Safety might imply that teachers have to create a warm and supportive atmosphere while simultaneously promoting the fairness of rules towards maximizing school safety, in line with authoritative discipline theory (Gregory & Cornell, 2009). In addition to being clear, school rules need to be consistent and fair to ensure a more positive perception of school safety (Williams et al., 2018).

**Figure 1** *The Mediation of Fairness of School Rules With Student-Student Relations, Teacher-Student Relations, Clarity of Expectation, Respect of Diversity, and Student Engagement Schoolwide as Predictors and School Safety as the Criterion*
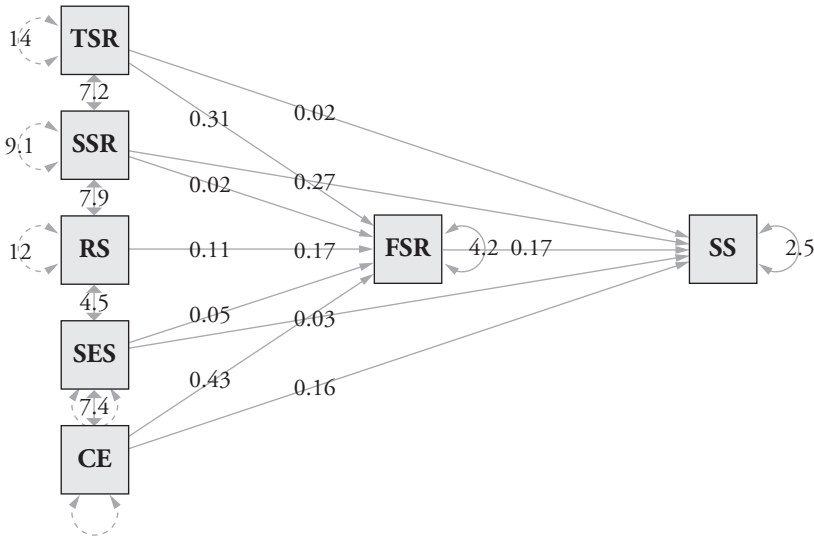


*Note.* TSR – Teacher–Student Relations; SSR – Student–Student Relations; CE – Clarity of Expectations; FSR – Fairness of Rules; RD – Respect for Diversity; SES – Student Engagement Schoolwide; SS – School Safety.

## Conclusion

The past two decades have seen the increasing popularity of addressing school safety through school climate promotion by implementing specific school-based models,

such as positive behavioral interventions and support (PBIS) and social and emotional learning (SEL) programs, which have proven effective (Green et al., 2021; Domitrovich et al., 2017; Pas et al., 2019). Multiple studies conducted in Serbia have found more equitable learning environments with a more positive school climate to be related to greater school safety, less bullying at school, and less discrimination and hate speech (Kovačević Lepojević et al., 2022; Tadić, 2023; Popović-Ćitić et al., 2021). However, until now, there has been no evidence regarding the implementation of the previously discussed school-based models in Serbia. On the other hand, the advantages of universal school-based interventions have been recognized and include producing changes in the wider population so that eventually the effects can be more significant, elevating the school staff's skills, eliminating participant stigmatization, facilitating the generalization of adopted skills in peer surroundings, and increasing the involvement of parents and the community in the programs (Kovačević Lepojević et al., 2022).

**Keywords:** school safety, school climate, fairness of rules

# References

Bear, G. G., Yang, C., Mantz, L., Pasipanodya, E., & Heard, S., Boyer, D. (2014). *Technical manual for Delaware school survey: Scales of school climate, bullying victimization, student engagement, and positive, punitive, and social emotional learning techniques.* Center for Disabilities Studies at the University of Delaware and the Delaware Department of Education.

Coelho, V. A., Romão, A. R., Brás, P., Bear, G., & Prioste, A. (2020a). Trajectories of students' school climate dimensions throughout middle school transition: a longitudinal study. *Child Indicators Research*, *13*(1), 175–192. https://doi.org/10.1007/s12187-019-09674-y

Coelho, V.A., Bear, G.G. & Brás, P. A (2020b). Multilevel analysis of the importance of school climate for the trajectories of students' self-concept and self-esteem throughout the middle school transition. *Journal of Youth and Adolescence*, *49*(9), 1793–1804. https://doi.org/10.1007/s10964-020-01245-7

Cornell, D. (2021). Reflections on school safety from a threat assessment perspective. *International Journal of Applied Psychoanalytic Studies*, *18*(3), 277–284. https://doi.org/10.1002/aps.1720

Domitrovich, C. E., Durlak, J. A., Staley, K. C., & Weissberg, R. P. (2017). Social-emotional competence: An essential factor for promoting positive adjustment and reducing risk in school children. *Child Development*, *88*(2), 408–416. https://doi.org/10.1111/cdev.12739

Green, A. L., Ferrante, S., Boaz, T. L., Kutash, K., & Wheeldon-Reece, B. (2021). Social and emotional learning during early adolescence: Effectiveness of a classroom-based SEL program for middle school students. *Psychology in the Schools*, *58*(6), 1056–1069. https://doi.org/10.1002/pits.22487

Gregory, A., & Cornell, D. (2009). "Tolerating" adolescent needs: Moving beyond zero tolerance policies in high school. *Theory into practice*, *48*(2), 106–113. https://doi.org/10.1080/00405840902776327

Gutvajn, N., Kovačević Lepojević, M., & Miščević, G. (2021). Školska klima i motivacija za učenje matematike i prirodnih nauka: medijacija vršnjačkog nasilja. U I. Đerić, N. Gutvajn, S. Jošić i N. Ševa (Ur.), *TIMSS 2019 u Srbiji: rezultati međunarodnog istraživanja postignuća učenika četvrtog razreda osnovne škole iz matematike i prirodnih nauka* (str. 107–123). Institut za pedagoška istraživanja.

Fisher, B. W., Gardella, J. H., & Tanner-Smith, E. E. (2019). Social control in schools: The relationships between school security measures and informal social control mechanisms. *Journal of School Violence*, *18*(3), 347–361. https://doi.org/10.1080/15388220.2018.1503964

King, S., & Bracy, N. L. (2019). School security in the post-Columbine era: Trends, consequences, and future directions. *Journal of Contemporary Criminal Justice*, *35*(3), 274–295. https://doi.org/10.1177/1043986219840188

Kovačević Lepojević, M., Merdović, B., & Živaljević, D. (2022). The systematic review of school-based programs focused on externalising problems in students. *Teme*, *46*(2), 361–375. https://doi.org/10.22190/TEME210329023K

Kovačević-Lepojević, M., Popović-Ćitić, B., Bukvić Branković, L., & Stojanović, M. (2022, September 7–9). Students' SEL skills, disciplinary practices and bulliyng: Relevance for positive youth development [Conference presentation abstract, p. 55]. SIG 10, 21 & 25 Conference 2022: Dialogue, diversity and interdisciplinarity in the field of learning and instruction, Belgrade, Serbia.

Kutsyuruba, B., Klinger, D. A., & Hussain, A. (2015). Relationships among school climate, school safety, and student achievement and well-being: a review of the literature. *Review of Education*, *3*(2), 103–135. https://doi.org/10.1002/rev3.3043

Racz, S. J. & McMahon, R. J. (2011). The relationship between parental knowledge and monitoring and child and adolescent conduct problems: A 10-year update. *Clinical Child and Family Psychology Review*, *14*(4), 377–398. https://doi.org/10.1007/s10567-011-0099-y

Pas, E. T., Ryoo, J. H., Musci, R. J., & Bradshaw, C. P. (2019). A state-wide quasi-experimental effectiveness study of the scale-up of school-wide positive behavioral interventions and supports. *Journal of school psychology*, *73*, 41–55. https://doi.org/10.1016/j.jsp.2019.03.001

Popović-Ćitić, B., Bukvić Branković, L., Kovačević-Lepojević, M., Paraušić, A., Stojanović, M., & Kovačević, M. (2021). *Promocija i uvažavanje različitosti i ravnopravnosti u školskom*

*okruženju u cilju prevencije govora mržnje i diskriminacije kod mladih: slučaj beogradske opštine Stari grad* (pp. 1–123). CEPORA – Centar za pozitivan razvoj dece i omladine.

Tanner-Smith, E. E., Fisher, B. W., Addington, L. A., & Gardella, J. H. (2018). Adding security, but subtracting safety? Exploring schools' use of multiple visible security measures. *American Journal of Criminal Justice*, *43*, 102–119. https://doi.org/10.1007/s12103-017-9409-3

Tadić, V. (2023). *Školska klima i prosocijalno ponašanje kao faktori bezbednosti u srednjim školama* [doktorska disertacija, Univerzitet u Beogradu]. NaRDuS. https://nardus.mpn.gov.rs/handle/123456789/21592

Williams, S., Schneider, M., Wornell, C., & Langhinrichsen-Rohling, J. (2018). Student's perceptions of school safety: It is not just about being bullied. *The Journal of School Nursing*, *34*(4), 319–330.

Yang, C., Chen, C., Lin, X., & Chan, M. K. (2021). School-wide social emotional learning and cyberbullying victimization among middle and high school students: Moderating role of school climate. *School Psychology*, *36*(2), 75–85. https://psycnet.apa.org/doi/10.1037/spq0000423

# COOPERATIVE LEARNING AND PROMOTING EQUITY IN EDUCATION[1]

**Jelena Medar Zlatković**[2] **and Nataša Lalić Vučetić**

*Institute for Educational Research, Belgrade, Serbia*

Over the past several years, education systems in countries around the world have undergone numerous changes. During the COVID-19 pandemic, social distancing policies and remote learning exacerbated the issue of inequity in education (Tadić, 2021). Within this context, the implementation of inclusive education was fraught with problems, both in our country and worldwide (Medar & Ratković, 2021; Parmigiani et al., 2020). In line with the Sustainable Development Goals of the United Nations and the global education goal of ensuring inclusive and quality education, contemporary authors have highlighted the necessity of implementing cooperative learning with the aim of ensuring equal learning opportunities for all students (Prieto-Saborit et al., 2021; Prieto-Saborit et al., 2022). Hence, this paper expounds the possibilities of cooperative learning implementation in the context of maximizing equity in education.

The assumption underlying cooperative learning is that students construct knowledge through social interaction within a group, where interaction and dialogue allow them to construct their own learning through a common objective (Prieto-Saborit et al., 2022). The uniqueness of this learning model is reflected in the meticulous structuring of different dimensions of group learning, including but not limited to forming student teams, determining specific learning goals, and devising adequate learning tasks. Researchers have emphasized that cooperative learning ensures equal learning opportunities for all students by providing a favorable context for the establishment of numerous social interactions as a prerequisite to learning (Cohen et al., 1999; Esmonde, 2009a; Esmonde, 2009b; Jacobs et al., 2002). Contemporary research on cooperative learning has shown that this learning model aids the development of empathy in students (Ryzin

---

2   jelenamedar95@hotmail.com

& Roseth, 2019) and promotes gender and cultural equality in the classroom (Ferguson-Patrick, 2020; Prieto-Saborit et al., 2021).

The relevant literature in this field particularly highlights the role of the teacher in devising complex cooperative tasks that require the use of different intellectual abilities (Cohen et al., 1999). During cooperative learning, teachers should support marginalized students by pointing out their competences to other students in the class, since according to Esmonde, students are eager to interact with a student who receives praise from the teacher (Esmonde, 2009a; Esmonde, 2009b). On the other hand, the teacher's failure to intervene in a timely and efficient manner can cause various forms of inequity in the cooperative learning process. It is believed that continuous teacher training is crucial to the successful implementation of cooperative learning. It has been established that the greatest problem in the implementation of cooperative learning lies in teachers' lack of specific knowledge necessary for implementing crucial elements of this method (Prieto-Saborit et al., 2021).

In the context of cooperative learning implementation, the evaluation of students' achievements emerges as one of the key issues related to ensuring quality learning through student cooperation within groups. According to the leading authors in this field, including Johnson and Johnson, Slavin, and Kagan and Kagan, an inadequate approach to student grading during cooperative learning can perpetuate inequity in terms of students' position in education. Among the abovementioned authors, no consensus has been reached regarding the approach that is adequate when grading students in this context. This discord between researchers' views on student grading during cooperative learning has reflected on the education practice. When grading students during cooperative learning, teachers often find that they struggle with striking a balance between individual and group responsibilities within groups, which results in their evaluations of student progress being imprecise and unsystematic (Ross et al., 1998). Having in mind the significance of student grading for learning motivation and ensuring quality learning outcomes, we believe that it is important to consider different approaches to student grading during cooperative learning, with a particular emphasis on the advantages and limitations of each approach.

Johnson and Johnson (1999) advocate group grading in cooperative learning contexts, with all group members receiving the same grade for their joint efforts. Giving the same grade to all group members promotes positive interdependence among students. Namely, since students know that their individual success hinges on the success of the group, they are more motivated to cooperate with others (Johnson & Johnson, 1999; Ševkušić, 1998). Johnson and Johnson (1999) emphasize that students' need for cooperation during cooperative learning is significantly diminished when they receive individual grades or when group members are ranked based on their success. On the other hand, Kagan and Kagan (2009) warn that the application of this grading model during cooperative learning can lead to inequity. They illustrate this claim with an example of two relatively equally knowledgeable students who are in two different cooperative learning groups. One student receives a good grade, while the other receives a bad grade. These students' grades are the results of group grading and each of their grades is shaped by the motivation, interests, and contributions of other group members (Kagan & Kagan, 2009). The inequitable nature of group grading does not only reflect on high-achieving students, but also on low-achieving students, who receive good grades that do not correspond to their actual achievements (Fuchs et al., 1998; Webb et al., 1998). Although good grades can improve students' learning motivation, if they are unjustifiably given to students who do not contribute to group work, such students do not receive adequate feedback for learning, with their good grades reinforcing a model of behavior that is not desirable in a cooperative milieu. Likewise, individual grading during cooperative learning can jeopardize cooperative relationships between students and reduce their need for peer interaction.

The limitations of group and individual student grading during cooperative learning can be overcome by combining and integrating the two approaches to grading. Slavin's learning model entitled Student Teams, Achievement Division or STAD constitutes an elaboration of the idea of a combined approach to student grading in cooperative learning situations (Slavin, 1982). According to this model, students first learn by cooperating within groups/teams. Afterwards, all group members take individual tests and receive individual grades. In this context, individual grades are not the final grades, since they serve to calculate the total team score, that is, the sum of all team members' grades based on which each group receives a joint grade (Slavin, 1982). Since this model pertains exclusively to the peer learning process, Antić notes that all the more complex, demanding, higher forms of mental activity remain outside

the scope of this cooperative learning model (Antić, 2010). Hence, this grading method would not be adequate in situations in which students solve problems in groups, engage in discovery learning, or solve tasks that require divergent thinking.

In search of an answer to the question of how to ensure more equitable grading in cooperative learning situations, we have reflected on the contemporary trends in student grading and evaluation that can be applied to this learning context. Such approaches to grading are formative and grades are based on both students' learning outcomes and the learning process and context (Stančić, 2020). In the context of cooperative learning, Kagan and Kagan (2009) emphasize that grading needs to be representative, multidimensional, formative, and authentic. In sum, we believe that student grading during cooperative learning should focus on learning outcomes as well as the quality of student interactions. It would be beneficial to allow students to engage in peer evaluation and self-evaluation in the context of cooperative learning. Such a grading practice would ensure that cooperative learning takes place in an atmosphere of mutual trust, with students and teachers sharing responsibility for the quality of the entire educational process.

We can conclude that cooperative learning can ensure equal opportunities for learning and academic achievement for all students, but its inadequate application and evaluation can constitute a source of various forms of inequity. Having in mind that teachers find student grading to be the greatest challenge in this process, future agendas should focus on the development of clearer options that teachers could use as guidelines for dealing with the complexity of the implementation and maintenance of cooperative learning in schools and classrooms.

**Keywords:** equity in education, cooperative learning, student grading, group grade, individual grade

## References

Antić, S. (2010). *Kooperativno učenje: modeli, potencijali, ograničenja*. Institut za psihologiju Filozofskog fakulteta Univerziteta u Beogradu.

Cohen, E. G., Lotan, R. A., Scarloss, B. A., & Arellano, A. R. (1999). Complex instruction: Equity in cooperative learning classrooms. *Theory Into Practice*, *38*(2), 80–86. https://10.1080/00405849909543836

Esmonde, I. (2009a). Ideas and identities: Supporting equity in cooperative mathematics learning. *Review of Educational Research*, *79*(2), 1008–1043. http://dx.doi.org/10.3102/0034654309332562

Esmonde, I. (2009b). Mathematics learning in groups: Analyzing equity in two cooperative activity structures. *The Journal of the Learning Sciences*, *18*(2), 247–284. https://doi.org/10.1080/10508400902797958

Ferguson-Patrick, K. (2020). Cooperative learning in Swedish classrooms: Engagement and relationships as a focus for culturally diverse students. *Education Sciences*, *10*(11)*, 312.* https://10.3390/educsci10110312

Fuchs, L., Fuchs, D., Karns, K., Hamlett, C., Katzaroff, M. & Dutka, S. (1998). Comparisons among individual and cooperative performance assessments and other measures of mathematics competence. *Elementary School Journal*, *99*(1), 23–52. https://www.jstor.org/stable/1002224

Jacobs, G. M., Power, M. A. & Loh, W. I. (2002). *The teacher's sourcebook for cooperative learning: Practical techniques, basic principles, and frequently asked questions*. Corwin Press.

Johnson D. & R. Johnson (1999). Making Cooperative Learning Work. *Theory Into Practice*, *38*(2), 67–73. https://doi.org/10.1080/00405849909543834

Kagan, S. & M. Kagan (2009). *Kagan cooperative learning*. Kagan Publishing.

Medar, J. i Ratković, M. (2021). Primena informaciono-komunikacionih tehnologija u inkluzivnom obrazovnom kontekstu – iskustva nastavnika tokom pandemije COVID-19. U I. Jeremić, N. Nikolić i N. Koruga (Ur.), *Vaspitanje i obrazovanje u digitalnom okruženju – Zbornik radova sa nacionalnog naučnog skupa Susreti pedagoga* (str. 109–114). Institut za pedagogiju i andragogiju Filozofskog fakulteta i Pedagoško društvo Srbije. https://hdl.handle.net/21.15107/rcub_ipir_473

Parmigiani, D., Benigno, V., Giusto, M., Silvaggio, C., & Sperandio, S. (2020). E-inclusion: Online special education in Italy during the Covid-19 pandemic. *Technology, Pedagogy and Education*, *30*(1), 111–124. https://10.1080/1475939x.2020.1856714

Prieto-Saborit, J. A., Méndez-Alonso, D., Cecchini, J.A., Fernández-Viciana, A., & Bahamonde-Nava, J. R. (2021). Cooperative learning for a more sustainable education: Gender equity in the learning of maths. *Sustainability*, *13*(15), 8220. https://doi.org/10.3390/su13158220

Prieto-Saborit, J. A., Méndez-Alonso, D., Fernández-Viciana, A., Dixit, L. J. D., & Nistal-Hernández, P. (2022). Implementation of cooperative learning and its relationship with prior training of teachers, performance and equity in mathematics: A longitudinal study. *Sustainability*, *14*(23), 16243. https://doi.org/10.3390/su142316243

Ross, J. A., Rolheiser, C., & Hogaboam-Gray, A. (1998). Student evaluation in cooperative learning: Teacher cognitions. *Teachers and Teaching: Theory and Practice*, 4(2), 299–316.

Ryzin, M. J., & Roseth, C. J. (2019). Effects of cooperative learning on peer relations, empathy, and bullying in middle school. *Aggressive Behavior*, *45*(6), 643–651. https://doi.org/10.1002/ab.21858

Ševkušić, S. (1998). Kooperativno učenje kao oblik aktiviranja učenika. *Nastava i vaspitanje*, *47(3*), 355–373.

Slavin, R. E. (1982). *Cooperative learning: Student teams. What research says to the teacher*. National Education Association.

Stančić, M. (2020). *Lica i naličja pravednosti u ocenjivanju*. Univerzitet u Beogradu – Filozofski fakultet, Institut za pedagogiju i andragogiju. https://hdl.handle.net/21.15107/rcub_reff_3874

Tadić, A. S. (2021). Obrazovanje na daljinu ili udaljavanje od obrazovanja – osvrt na školovanje u ruralnim područjima. U V. Spasenović (Ur.), *Obrazovanje u vreme kovid krize: Gde smo i kuda dalje* (str. 215–229). Univerzitet u Beogradu – Filozofski fakultet. https://hdl.handle.net/21.15107/rcub_reff_3518

Webb, N., Nemer, K. M., Chizhik, A. W., & Sugrue, B. (1998). Equity issues in collaborative group assessment: Group composition and performance. *American Educational Research Journal*, *35*(4), 607–651. http://dx.doi.org/10.2307/1163461

# INDIVIDUALIZED TEACHING AS THE BASIS OF FAIR EDUCATION THROUGH TEACHING AT DIFFERENT LEVELS OF COMPLEXITY

**Marija Tomić**[1]

*Faculty of Philosophy, University of Banja Luka, Banja Luka, Bosnia and Herzegovina*

## Introduction

The present paper deals with teaching at different levels of complexity as an individualized model that equally fosters the maximum development of each student. Although individualized teaching is not a novelty, it does not seem to be sufficiently represented in schools. Teachers still most commonly opt for the traditional model, which implies frontal instruction, with the teacher as the subject of the educational process. Conversely, teaching at different levels of complexity involves devising tasks with three different levels of difficulty, thus supporting the individual progress of every student (Ilić, 1998). It is important to make a clear distinction between the aforementioned individualized teaching and individual teaching, which implies students' individual, independent work on the same tasks (Lazarević, 2005).

## Traditional Teaching as a Trap for Fair Education

First, it is necessary to analyze the concept of fair education. Educational values and the right to an education have served as guidelines for changes in education systems aimed at ensuring the inclusion of every child in the education process (Vican & Brčić, 2013). The values of education, equality, and fairness have primarily reflected on children with developmental disabilities and their inclusion in the education system. It is clear that fair education implies the existence of a curriculum that every student can follow.

---

1    marija.tomic93@hotmail.com

Given that traditional teaching is tailored to the fictitious average student, how does traditional teaching respond to the needs of gifted children or students with learning disabilities? Quasi-elitist teachers work with several high-achieving students and convince themselves that their work makes a difference (Suzić, 2009). This is a common practice in the traditional education system, which hardly satisfies the principles of fairness. The goal should be that all students reach their full potential and not that only a few students obtain exceptionally high results. In a practical sense, it is necessary to engage students at all levels during the education process. According to the literature, this engagement comes in four forms: cognitive, emotional, actional, and agentic (Christenson, 2012; Reeve, 213; Reeve & Tseng, 2011). Cognitive engagement implies learning with understanding as opposed to only memorizing information (Walker et al., 2006). In fair education, it is important to enable every student to be engage at all four levels. Agentic engagement refers to students personalizing their learning, offering input, expressing preferences, and giving suggestions. This allows for the process of learning to be adapted to the individuality of each student and ensures that students can freely act and express their emotions, in accordance with the idea of fair education.

## Overview of the Results of Research on the Effectiveness of Individualized Teaching

A recent study explored the influence of an individualized literature teaching model on students' creative reading over the course of one year. The results showed that teaching at different levels of complexity resulted in experimental groups being more successful in creative reading compared to control groups, in which the traditional model was employed (Laketić, 2019). An experimental study that assessed the effects of teaching students at the level of their abilities showed a significant improvement compared to the results achieved with the application of the traditional model. The mentioned research refers to the education of students with different intellectual abilities, although they can differ according to many criteria such as motivation, physical disabilities, maturity, etc. After eight months, students in experimental classes were 2.5 months ahead of students in the control group (Quinard, 1972).

# Methodology

The present research was conducted over a period of two weeks and focused on the subjects of Serbian Language and Literature, Mathematics, History, Geography, and Chemistry. In three separate control groups, the traditional teaching model was applied, while three experimental classes worked according to the principles of teaching at different levels of complexity.

The aim of the research was to determine whether teaching at different levels of complexity is more effective in terms of the acquisition and durability of knowledge. Effectiveness was measured based on the achieved results defined by the curriculum and assessed using the same standard knowledge tests for all groups. Two hypotheses were formulated:

1. We expected the traditional teaching model to yield lower student results compared to teaching at different levels of complexity.

2. We hypothesized that teaching at different levels of complexity would help students acquire more durable knowledge compared to the traditional model.

## Research Methods and Research Techniques

Using the method of theoretical analysis and synthesis, all professional literature related to the topic was meticulously studied. An experimental method was used to determine differences in the scope and durability of knowledge depending on the teaching method. The experiment lasted for two weeks and involved 120 primary school students from the city of Banja Luka. In control groups, the traditional, frontal teaching method was applied, while experimental groups learned by solving tasks at three levels of difficulty. The first level included 70% of basic knowledge and 30% of understanding the facts. The second level comprised 70% of understanding the facts and 30% of independent use, while the third level consisted of 70% of independent use and 30% of creative use. When students completed one level, they could move on to another. In the final phase of the experiment, a testing technique was used to assess the knowledge acquired by both control and experimental groups. The technique involved the use of standard knowledge tests provided in the curriculum.

# Results

Students in experimental groups achieved much better results on knowledge tests compared to their peers in control groups (Figure 1). All students were given the same tests in Mathematics, Serbian Language and Literature, History, Geography, and Chemistry. Experimental classes achieved statistically significantly higher results in Mathematics and Chemistry. Better results were also achieved in Serbian Language and Literature tests, but with no statistical significance. There were no significant differences in the success of students on History and Geography tests.

Furthermore, experimental group participants acquired more durable knowledge. Compared to control group participants, they were more successful on repeat tests taken a month after the initial testing. More specifically, experimental group participants once again obtained statistically significantly better results in Chemistry and Mathematics. They also performed better in Serbian Language and Literature, but the difference was still not statistically significant.

**Figure 1** *Differences in Success on the Mathematics Test Depending on the Teaching*
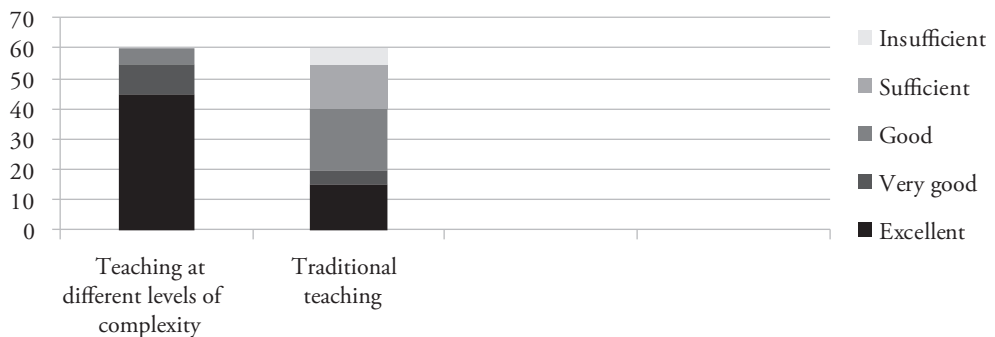


# Conclusion

The results indicate that teaching at different levels of complexity has far more advantages than the traditional method, which is still dominant in the teaching practice. The future of education needs to be directed towards helping students become more independent and reach their full potential, which is best achieved through teaching at different

levels of difficulty. This model ensures maximum fairness and acknowledgement of different levels of intellectual capacities as well as learning techniques. In terms of the shortcomings of the conducted research, a larger research sample would have yielded more reliable results. Likewise, while the study only focused on teaching at different levels of complexity, it would be beneficial to examine other models of individualization.

**Keywords:** individualization, teaching at different levels of complexity

# References

Christenson, S. L., Reschly, A. L., & Wylie, C. (2012). *Handbook of research on student engagement*. Springer Science.

Ilić, M. (1998). *Nastava različitih nivoa složenosti*. Učiteljski fakultet.

Laketić, M. (2019). Uticaj individualizovane nastave na kreativno čitanje. *Naša škola*, *25*(1), 43–46. https://doi.org/10.7251/NSK1901043L

Lazarević, V. (2005). Individualizovana nastava. *Obrazovna tehnologija*, (2), 47–60.

Peko, A., Mlinarević, V., i Gajger, V. (2008). *Položaj učenika u nastavi*. Filozofski fakultet.

Quingnard, J. (1972). La pedagogie differencice. *Las amis Servis*, (2), 9.

Suzić, N. (2009). *Kontekst izvođenja nastave*. Agencija za predškolsko, osnovno i srednje obrazovanje.

Vican, D., i Brčić M. (2013). Obrazovna inkluzija u kontekstu svjetskih i nacionalnih obrazovnih politika. *Život i škola*, *30*(2), 48–66.

Walker, C. O., Greene, B. A., i Mansell, R. A. (2006). Identification with academics, intrinsic/extrinsic motivation, and self-efficacy as predictors of cognitive engagement. *Learning and individual Differences*, *16*(1), 1–12.

# TRAINING ACTIVITIES TO REDUCE AGGRESSIVE BEHAVIOR IN STUDENTS AS AN EDUCATIONAL PROGRAM AT A DEVELOPING UNIVERSITY

**Marina Rushina, Marina Volk[1],**
**Alexandra Dostatnyaya and Tamara Jafarova**
*Peoples' Friendship University of Russia, Moscow, Russian Federation*

## Introduction

Aggressive behavior among students is a pressing problem that can negatively impact the educational environment and the quality of education. In recent years, there has been an increase in cases of aggression among students, both physical and verbal.

This can lead to conflicts between students, create a tense atmosphere in study groups, and negatively affect the psychological state of students. Moreover, aggressive behavior can hinder students' effective learning and development (Solso, 2012).

Therefore, studying the causes and forms of aggressive behavior in students is an important step towards creating a more equitable and safe educational environment. It can help identify factors that contribute to the development of aggressive behavior and develop effective strategies for preventing and managing this phenomenon (Bandura 1992, pp. 175–208).

The study of aggressive behavior in students can lead to changes in the education system, such as inclusion in training programs or modules on developing skills for managing emotions and conflict situations. It may also be proposed to introduce measures to prevent and respond to cases of aggression at educational institutions. Studying aggressive behavior in students can lead to practical changes in the education system and create a safer and more equitable environment for student learning and development.

---

1    volk-mi@rudn.ru

Aggression is a behavioral response that can manifest itself physically, verbally, or psychologically. Aggressive behavior in students can have various reasons and motives and variously affect the educational process (Gibbs, 1991, pp. 95–110).

Note that the social cognitive theory suggests that aggressive behavior can be acquired through observation of other people. When people see that aggressive behavior leads to desired results or rewards, they may be inclined to repeat that behavior.

However, the social cognitive theory also indicates that not all people repeat aggressive behavior if they see it around them. This is due to individual factors such as empathy and moral values. People with high levels of empathy and strong moral values may reject aggressive behavior even if they see it being modeled by others (Fetiskin, 1980; Zelli et al., 1999).

# Methodology

Based on a theoretical analysis of the problem of aggressive behavior among students, we conducted a study that included:

1. diagnostics of the initial level of aggressive behavior in students;
2. a set of training sessions with students in the experimental group;
3. re-diagnosis of the level of aggressive behavior in students.

## Purpose of the Study

The study aimed to determine the effectiveness of training sessions in reducing aggressive behavior in students.

## Study Sample

The study was conducted at the Patrice Lumumba Peoples' Friendship University of Russia. The sample included 40 students aged 19–22 years. Participants were divided into two groups, with 20 students in the experimental group and 20 students in the control group.

## Instrument

The instrument used was the Aggressive Behavior questionnaire (E.A. Ilyin, P.A. Kovalev-Karelin, 2007, pp. 614–616). The questionnaire is designed to identify respondents' propensity for a certain type of aggressive behavior. The questionnaire contains 40 statements (e.g., "I can't help but say rude things if someone doesn't agree with me"; "I sometimes gossip about people I don't like"; "I never get so angry that I throw things.") Participants were instructed to read a series of statements and express their agreement or disagreement. The sum of points for direct and indirect physical aggression and direct verbal aggression is indicative of incontinence or restraint. If the sum is 20 points or more, it points to incontinence, while sums below 20 points are indicative of restraint.

## Results

What follows is an overview of the results of the study.

The data were processed mathematically using the Mann-Whitney U test. Having studied the level of aggressive behavior, we obtained empirical values.

**Table 1** *Average Values of Indicators of Aggressive State in Students in the Experimental and Control Groups at the Ascertaining Stage*

| Method Scale/ Average Values | Experimental Group | Control Group | Significance Level |
|---|---|---|---|
| Direct Verbal | 6.76160542 | 6.190909091 | - |
| Indirect Verbal | 5.32176123 | 5.772727273 | - |
| Indirect Physical | 4.785365854 | 4.881818182 | - |
| Direct Physical | 5.69413165 | 4.967272727 | - |
| Excerpt | 17.241 | 16.1 | - |

Based on the diagnostic results, the average values for the experimental and control groups were 17 and 16 points, respectively. The values were within the limits of endurance and did not differ between the groups in terms of significance level.

Based on a theoretical analysis of the problem of aggressive behavior among university students and the diagnostic results, we developed and implemented a

program within the framework of the PSO project at the Department of Psychology and Pedagogy, RUDN University. The program was implemented at the You Are Not Alone psychological self-help club and it was aimed at reducing the levels of indicators of aggressive behavior among students in the experimental group.

The main idea of the set of training sessions was to teach students to control their thoughts and emotions, develop aggression-management skills, build personal boundaries in an environmentally friendly manner, and develop conflict-management skills.

The objectives of the program included teaching students to:

1. control their thoughts: students were taught to manage their thoughts and reduce negative and destructive thought patterns, thus reducing their levels of anxiety, fear, and worry;

2. manage their emotions: students learned to control their emotions and respond to conflict situations more constructively, thus learning to manage their anger, frustration, and fear;

3. improve their communication skills and communication with other people.

In each training session, participants performed 4-6 exercises. In total, the training consisted of 10 lessons, with a total training duration of 15 hours.

The first, organizational stage of the training program included forming the group, identifying and researching participants' motives, and determining the time and place of the classes.

The second, introductory stage involved familiarizing participants with the basic principles and rules of working in a group, as well as creating favorable conditions for participants to get mutually acquainted. At this stage, rituals of congratulations and farewells in the group were also discussed.

The third, crucial stage of the training included exercises and psychological games. In these tasks, participants developed their skills, worked on their problems and achievements, exchanged experiences, and supported one another.

The fourth and final part of the training included reflection and discussion of the general results of the training, various issues, and wishes for the future. At this stage, participants shared their impressions and realizations and discussed how to apply the acquired knowledge and skills to everyday life situations.

At the control stage, students were asked to retake the Aggressive Behavior questionnaire (E.P. Ilyin, P.A. Kovalev). All students filled out the questionnaire, including both the experimental group, which completed the training, and the control group, which did not attend the training sessions.

**Table 2** *Comparison of the Results of Aggressive State in Students in the Experimental and Control Groups (According to E.P. Ilyin, P.A. Kovalev)*

| Average Values | Control Group | | Experimental Group | |
| --- | --- | --- | --- | --- |
| | Ascertaining Stage | Control Stage | Ascertaining Stage | Control Stage |
| Direct Verbal | 6.2 | 5.5 | 6.8 | 3.3 |
| Indirect Verbal | 5.8 | 6.2 | 5.3 | 4.5 |
| Indirect Physical | 4.9 | 5.2 | 4.8 | 3.3 |
| Direct Physical | 5 | 4.8 | 5.7 | 4.1 |
| Excerpt | 16.1 | 15.5 | 17.2 | 10.4 |

According to the results of our analysis, after the formative stage, there was a decrease in aggressive state indicators among students in the experimental group. The exposure level decreased from 17.2 to 10.4. In the control group, with which the experiment was not conducted, the endurance indicators before and after differed by only 0.6. Based on the assumptions underlying this technique, the lower the indicators, the lower the severity of aggressive behavior of this type. Since the results of the ascertaining stage were in the norm of endurance, but borderline with high indicators, according to the key of the questionnaire, the results showed that after a set of training sessions, the level of endurance of aggressive behavior among students in the experimental group decreased from 17.2 to 10.4 and the control remained within 15-16 points. This points to the positive effects of the implementation of the developed set of training sessions aimed at reducing aggressive behavior levels among university students. Hence, the set aim of the research was achieved.

The study of aggressive behavior in students has practical significance for the development and implementation of effective programs and activities aimed at preventing and resolving conflicts in the educational environment. This can help create a safe and supportive environment that is conducive to student success and development.

**Keywords:** aggressive behavior, students, training, academic performance, stress

# References

Bandura, A. (1992). Social-cognitive theory of social reference. In S. Feynman (Ed.), *Social references and the social construction of reality in infancy* (pp. 175–208). Springer.

Gibbs, J. C. (1991). Moral retardation and cognitive distortions: implications for the treatment of antisocial youth. In V. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of Moral Behavior and Development* (pp. 95–110). Routledge.

Karelin A. (2007). *Great encyclopedia of psychological tests*. Eksmo.

Solso R.L. (2012). *Cognitive psychology*. Pearson.

Fetiskin, N. P., Kozlov, V. V., & Manuilov, G. M. (2002). *Socio-psychological diagnosis of personality development and small groups*. Publishing house of the Institute of Psychotherapy.

Zelli, A., Dodge, K. A., Lochman, J. E., & Laird, R. D. (1999). The distinction between beliefs legitimizing aggression and deviant processing of social cues: Testing measurement validity and the hypothesis that biased processing mediates the effects of beliefs on aggression. *Journal of personality and social psychology, 77*(1), 150–166. https://psycnet.apa.org/doi/10.1037/0022-3514.77.1.150

# CHALLENGES OF INCLUSIVE EDUCATION

# POSSIBILITIES AND CHALLENGES OF USING DIGITAL TECHNOLOGY IN INCLUSIVE EDUCATION

**Zorica Šaljić**[1] **and Mirjana Senić Ružić**

*Department of Pedagogy and Andragogy, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia*

## Introduction

Inclusive education is achieved by providing various types of additional support to students who may need it for reasons including but not limited to developmental difficulties, deprived family circumstances, socio-economic disadvantages, and developmental crises. The process of providing additional support to students requires the restructuring of school work according to the needs and capabilities of students (Alexaki et al., 2022), especially children with developmental disabilities. This process is riddled with challenges stemming from factors such as the political and economic conditions under which the school system operates, the way legislation in this domain is conceived and enacted, the existing (school) system solutions, the competencies of teachers and other school staff, negative attitudes towards inclusive education, a conservative school tradition, school organizational conditions, and difficulties in providing and employing assistive technology (Ahmad, 2015; Grönlund et al., 2010; Mendez et al., 2022; Šaljić, 2023; Vujačić et al., 2015).

With the increasingly widespread use of technology in various social spheres, its application in education has emerged as a crucial issue, particularly in efforts to more adequately respond to students' needs. In the context of inclusive education, digital technology implies a wide range of equipment, tools, strategies, and services (from simple aids such as pen grips to computers with specialized software) that provide students with developmental disabilities with appropriate support and assistance in mastering school curriculum and achieving optimal learning outcomes (Ahmad, 2015; Sánchez-Serrano et al., 2020).

---

1    zorica.saljic@f.bg.ac.rs

# The Possibilities of Using Digital Technology
# in the Process of Providing Additional Support to Students

Digital technology has been used in education for several decades and has demonstrated a significant potential to improve and transform the teaching and learning processes (Senić Ružić, 2021), primarily in the domain of communication and collaboration, engaging students in an interactive, innovative, and interesting learning environment, as well as developing digital literacy, 21st-century skills, and digital citizenship (Taylor et al., 2021). Research has recognized numerous opportunities for using technology in the process of providing additional support to students. Technology can be used to adapt teaching methods to student needs, provide a creative and cooperative learning environment, and encourage students with developmental disabilities to actively participate and collaborate with their peers, thus leading to their empowerment (Stendal, 2012; *Global Education Monitoring Report – Inclusion and education* [GEMR], 2020). Hence, technology can contribute to the reduction or elimination of barriers that hinder the participation of students with developmental disabilities in certain school activities (Stendal, 2012).

To provide adequate additional support to students, it is necessary to choose appropriate digital tools. Depending on the assessment of students' needs, abilities, and inclinations, as well as the specific characteristics of different developmental difficulties, various assistive technologies can be used, such as electronic books (including Braille books), word scanners, text prediction programs, text-to-speech software and devices, word processing programs, spelling and grammar checkers, calculators, screen readers, screen magnifiers, audio or video lessons, signal devices, closed captioning, voice recognition software, hand-eye coordination apps, electronic organizers, and highlighters (Ahmad, 2015).

Research on the effects of using technology in education has shown that it makes learning more interesting, supports different learning styles, and encourages student motivation (Heemskerk et al., 2005; Kuenneville, 2001; Obradović et al., 2015; as cited in GEMR, 2020). Findings indicate that students respond positively to the classroom use of tablets, which are particularly suitable for students with autism, ADHD, and a need for multisensory stimulation (Johnson, 2013; Mintz et al., 2012). Studies have suggested that the use of multimedia, dictation software, and applications for organizing

ideas and notes helps students with learning disabilities, while PowerPoint presentations, graphic symbols, and online video and audio lessons yield beneficial results in working with students with various developmental disabilities (Batorowicz et al., 2012; Jones et al., 2007; as cited in GEMR, 2020). It is believed that the use of multimedia mobile devices (e.g., iPad, iPod, tablets, and pens for touch screens) contributes not only to the development of fine motor skills (the control of small muscles in fingers), but also to the development of various student competencies (Johnson, 2013; Sánchez-Serrano et al., 2020). These devices can be used in working with children who have different disabilities, although there are indications that students with cognitive disabilities do not respond as favorably as others (Johnson, 2013). Finally, an individualized approach is necessary when choosing appropriate digital tools for providing additional student support. Therefore, it is important to mention findings confirming that the use of technology in the education of students requiring additional support opens up a new space for learning, enables the adaptation of educational content to students' needs, and contributes to the development of students' social and communication skills (Mendez et al., 2022; Sánchez-Serrano et al., 2020; Stendal, 2012).

## The Challenges of Using Digital Technology in the Process of Providing Additional Support to Students

Using technology in the implementation of inclusive education can reduce the feeling of isolation among students with various developmental disabilities and contribute to overcoming obstacles to their active participation in certain school activities. On the other hand, it can result in increased exclusion and discrimination (Cabero & Ruiz-Palmero, 2017; as cited in Mendez et al., 2022; Stendal, 2012) due to limited access to technology, inadequate technical equipment and support, a lack of experience and digital competencies (of teachers as well as students), negative attitudes towards the use of technology in education, and inadequate assessments of students' needs, abilities, and the additional support they require (Ahmad et al., 2015; GEMR, 2020; Mendez et al., 2022; Stendal, 2012). Despite the aforementioned challenges, there is room for optimism, with research findings indicating that the key actors in education have recognized digital technology as a significant element of support for all students to actively participate in the educational process and learn together (Mendez et al., 2022).

Teachers' digital competencies are considered to be one of the main challenges in using technology in (inclusive) education. Research results have shown that teachers lack the skills necessary to adequately use technology in the provision of learning support to students, which indicates the necessity of continuous professional development in this domain (Cabero Almenara et al., 2022; Mendez et al., 2022; Sánchez-Serrano et al., 2020).

# Conclusion

Using digital technology in the process of providing additional student support should not be seen as a goal in itself or a universal solution, but as a form of student support and assistance that contributes to the creation of a more favorable environment for learning and implementing new teaching strategies that respond to the needs of a heterogeneous student population (Hersh, 2017; as cited in Cabero Almenara et al., 2022). Therefore, the integration of digital technology into the inclusive school practice should be an important element of the education policy, based on the assessment and acknowledgment of all relevant contextual factors. Purposeful use of digital technology in inclusive education requires the provision of the necessary conditions and the continuous development of all key actors' digital competencies as crucial prerequisites to properly assessing students' needs and designing individualized additional support plans in which digital technology has a suitable role.

**Keywords:** inclusive education, additional support for students, digital technology

# References

Ahmad, F. K. (2015). Use of assistive technology in inclusive education: Making room for diverse learning needs. *Transcience*, *6*(2), 62–77.

Alexaki, N., Foulidi, X., & Papakitsos, E. C. (2022). The three dimensions of inclusive education in the attempt for educational change: Cultures, policies and practices. *Journal of Research Initiatives*, *6*(1), 1–11.

Cabero Almenara, J., Guillén-Gámez, F. D., Ruiz-Palmero, J., & Palacios-Rodríguez, A. (2022). Teachers' digital competence to assist students with functional diversity: Identification

of factors through logistic regression method. *British Journal of Educational Technology*, *53*, 41–57. https://doi.org/10.1111/bjet.13151

*Global Education Monitoring Report – Inclusion and Education* (2020). UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000373718

Grönlund, A., Lim. N., & Larsson, H. (2010). Effective use of assistive technologies for inclusive education in developing countries: Issues and challenges from two case studies, *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, *6*(4), 5–26.

Johnson, G. M. (2013). Using tablet computers with elementary school students with special needs: The practices and perceptions of special education teachers and teacher assistants. *Canadian Journal of Learning and Technology*, *39*(4). https://doi.org/10.21432/T2NP49

Mendez, V. G., Suelves, D. M., Mendez, C. G., & Ramon-Llin Mas, J. A. (2022). Future teachers facing the use of technology for inclusion: A view from the digital competence. *Education and Information Technologies*, *28*(8), 9305–9323. https://doi.org/10.1007/s10639-022-11105-5

Mintz, J., Sucursal, C., March, C. & Lernman, S. (2012). Key factors mediating the use of a mobile technology tool designed to develop social and life skills in children with Autistic Spectrum Disorders. *Computers & Education*, *58*(1), 53–62. https://doi.org/10.1016/j.compedu.2011.07.013

Šaljić, Z. (2023). *Inkluzivno obrazovanje: ideal ili realnost*. Institut za pedagogiju i andragogiju Filozofskog fakulteta Univerziteta u Beogradu.

Sánchez-Serrano, J. L. S., Jaén-Martínez, A., Montenegro-Rueda, M., & Fernández-Cerero, R. (2020). Impact of the information and communication technologies on students with disabilities. A systematic review 2009–2019. *Sustainability*, *12*(20), 8603. https://doi.org/10.3390/su12208603

Senić Ružić, M. (2021). Digitalna transformacija obrazovanja u Srbiji: pitanje digitalne pismenosti ili digitalne kompetencije. U I. Jeremić, N. Nikolić i N. Koruga (Ur.), *Vaspitanje i obrazovanje u digitalnom okruženju: zbornik radova* (str. 11–24). Filozofski fakultet, Institut za pedagogiju i andragogiju, Pedagoško društvo Srbije.

Stendal, K. (2012). How do people with disability use and experience virtual worlds and ICT: A literature review. *Journal of Virtual Worlds Research*, *5*(1), 1–17. https://doi.org/10.4101/jvwr.v5i1.6173

Taylor, M., Fudge, A., Mirriahi, N., & de Laat. M. (2021). *Use of digital technology in education: Literature review*. South Australian Department for Education. https://www.education.sa.gov.au/docs/ict/digital-strategy-microsite/c3l-digital-technologies-in-education-literature-review.pdf

Vujačić, M., Lazarević, E., i Đević, R. (2015). Inkluzivno obrazovanje: od zakonske regulative do praktične realizacije. *Teme*, *39*(1), 231–247.

# THE APPLICATION OF SOCIOMETRIC TECHNIQUES IN RESEARCH ON PEER RELATIONS IN INCLUSIVE EDUCATION[1]

**Marija Ratković[2], Jelena Medar Zlatković and Jelena Stanišić**

*Institute for Educational Research, Belgrade, Serbia*

The application of sociometric techniques is commonplace in research on social relations between students included in a model of inclusive education and their peers. Since the acceptance of children with developmental disabilities is a crucial prerequisite to a more equitable education, this paper aims to explore the advantages and shortcomings of the application of sociometric techniques, which are most commonly associated with the positivist paradigm in the study of contemporary pedagogical concepts such as inclusion.

With the use of sociometric techniques, researchers can shed light on the social status of students with developmental disabilities and the level of their social acceptance by their classmates. Sociometric techniques can be used to study different aspects of peer relations, allowing for the exploration of peer learning, socializing, play, and emotional relationships (Gifford-Smith & Brownell, 2003). Aiming to explain the sociometric status of students with developmental disabilities, researchers have focused on links between students' sociometric status and some of their personal characteristics, including but not limited to socio-behavioral characteristics (Banković, 2018; Frostad & Pijl, 2007; Garrote, 2017), academic achievement (Vujačić & Đević, 2022), and the type of developmental disability (Maksimović, 2004). Studies have also linked the sociometric status of students with developmental disabilities to certain characteristics of the environment, such as the cultural capital of students' families (Vujačić & Đević, 2022), peer attitudes and beliefs (Mamas et al., 2019; Petry, 2018), and teaching strategies (Fuchs et al., 2002).

2   mratkovic09@gmail.com

While researchers worldwide have long used sociometric techniques to study the social status of students with developmental disabilities who attend regular schools, researchers in our country have rarely included these techniques in their research designs. However, several domestic studies examining this issue have relied on sociometric techniques (Banković, 2016; Đević, 2015; Jablan et al., 2017; Maksimović, 2004, Vujačić & Đević, 2022). The results of these studies are in line with the findings of research conducted in other parts of the world and indicate that numerous students with developmental disabilities are either ignored or rejected by their classmates in regular schools (Frostad & Pijl, 2007; Koster et al., 2010; Walker & Nabuzoka, 2007). However, it should be emphasized that this does not hold true for the entire population of students with developmental disabilities. Indeed, research has revealed variations in the social experiences of students with developmental disabilities in regular schools, indicating that not all members of this population have poor social relations with their peers (Avramidis, 2010).

Analyzing empirical research on the social status of students with developmental disabilities, we identified peer nomination as the most commonly used technique (Banković, 2018; Đević, 2015; Frostad & Pijl, 2007; Jablan et al., 2017; Koster et al., 2010; Vujačić & Đević, 2022; Walker & Nabuzoka, 2007), followed by peer ranking (Đević, 2015; Koster et al., 2010; Vujačić & Đević, 2022). In the case of the peer nomination technique, students are expected to nominate their peers based on a specific sociometric criterion, such as play and socializing. Nominations can be positive, with students asked to name peers with whom they would like to engage in the given activity, or negative, with students asked to name peers with whom they would not like to engage in the proposed activity (Child & Nind, 2013). Positive nominations are used to calculate the peer acceptance score, while negative nominations serve to calculate the peer rejection score (Ilić, 2013). The number of nominations can be limited (usually to three nominations) or unlimited (Terry, 2000). According to Avramidis, one of the main limitations of this technique lies in the fact that when the number of nominations is limited, students with developmental disabilities can remain unnominated. Thus, their status in the peer group remains unclear. Furthermore, with peer nominations, students can be labeled as rejected based on the number of nominations received from their peers, despite having close social relationships with several students in the class (Avramidis et al., 2017). Likewise, there are certain ethical issues associated with the use of negative

peer nominations (Avramidis, 2010; Mayeux et al., 2007; Child & Nind, 2013; Krnjajić, 2007). A common belief among researchers is that negative statements about other children can magnify students' sense of loneliness, reinforce negative interactions and negative attitudes towards rejected children, cause participants to show resistance, and affect participants' honesty (Krnjajić, 2007). However, research focusing on the ethical issues associated with the application of sociometric techniques and the well-being of students after research has shown that studies relying on sociometric techniques do not significantly affect student behavior and that students do not experience any negative feelings as a result of research participation (Mayeux et al., 2007). Still, these findings do not pertain to peer relations in the context of inclusive education.

On the other hand, the application of the peer ranking technique tends to yield more information on the social status of each individual student. In the application of this technique, students are expected to use a three-point or five-point Likert-type rating scale (Jiang & Cillessen, 2005) to indicate the degree to which they would be inclined to participate in the joint activity defined by a sociometric criterion with each of their classmates (Krnjajić, 2002). The mean value of the peer ratings a student receives reflects the level of the student's social acceptance within the group (Gifford-Smith & Brownell, 2003). Research on the social status of students with developmental disabilities has commonly combined peer nominations with the peer ranking technique (Koster et al., 2010; Vujačić & Đerić, 2002; Wauters & Knoors, 2008) to ensure the obtainment of the desired data on the social status of students with developmental disabilities. On the other hand, the peer ranking technique constitutes a good alternative to negative peer nominations in terms of avoiding potential negative effects on the well-being of students who participate in the research (Child & Nind, 2013). However, it should be emphasized that there are also certain ethical dilemmas regarding the use of the peer ranking technique. For instance, there is the question of the degree to which student responses are shaped by the dominant prejudices in society, which further raises the question of whether asking students to rank their peers based on a criterion can lead to the reinforcement of these prejudices (Child & Nind, 2013). In line with the ethical issues associated with negative peer nominations, Avramidis warns that situations in which students are asked to rank their peers based on a criterion can indirectly evoke unspoken negative perceptions of peers, which could affect subsequent peer interactions within the group (Avramidis, 2010).

The application of sociometric techniques yields valuable data on the social status of students with developmental disabilities. However, these techniques cannot illuminate the causes and consequences of students' social status, nor can they offer a deeper insight into the structure and nature of relations in classrooms with students with developmental disabilities. To avoid the tendency towards merely categorizing students and ensure greater sensitivity to the environment in which social relations are established, it is necessary to combine quantitative and qualitative methods, employ diverse research instruments, and involve all key actors (Vujačić & Đević, 2022).

Despite the aforementioned shortcomings, the application of sociometric techniques in research on peer relations in inclusive education yields findings that can be of use not only to researchers, but also to education policymakers, teachers, school counselors, parents, and other actors in education. Sociometric techniques can be particularly useful to teachers and since they are not difficult to use, teachers can easily employ them in their classrooms. Thus, they can gain a better understanding of the social status of each student and help improve social relations between students in a class. It should be noted that the inclusive orientation of our school system is characterized by the tendency to enroll an increasing number of students with developmental disabilities in regular schools. Having in mind the potential negative effects of peer rejection, it is necessary to use the existing findings to inform and implement proactive measures and enrich the teaching practice with strategies that can help improve peer relations among students (Banković, 2016).

**Keywords:** students with developmental disabilities, peer relations, sociometric research, the peer nomination technique, the peer ranking technique

# References

Avramidis, E. (2010). Social relationships of pupils with special educational needs in the mainstream primary class: peer group membership and peer-assessed social behaviour. *European Journal of Special Needs Education*, *25*(4), 413–429.

Avramidis, E., Strogilos,V., Aroni, K., & Kantaraki, C. T. (2017). Using sociometric techniques to assess the social impacts of inclusion: Some methodological considerations. *Educational Research Review*, *20*, 68–80. http://dx.doi.org/10.1016/j.edurev.2016.11.004

Banković, S. (2016). Sociometrijski status učenika sa intelektualnom ometenošću u redovnom obrazovnom okruženju. [Sociometric status of students with intellectual disabilities in a regular educational environment]. *Beogradska defektološka škola*, *22*(1), 5–74.

Banković, S. (2018). *Sociometrijski status i socio-bihevioralne karakteristike učenika sa intelektualnom ometenošću* [Sociometric status and socio-behavioral characteristics of students with intellectual disabilities] [Doktorska disertacija, Univerzitet u Beogradu, Fakultet za specijalnu edukaciju i rehabilitaciju]. Nacionalni Repozitorijum Disertacija u Srbiji. https://nardus.mpn.gov.rs/handle/123456789/11646?locale-attribute=sr_RS

Child, S., & Nind, M. (2013). Sociometric methods and difference: A force for good–or yet more harm. *Disability & Society*, *28*(7), 1012–1023.

Đević, R. (2015). *Socijalna interakcija učenika sa smetnjama u razvoju u osnovnoj školi* [The social interaction of students with developmental disabilities in primary schools]. [Doktorska disertacija, Univerzitet u Beogradu, Filozofski fakultet]. Nacionalni Repozitorijum Disertacija u Srbiji. https://nardus.mpn.gov.rs/handle/123456789/4550

Frostad, P., & Pijl, S. J. (2007). Does being friendly help in making friends? The relation between the social position and social skills of pupils with special needs in mainstream education. *European Journal of Special Needs Education*, *22*(1), 15–30.

Fuchs, D., Fuchs, L. S., Mathes, P. G., & Martinez, E. A. (2002). Preliminary evidence on the social standing of students with learning disabilities in PALS and No-PALS classrooms. *Learning Disabilities Research and Practice*, *17*(4), 205–215.

Garrote, A. (2017). The relationship between social participation and social skills of pupils with an intellectual disability: A study in inclusive classrooms. *Frontline Learning Research*, *5*(1), 1–15. http://dx.doi.org/10.14786/flr.v5i1.266

Gifford-Smith, M. E., & Brownell, C. A. (2003). Childhood peer relationships: Social acceptance, friendships, and peer networks. *Journal of School Psychology*, *41*(4), 235–284. https://doi.org/10.1016/S0022-4405(03)00048-7

Ilić, M. (2013). Sociometrijska istraživanja u pedagogiji [Sociometric research in pedagogy]. *Zbornik Instituta za pedagoška istraživanja*, *45*(1), 24–41. https://10.2298/ZIPI1301024I

Jablan. B., Mirković, A., Stanimirović, D., & Vučinić, V. (2017). Sociometrijski status učenika sa razvojnim smetnjama i učenika sa zdravstvenim teškoćama u redovnoj školi. [Sociometric status of students with developmental disabilities and students with health difficulties in mainstream school]. *Beogradska defektološka škola*, *23*(2), 9–21.

Jiang, X. L., & Cillessen, A. H. N. (2005). Stability of continuous measures of sociometric status: A meta-analysis. *Developmental Review*, *25*(1), 1–25.

Koster, M., Pijl, S. J., Nakken, H., & Van Houten, E. (2010). Social participation of students with special needs in regular primary education in the Netherlands. *International Journal of Disability, Development and Education*, *57*(1), 59–75. https://10.1080/10349120903537905

Krnjajić, S. (2002). *Socijalni odnosi i obrazovanje* [Social relations and education]. Institut za pedagoška istraživanja i Viša škola za obrazovanje vaspitača Vršac.

Krnjajić, S. (2007). *Pogled u razred.* [Looking in Classrooms]. Institut za pedagoška istraživanja.

Maksimović, J. (2004). Sociometrijski status učenika s vizuelnim smetnjama u redovnoj osnovnoj školi [Socio-metric status of the students with visual disturbances in regular primary school]. *Zbornik radova Učiteljskog fakulteta, Užice*, 5, 353–364.

Mamas, C., Daly, A. J., & Schaelli, G. H. (2019). Socially responsive classrooms for students with special educational needs and disabilities. *Learning, Culture and Social Interaction*, *23, 100334.* https://sci-hub.ru/10.1016/j.lcsi.2019.100334

Mayeux, L., Underwood, M. K., & Risser, S. D. (2007). Perspectives on the ethics of sociometric research with children: How children, peers, and teachers help to inform the debate. *Merrill-Palmer Quarterly*, *53*(1), 53–78.

Petry, K. (2018). The relationship between class attitudes towards peers with a disability and peer acceptance, friendships and peer interactions of students with a disability in regular secondary schools. *European Journal of Special Needs Education*, *33*(2), 254–268.

Terry, R. (2000). Recent advances in measurement theory and the use of sociometric techniques. *New Directions for Child and Adolescent Development*, *2000*(88), 27–53.

Vujačić, M., & Đević, R. (2022). *Vršnjačka prihvaćenost u inkluzivnom obrazovanju* [Peer acceptance in inclusive education]. Institut za pedagoška istraživanja. https://hdl.handle.net/21.15107/rcub_ipir_859

Walker, A., & Nabuzoka, D. (2007). Academic achievement and social functioning of children with and without learning difficulties. *Educational Psychology*, *27*(5), 635–654. https://10.1080/01443410701309175

Wauters, L. N., & Knoors H. (2008). Social integration of deaf children in inclusive settings. *Journal of Deaf Studies and Deaf Education*, *13*(1), 21-36. https://doi.org/10.1093/deafed/enm028

# THE ROLE OF THE TEACHING ASSISTANT IN THE INCLUSIVE SCHOOL CULTURE

**Maja Brust Nemet**[1] **and Mia Bašić Bučanović**

*Faculty of Education, Josip Juraj Strossmayer University of Osijek, Osijek, Croatia*

## Introduction

Inclusion represents the complete involvement of children with developmental disabilities, who need support in social integration into all aspects of school as an educational institution. It implies a genuine adaptation and change in schools and classrooms to meet the needs of each child while respecting diversity (Deppeler et al., 2010). In a school for everybody, the rights of all members of the social community are equalized, regardless of their national, religious, cultural, age, gender, language, social, or other identity, with respect for diversity in learning, teaching, and socialization (UNESCO, 2005).

Thus far, the literature has focused on the roles of teachers and principals as the key factors in the school's inclusive culture and promoters and managers of change. Their words, non-verbal messages, actions, and achievements form an inclusive culture (Kugelmass, 2003), but an inclusive school culture equally depends on other educational stakeholders, including students, teaching assistants, parents, and the local community (Ivančić & Stančić, 2013). With the rise in the number of teaching assistants (Blatchford et al., 2012), who support students with developmental disabilities in mastering the educational content, there is also a need to research this topic from a new perspective. This paper analyzes theoretical assumptions and research results on inclusive school culture, along with the role and influence of teaching assistants on inclusive school culture. Relevant foreign and Croatian scientific literature and legal and strategic development documents of the Republic of Croatia were reviewed in order to highlight the importance, position, and roles of teaching assistants in co-creating an inclusive class and school culture.

---

1    mbrust@foozos.hr, https://orcid.org/0000-0002-6936-3024

## The Role of the Teaching Assistant in the Inclusive School Culture

In a modern context, inclusive school culture implies respecting the diversity of all students in the educational process, includes community building and the establishment of inclusive values (Black-Hawkins et al., 2007; Booth & Ainscow, 2002), and belongs to the priority program of education (UNESCO, 2005). Inclusive education has been integrated into the educational policies of all European countries. According to existing research, most countries have developed educational programs and models for the inclusion of children with disabilities with the support of teaching assistants (Drandić, 2017). Consequently, teaching assistants have become increasingly common members of the school staff in Croatia (Drandić & Radetić Pajić, 2020). They are experts who provide individualized support to a certain student and/or group of students (Giangreco et al., 2012), while also assisting teachers in the realization of the planned educational activities (Weber Jakab et al., 2016). Even though we cannot use a universal definition of the position and role of teaching assistants in the teaching process, since it depends on the legislature and the education system of each country (Giangreco & Doyle, 2007), most definitions emphasize the element of continuous and direct support to students while following teachers' instructions and taking into account students' needs and abilities (Butt & Lowe, 2012; Giangreco, 2011). In the Republic of Croatia, the key legal and normative-strategic documents that regulate the work of teaching assistants are the Law on Education in Primary and Secondary Schools (2020), Regulations on Primary and Secondary Education With Developmental Difficulties (2015), and the Rulebook on Teaching Assistants and Professional Communication Mediators (2020). The aforementioned basic legal documents define children with developmental disabilities, programs according to which they are educated, conditions for obtaining a job as a teaching assistant, teaching assistants' duties, and the contents of assistants' education. Nothing is stated about the role of teaching assistants in creating an inclusive atmosphere. This raises the question of whether teaching assistants are aware of their role and ready to act and be equal co-creators of an inclusive atmosphere in the classroom and school.

According to the results of a study conducted in Croatia in 2017, teaching assistants believed that their role in an inclusive school encompassed their educational role, encouraging socialization in the classroom, cooperating with all participants in

the inclusive process, being ready to engage in additional education, building mutual trust, showing readiness for additional engagement, and ensuring that all students benefit from inclusion (Drandić, 2017). A teaching assistant's educational role involves supporting students' participation in the educational process and school activities. This implies that teaching assistants often take over the role of the teacher, that is, the pedagogical role (Sharma & Salden, 2016). Teaching assistants realize the pedagogical role through individual and group teaching, participating in the assessment of students' educational progress, encouraging mutual interaction between students, exchanging information between experts and parents, and adapting the teaching materials (OECD, 2015). Including teaching assistants in the educational process and positioning them in the immediate vicinity of students creates space for students with difficulties to interact with both teaching assistants and classmates, which is important for students' physical, socio-emotional, and cognitive development (ISSA, 2011). Ivančić and Stančić (2013) emphasize the importance of cooperation and supportive relationships between teaching assistants, teachers, and school counselors, who jointly determine and ensure all the necessary prerequisites for the school's inclusive functioning (Ivančić & Stančić, 2013). International research on the professional roles of teaching assistants has shown that their different roles are positively evaluated by teachers, students with disabilities, their parents, and teaching assistants themselves (Chopra, 2004; Sharma & Salend, 2016). Students with difficulties tend to view teaching assistants as their friends who help them understand school content and perform different school tasks. They emphasize teaching assistants' contributions to their improved educational success and socialization and express a desire for teaching assistants' continuing support (Krampač-Grljušić et al., 2010).

One of the teaching assistants' daily tasks is caring for others and this task represents a crucial element of the school's inclusive culture (Vican, 2013). It implies a relationship based on understanding and respect, which hinges on the development of socio-emotional competencies. The positive effects of education workers' socio-emotional competencies are essential to the development of an inclusive school culture because they improve the quality of relationships by building trust, ensuring successful communication, resolving conflicts, increasing the understanding of the needs and difficulties of others, and improving school success (Chabot & Chabot, 2009). While the support and care that teaching assistants provide to students is unquestionable, it is

important to mention how policymakers affect teaching assistants' work. As the creators of the Index of Inclusion, Booth and Ainscow (2002) emphasize the equality of evaluation of all students and employees as the first component of inclusive education. Research has shown that while teaching assistants often assume the teacher's role and also have to teach outside of the classroom, they are generally underpaid and the scope of their work exceeds the contracted hourly rate (Breyer et al., 2020). In Austria, Bulgaria, and Portugal, teaching assistants are hired through an external and completely independent body, with no ties to the school itself. The result is assistants' non-involvement in school meetings and the feeling of not belonging to the school community. Furthermore, there are variations in school staff members' willingness to cooperate and openness towards other professions in education, which affect the quality of professional cooperation (Breyer et al., 2020). In addition to the previously highlighted problem of teaching assistants' unclear role, their equal status and professional identity are also questionable.

# Instead of a Conclusion

An inclusive culture should recognize the importance of diversity and promote equality in all aspects of the educational process. Teaching assistants, with their role and actions towards students with disabilities, play a key role in the process of equalization of students' rights. Moreover, they create opportunities for students' personal growth and contribute to the development of an inclusive culture, which then includes all students and encourages cooperation among all stakeholders in the educational process. The scientific contribution of this paper is evident in the comparative and critically theoretical approach to researching the role of teaching assistants in co-creating an inclusive school culture. The scientific relevance of this paper lies in its significant contribution to the enrichment of pedagogical theory regarding this vital and insufficiently researched field, due to the legally unregulated status of teaching assistants at the international level.

**Keywords:** inclusion, school culture, teaching assistants

# References

Blatchford, P., Russell, A., & Webster, R. (2012). *Reassessing the impact of teaching assistants: How research challenges practice and policy*. Routledge.

Booth, T., & Ainscow, M. (2002). *Index for inclusion developing and learning and participation in school*. Centre for Studies on Inclusive Education.

Butt, R., & Lowe, K. (2012). Teaching assistants and class teachers: differing perceptions, role confusion and the benefits of skills-based training. *International Journal of Inclusive Education*, *2*(16), 207–219. https://doi.org/10.1080/13603111003739678

Chabot, D., & Chabot, M. (2009). *Emocionalna pedagogija, Osjećati kako bi se učilo – Kako uključiti emocionalnu inteligenciju u vaše poučavanje*. EDUCA.

Chopra, R. V., & French, N. (2004). Paraeducator relationships with parents of students with significant disabilities. *Remedial and Special Education*, *25*(4), 240–251, https://doi.org/10.1177/07419325040250040701

Deppeler, J., Harvey, D., & Loreman, T. (2010). *Inclusive education: Supporting diversity in the classroom*. Routledge.

Drandić, D. (2017). Uloga pomoćnika u nastavi u provođenju inkluzivnoga obrazovanja. *Napredak*, *158*(4), 439–459.

Drandić, D., & Radetić Paić, M. (2020). Suradnja u inkluzivnim školama: Kako pomoćnici u nastavi procjenjuju njihovu suradnju s učiteljima u razredu? *Ljetopis socijalnog rada*, *27*(1), 151–178.

Giangreco, M. F., & Doyle, M. B. (2007). Teacher assistants in inclusive school. In L. Florian (Ed.), *The Sage handbook of special education* (pp. 429–439). UK Sage.

Giangreco, M. F., Doyle, M. B., & Suter, J. C. (2012.). Constructively responding to requests for para-professionals: We keep asking the wrong questions. *Remedial and Special Education*, *33*(6), 362–337. https://doi.org/10.1177/0741932511413472

Giangreco, M. F. (2013). Teacher assistant supports in inclusive schools: Research, practices and alternatives. *Australasian Journal of Special Education*, *37*(2), 93–106. https://doi.org/10.1017/jse.2013.1

ISSA (2011). *Kompetentni odgajatelji 21. stoljeća. Issa-ina definicija kvalitetne pedagoške prakse*. https://inskola.com/wp-content/uploads/2021/11/KOMPETENTNI-ODGAJATELJI-21-STOLJECA.pdf

Ivančić, Đ. (2012). *Pokazatelji kvalitete inkluzivne osnovne škole* (Doktorska disertacija). Sveučilište u Zagrebu, Edukacijsko-rehabilitacijski fakultet. https://www.bib.irb.hr/981460

Ivančić, Đ., & Stančić, Z. (2013). Stvaranje inkluzivne kulture škole. *Hrvatska revija za rehabilitacijska istraživanja*, *49*(2), 139–157.

Krampač-Grljušić, A., Žic Ralić, A., & Lisak, N. (2010). Što djeca s teškoćama misle o podršci asistenta u nastavi. In V. Đurek (Ur.), *Uključivanje i podrška u zajednici* (pp. 181–195). Školska knjiga.

Kugelmass, J., & Ainscow, M. (2004). Leadership for inclusion: A comparison of international practices. *Journal of Research in Special Educational Needs*, *4*(3), 133–141. https://doi.org/10.1111/j.1471-3802.2004.00028.x

Ministarstvo znanosti i obrazovanja (2015). Regulations on primary and secondary education with developmental difficulties. *Narodne novine*, *4*. https://narodne-novine.nn.hr/clanci/sluzbeni/2015_03_24_510.html

Ministarstvo znanosti i obrazovanja (2020). Law of education in primary and secondary schools. *Narodne novine* (87/08, 151/22). https://www.zakon.hr/z/317/Zakon-o-odgoju-i-obrazovanju-u-osnovnoj-i-srednjoj-%C5%A1koli

Ministarstvo znanosti i obrazovanja (2020). Rulebook on teaching assistants and professional communication mediators. *Narodne novine, 102.* https://narodne-novine.nn.hr/clanci/sluzbeni/2018_11_102_1992.html

OECD (2015). *Learning support staff: A literature review.* OECD Publishing. https://doi.org/10.1787/19939019

Sharma, U., & Salend, S. J. (2016). Teaching assistants in inclusive classrooms: A systematic analysis of the international research. *Australian Journal of Teacher Education*, *41*(8), 118-134. https://doi.org/10.14221/ajte.2016v41n8.7

UNESCO (2005). *Guideliness for inclusion: Ensuring access to education for all.* UNESCO. http://unesdoc.unesco.org/images/0014/001402/140224e.pdf

Vican, D. (2013). Inkluzivna kultura osnovnih škola u Hrvatskoj s gledišta učenika. *Život i škola, 30*(2), 17–37.

# THE ROLE OF EMPATHY IN SUPPORT FOR INCLUSIVE EDUCATION IN THE CZECH REPUBLIC

**Ákos Bocskor[1], Aleš Kudrnáč and Radka Hanzlová**

*Institute of Sociology of the Czech Academy of Sciences, Prague, Czech Republic*

## Introduction

Inclusive education is increasingly understood as educating *all* students, with a particular emphasis on the groups at risk of marginalization or underachievement (Ainscow, 2020). Attitudes towards placing children from such disadvantaged groups in regular classrooms are of central importance, because inclusion cannot be effective and successful without the support of the general public as well as the key stakeholders in the education process (Krischler et al., 2019). Therefore, it is vital to understand how attitudes towards inclusive education are formed and how they can be improved.

The positive association between empathy and intergroup relations has already been widely demonstrated in the literature. Empathy has been associated with decreased prejudice towards a variety of outgroups, including ethnic and racial minorities (e.g., Dovidio et al., 2004; Finlay & Stephan, 2000; Vescio et al., 2003), sexual minorities (Burke et al., 2015), disabled people (Clore & Jeffery, 1972), or different stigmatized groups such as drug addicts, homeless people, or people with AIDS (Batson et al., 1997, 2002). Similarly, perspective-taking has also been associated with reduced prejudice and more positive intergroup attitudes (e.g., Burke et al., 2015; Dovidio et al., 2004; Vescio et al., 2003). The meta-analysis by Pettigrew and Tropp (2008) also indicates that empathy and perspective-taking are effective mediators between intergroup contact and prejudice. These findings raise the question of whether empathy is also positively associated with parents' willingness to send their children to classrooms with marginalized or negatively judged outgroup children. We investigated this issue on a nationally representative Czech sample focusing on a variety of disadvantaged groups,

---

1    akos.bocskor@soc.cas.cz

including individuals with physical and intellectual disabilities as well as ethnic (Roma) and linguistic minority statuses.

Our study aimed to contribute to the existing literature in several ways. First, there is a scarcity of research comparing attitudes towards the inclusion of children with disabilities *and* children with social disadvantages. However, if we focus on the broad understanding of inclusive education described above (education for *all* children), we have to pay attention to a wide range of disadvantaged groups. This approach also brings together the special education literature focusing on the inclusion of children with disabilities and the social psychological literature focusing on attitudes towards racial and ethnic groups. Second, the literature on empathy has focused on attitudes towards outgroups and we know little about the role of empathy in support for social inclusion. Third, according to a recent review (Stepaniuk, 2019), empirical research on inclusive education is scarce in the formerly socialist Eastern and Central European countries (at least in English).

## Present Study

We used a nationally representative Czech sample of 1,028 adult respondents and focused on six disadvantaged groups: 1) children with physical disabilities, 2) children with mild intellectual disabilities, 3) children with specific learning, attention, and behavioral difficulties, 4) children from socially disadvantaged backgrounds, 5) Roma children, and 6) children with a mother tongue different from Czech. Examining the relationship between empathy and attitudes towards inclusion, we expected higher levels of empathy to be related to more inclusive attitudes (Hypothesis 1). We expected all three dimensions of empathy (i.e., perspective-taking, personal distress, and emphatic concern) to be related to attitudes towards inclusion. Furthermore, based on Pettigrew and Troop (2006), we expected that respondents with personal contact (knowing someone with a child from one of the disadvantaged groups) would be more inclined to place their child in a classroom with children from the disadvantaged groups (Hypothesis 2).

## Method

### Participants

Data were collected online (the CAWI method) from respondents of the Czech National Panel. A total of 1,028 Czech respondents aged 18 years and older were surveyed. Excluded from the analysis were respondents identified as invalid cases based on a scale-wise method according to long strings in the items from the Interpersonal Reactivity Inventory (IRI) (34 cases in total, 3.31%) and those who had children from any of the investigated disadvantaged groups. The final research sample consisted of 994 respondents (mean age of 49.1 years), including 480 male (48.3%) and 514 female (51.7%) participants.

### Key Variables

*Type of Disadvantage.* Respondents were asked whether they would be willing to place their child in a classroom with 1) no students from a certain disadvantaged group, 2) one or two students from a certain disadvantaged group, 3) three or four students from a certain disadvantaged group, or 4) five or six students from a certain disadvantaged group. Six disadvantaged groups were tested: 1) children with mild intellectual disabilities (INT), 2) children with physical disabilities (PHYS), 3) children from socially disadvantaged backgrounds (SOC), 4) Roma children (ROMA), 5) children with a mother tongue different from Czech (LANG), and 6) children with specific learning, attention, and behavioral disorders (BEH). Models for each disadvantaged group were run separately.

*Empathy.* We measured empathy using the shorter forms of the three subscales from the Interpersonal Reactivity Inventory (IRI; Davis, 1983). The IRI consists of three dimensions – Perspective-Taking (PT), Personal Distress (PD), and Empathic Concern (EC). (*Cronbach's alpha* for PT = .73; for PD = .77; for EC = .71)

The other variables in our models were *personal contact* (whether they knew someone whose child had one of the disadvantages), *parenthood* (whether they had a child and whether the child was in the education system), and *socio-economic background* variables (age, gender, level of education, and household income).

*Analytical strategy*

Due to the ordinal nature of the dependent variables (*type of disadvantage*), we ran an ordinal logistic regression with a proportional odds model (ologit) to test our hypotheses. The ordinal logistic model was run separately for each of the six types of disadvantages.

# Results

The descriptive statistics (Table 1) show that about two-thirds of respondents stated that they would allow placing their children in a classroom with one or more Roma children (63%), children with mild intellectual disabilities (66%,) and children with specific learning, attention, and behavioral disorders (68%). The highest support for inclusion was recorded for children with physical disabilities (83%) and children from socially disadvantaged backgrounds (82%).

**Table 1** *"Would You Enroll Your Child/Children in a Class That the Following Students Would Also Attend?"*

|  | No Students<br>*n* (%) | One or Two Students<br>*n* (%) | Three or Four Students<br>*n* (%) | Five or Six Students<br>*n* (%) |
|---|---|---|---|---|
| INT | 342 (34.4) | 200 (20.1) | 188 (18.9) | 264 (26.6) |
| PHYS | 173 (17.4) | 188 (18.9) | 215 (21.6) | 418 (42.1) |
| SOC | 180 (18.1) | 146 (14.7) | 214 (21.5) | 454 (45.7) |
| ROMA | 365 (36.7) | 232 (23.3) | 179 (18.0) | 218 (22.0) |
| LANG | 230 (23.1) | 162 (16.3) | 208 (21.0) | 394 (39.6) |
| BEH | 323 (32.5) | 215 (21.6) | 188 (18.9) | 268 (27.0) |

*Note. N* = 994. Numbers refer to the count and percentage of respondents agreeing with placing their child in a classroom with (1) no students with a disadvantage; (2) one or two students with a disadvantage; (3) three or four students with a disadvantage; or (4) five or six students with a disadvantage. INT – mild intellectual disabilities; PHYS – physical disabilities; SOC – socially disadvantaged background; LANG – mother tongue different from Czech; BEH – specific learning, attention, and behavioral disorders.

Table 2 shows the results of our ordinal logistic regression models. We found only partial support for our first hypothesis (the positive association between empathy and support for inclusion). Out of the three dimensions of empathy, Empathic Concern had a statistically significant positive effect on inclusion (with the exception of Roma

students), while Perspective-Taking was not statistically significant in any of the models and Personal Distress only had a statistically significant negative effect in the case of physically disabled children. Regarding our second hypothesis (the positive effect of personal contact – knowing someone with a child from one of the disadvantaged groups), we found a positive effect on support for inclusion for all groups except for children with mild intellectual disabilities. Concerning our background variables, we found that having a child, having a university degree, and older age were negative predictors, while a higher income was a positive predictor for some of the groups. Gender had no statistically significant effect in any of the models.

**Table 2** *The Results of the Ordinal Logistic Regression With the Proportional Odds Model*

| Variables | Model 1: INT | Model 2: PHYS | Model 3: SOC | Model 4: ROMA | Model 5: LANG | Model 6: BEH |
|---|---|---|---|---|---|---|
| Perspective-Taking | 0.98 (0.10) | 1.05 (0.11) | 1.02 (0.11) | 1.07 (0.11) | 1.07 (0.11) | 1.02 (0.11) |
| Empathic Concern | 1.37** (0.14) | 1.43*** (0.15) | 1.52*** (0.16) | 1.18 (0.12) | 1.58*** (0.17) | 1.38** (0.15) |
| Personal Distress | 0.92 (0.07) | 0.85* (0.07) | 0.88 (0.07) | 0.87 (0.07) | 0.91 (0.07) | 0.93 (0.08) |
| Contact (Ref. No Contact) | 1.25 (0.17) | 1.34* (0.18) | 1.48** (0.23) | 1.69*** (0.22) | 1.86*** (0.27) | 1.28* (0.16) |
| Parenthood (Ref. No Children) | | | | | | |
| Children not in the Education System | 0.71 (0.13) | 0.72 (0.13) | 0.86 (0.16) | 0.48*** (0.09) | 0.69* (0.13) | 0.65* (0.12) |
| Children in the Education System | 0.78 (0.14) | 0.65* (0.12) | 0.78 (0.14) | 0.63* (0.11) | 0.76 (0.14) | 0.66* (0.12) |
| Gender (Ref. Male) | 1.09 (0.14) | 1.08 (0.14) | 1.19 (0.15) | 1.07 (0.13) | 0.91 (0.12) | 1.03 (0.13) |
| University Degree (Ref. Lower Education) | 0.65** (0.10) | 1.06 (0.16) | 0.79 (0.12) | 0.86 (0.13) | 1.22 (0.19) | 0.66** (0.10) |
| Age (Ref. 18–35) | | | | | | |
| 36–50 | 0.88 (0.16) | 1.33 (0.25) | 0.70 (0.13) | 0.89 (0.16) | 0.64* (0.12) | 0.70 (0.13) |
| 51–65 | 0.91 (0.17) | 1.30 (0.25) | 0.77 (0.15) | 1.13 (0.21) | 0.72 (0.14) | 0.63* (0.12) |
| 66+ | 0.77 (0.16) | 1.42 (0.29) | 0.63* (0.13) | 0.89 (0.18) | 0.67 (0.14) | 0.49*** (0.10) |

| Variables | Model 1: INT | Model 2: PHYS | Model 3: SOC | Model 4: ROMA | Model 5: LANG | Model 6: BEH |
|---|---|---|---|---|---|---|
| Managing Income (Ref. With Great Difficulty) | | | | | | |
| With Some Difficulty | 1.10 (0.18) | 1.10 (0.18) | 1.26 (0.21) | 1.46* (0.24) | 1.55** (0.26) | 1.02 (0.17) |
| Quite Easily | 1.14 (0.20) | 1.30 (0.23) | 1.30 (0.23) | 1.70** (0.30) | 1.70** (0.30) | 1.26 (0.23) |
| Very Easily | 1.18 (0.24) | 1.54* (0.31) | 1.14 (0.23) | 1.69** (0.34) | 1.81** (0.37) | 1.35 (0.28) |
| N | 969 | 968 | 974 | 976 | 969 | 939 |
| Log-Likelihood | –1295.93 | –1253.95 | –1219.44 | –1285.74 | –1242.36 | –1245.85 |
| LR chi2 (*df*) | 36.01 (14) | 42.76 (14) | 55.07 (14) | 59.16 (14) | 95.44 (14) | 66.32 (14) |
| Pseudo R2 | 0.0137 | 0.0168 | 0.0221 | 0.0225 | 0.0370 | 0.0259 |

*Note.* Standard errors are in parentheses. N = number of observations. LR chi2 (df) = Likelihood Ratio (LR) Chi-Square test (degrees of freedom). Pseudo R2 = McFadden's pseudo R-squared. Ref. = reference category. INT – mild intellectual disabilities; PHYS – physical disabilities; SOC – socially disadvantaged background; LANG – mother tongue different from Czech; BEH – specific learning, attention, and behavioral disorders;

*p < .05, **p < .01, ***p < .001

## Discussion

Our analysis indicates that support for inclusive education depends on the number of children from a disadvantaged group in one classroom and the type of disadvantage. Based on the descriptive statistics (Table 1), the presence of one or two children from a disadvantaged group was acceptable to 63–83% of respondents (they stated that they would place their child in such a classroom), while the presence of five or six disadvantaged children was only acceptable to a minority of respondents (27–46%). Our regression models (Table 2) showed that respondents expressed the greatest reluctance to place their children in a classroom with Roma children, children with mild intellectual disabilities, and children with specific learning, attention, and behavioral disorders. On the other hand, they were more open to placing their children in a classroom with children from socially disadvantaged backgrounds, children with a different mother tongue, and children with physical disabilities. This is in line with the findings of international research, which has consistently found that support is

higher for the inclusion of children with physical disabilities than for children with intellectual disabilities and particularly for children with behavioral problems (e.g., Albuquerque et al., 2019; de Boer et al., 2010; de Boer & Munde, 2015). This suggests that respondents are most concerned about a 'quiet and productive' learning climate. While physically disabled, poor, and non-native children may be expected to focus on learning, respondents may expect children with mental disabilities, students with specific learning, attention, and behavioral disorders, and Roma children to act as 'disruptive elements' in the classroom. The reluctance of Czech respondents towards the inclusion of Roma children reflects long-lasting prejudice and negative attitudes (Kudrnáč & Hrubá, 2015).

In the analysis, we found a positive association between Emphatic Concern and attitudes towards inclusion. This is in line with previous literature suggesting that higher levels of empathy enable the perception of similarities between the self and others (Aboud, 1988; Davis et al., 1996) and increase concern about others' well-being and happiness (Eisenberg & Fabes, 1990; Hoffman, 2000). However, we did not find support for the relationship between Perspective-Taking and social inclusion. This may suggest that individuals use only some processes of empathy when thinking about social inclusion. Trying to look at the situation from someone else's perspective does not seem to affect their attitude towards inclusion.

**Keywords:** empathy, inclusive education, prejudice

## References

Aboud, F. E. (1988). *Children and prejudice*. Blackwell.

Ainscow, M. (2020). Promoting inclusion and equity in education: Lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, *6*(1), 7–16. https://doi.org/10.1080/20020317.2020.1729587

Albuquerque, C. P., Pinto, I. G., & Ferrari, L. (2019). Attitudes of parents of typically developing children towards school inclusion: The role of personality variables and positive descriptions. *European Journal of Special Needs Education*, *34*(3), 369–382. https://doi.org/10.1080/08856257.2018.1520496

Batson, C. D., Chang, J., Orr, R., & Rowland, J. (2002). Empathy, attitudes and action: Can feeling for a member of a stigmatized group motivate one to help the group. *Personality and Social Psychology Bulletin*, *28*(12), 1656–1666. https://doi.org/10.1177/014616702237647

Batson, C. D., Polycarpou, M. P., Harmon-Jones, E., Imhoff, H. J., Mitchener, E. C., Bednar, L. L., Klein, T. R., & Highberger, L. (1997). Empathy and attitudes: Can feeling for a member of a stigmatized group improve feelings toward the group? *Journal of Personality and Social Psychology*, *72*(1), 105–118. https://doi.org/10.1037/0022-3514.72.1.105

Burke, S. E., Dovidio, J. F., Przedworski, J. M., Hardeman, R. R., Perry, S. P., Phelan, S. M., Nelson, D. B., Burgess, D. J., Yeazel, M. W., & van Ryn, M. (2015). Do contact and empathy mitigate bias against gay and lesbian people among heterosexual first-year medical students? A report from the medical student CHANGE study. *Academic Medicine: Journal of the Association of American Medical Colleges*, *90*(5), 645–651. https://doi.org/10.1097/ACM.0000000000000661

Clore, G. L., & Jeffery, K. M. (1972). Emotional role playing, attitude change, and attraction toward a disabled person. *Journal of Personality and Social Psychology*, *23*(1), 105–111. https://doi.org/10.1037/h0032867

Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, *44*(1), 113–126. https://doi.org/10.1037/0022-3514.44.1.113

Davis, M. H., Conklin, L., Smith, A., & Luce, C. (1996). Effect of perspective taking on the cognitive representation of persons: A merging of self and other. *Journal of Personality and Social Psychology*, *70*(4), 713–726. https://doi.org/10.1037/0022-3514.70.4.713

de Boer, A., & Munde, V. S. (2015). Parental attitudes toward the inclusion of children with profound intellectual and multiple disabilities in general primary education in the Netherlands. *The Journal of Special Education*, *49*(3), 179–187. https://doi.org/10.1177/0022466914554297

de Boer, A., Pijl, S. J., & Minnaert, A. (2010). Attitudes of parents towards inclusive education: A review of the literature. *European Journal of Special Needs Education*, *25*(2), 165–181. https://doi.org/10.1080/08856251003658694

Dovidio, J. F., ten Vergert, M., Stewart, T. L., Gaertner, S. L., Johnson, J. D., Esses, V. M., Riek, B. M., & Pearson, A. R. (2004). Perspective and prejudice: Antecedents and mediating mechanisms. *Personality & Social Psychology Bulletin*, *30*(12), 1537–1549. https://doi.org/10.1177/0146167204271177

Eisenberg, N., & Fabes, R. A. (1990). Empathy: Conceptualization, measurement, and relation to prosocial behavior. *Motivation and Emotion*, *14*(2), 131–149. https://doi.org/10.1007/BF00991640

Finlay, K. A., & Stephan, W. G. (2000). Improving intergroup relations: The effects of empathy on racial attitudes. *Journal of Applied Social Psychology*, *30*(8), 1720–1737. https://doi.org/10.1111/j.1559-1816.2000.tb02464.x

Hoffman, M. L. (2000). *Empathy and moral development: Implications for caring and justice*. Cambridge University Press. https://doi.org/10.1017/CBO9780511805851

Krischler, M., Powell, J. J. W., & Pit-Ten Cate, I. M. (2019). What is meant by inclusion? On the effects of different definitions on attitudes toward inclusive education. *European*

*Journal of Special Needs Education*, *34*(5), 632–648. https://doi.org/10.1080/08856257.2019.1580837

Kudrnáč, A., & Hrubá, L. (2015). *Co si Češi myslí o muslimech, Syřanech a Romech? [What do Czechs think about Muslims, Syrians and Roma?].* https://www.soc.cas.cz/sites/default/files/soubory/tz_-_20151216_-_co_si_cesi_mysli_o_muslimech_syranech_a_romech_0.pdf

Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, *49*, 65–85. https://doi.org/10.1146/annurev.psych.49.1.65

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*(5), 751–783. https://doi.org/10.1037/0022-3514.90.5.751

Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology*, *38*(6), 922–934. https://doi.org/10.1002/ejsp.504

Stepaniuk, I. (2019). Inclusive education in Eastern European countries: A current state and future directions. *International Journal of Inclusive Education*, *23*(3), 328–352. https://doi.org/10.1080/13603116.2018.1430180

Vescio, T. K., Sechrist, G. B., & Paolucci, M. P. (2003). Perspective taking and prejudice reduction: The mediational role of empathy arousal and situational attributions. *European Journal of Social Psychology*, *33*(4), 455–472. https://doi.org/10.1002/ejsp.163

# DEFINING EQUITABLE EDUCATION POLICIES

# THE EDUCATIONAL PROCESS OF CHILDREN IN ALTERNATIVE CARE: TOWARDS A TRAUMA-SENSITIVE SCHOOL

**Emina Borjanić Bolić**[1]**, Ivana Milosavljević Đukić and Veselin Medenica**
*The College of Social Work, Belgrade, Serbia*

## Introduction

Children and the youth in the child welfare system may be exposed to different rates of adverse childhood experiences during their lives. According to SAMHSA (2023, p. 2), "Adverse Childhood Experiences (ACEs) are potentially traumatic events that occur in childhood (0–17 years)". ACEs can include experiences of violence, psychological or sexual abuse, and neglect, as well as aspects of a child's environment that undermine their sense of safety and stability, such as parental separation or substance use problems within the household". When children are repeatedly and chronically exposed to adverse and traumatic experiences caused and performed by a parent or a caregiver, especially during vulnerable developmental periods, they are at a significant risk of complex trauma (Brend et al., 2020; Cook et al., 2005; van der Kolk, 2021). Increasingly, research has pointed at the potentially devastating effects on children, resulting in behavioral and academic problems or problems that impair day-to-day functioning. Some problems could be related to learning abilities, attention, memory, establishing and maintaining relationships with peers and adults, overwhelming emotional reactions, identity, and lower self-esteem. Children's suffering often goes unrecognized (Borjanić Bolić & Ristić, 2021; Lorig, 2021; NCTSNSC, 2008; Pejović Milovančević & Tošković, 2019). Children in care usually change accommodations and schools at the same time. During this transition, they encounter numerous challenges (Towsend et al, 2016).

Alternative care is any arrangement, formal or informal, temporary or permanent, where children live away from their parents, who are not actively involved in children's

---

1    emina.borjanic@asp.edu.rs, emina.borjanic@gmail.com; https://orcid.org/0000-0002-5207-973X

lives (Žegarac, 2014). Žegarac (2014) found the risk of child neglect and family poverty to be the most prominent reasons for entering alternative care. Relevant documents suggest that legislation on education has to recognize children and the youth in alternative care as a population that experiences difficulties in the educational process and stands at risk of poor academic achievement. The aim of this paper is to draw attention to the lack of data on the educational processes and school achievements of children in alternative care in our country. When working with students from vulnerable groups, such as children in alternative care, schools need to adopt a trauma-informed approach, that is, an approach based on knowledge about trauma. This approach implies a shift in the way of thinking and speaking about children with traumatic experiences and demands specific teacher competencies. Children's learning needs have to be recognized and met by their teachers, who then create an environment that is conducive to student success (Borjanić Bolić & Ristić, 2021; Chafouleas & Iovino, 2021; COP, 2021; Overstreet & Chafouleas, 2016). For the youth in alternative care, the transition into emancipation is particularly challenging. Supporting them throughout their educational process implies supporting them on their way towards emancipation and a better quality of life.

## Research Method and Data Analysis Procedures

An integrative literature review was conducted with the aim of gaining a better understanding of children's educational experiences, with a particular focus on children in alternative care in our country. This methodological procedure allowed us to summarize the findings of recent primary studies. We meticulously reviewed Serbian-language papers on child trauma, trauma-sensitive educational environments, children in alternative care, and poor academic achievement published in the period of 2021–2023. Additionally, we analyzed online resources, including technical reports and articles, along with the reports of different institutions, including The Center for the Protection of Infants, Children and the Youth in Belgrade, the Republic Institute for Social Protection, and the Center for Education Policy. Excluded from the analysis were publications not available in full, theses, and dissertations. The 15-day data collection process took place in August/September 2023. The study sample comprised six reports.

# Key Findings

In 2022, Serbia's child population was 1,188,338. There were 179,802 children on the records of the Center for Social Work. A total of 5,443 children without parental care were in alternative care, both foster care (89.5%) and residential care (10.5%) (RZSZ, 2023b; RZSZ, 2023c). A total of 2,119 children and youths were in residential care (RZSZ, 2023). Hence, it is clear that there are some inconsistencies in the data. Most children in residential care (49.9%) were of primary school age (6–14 years), while 37.6% of the population were aged 15-17. A total of 10 children in residential care (2.3%) did not attend school (RZSZ, 2023). Children and the youth with disabilities constituted 50% of the population in residential care for children without parental care. The 2021 data on children in residential care for children without parental care show that the percentages of children attending regular (24.6%) and special (25.4%) schools were similar. However, the 2020s have seen an increase in the number of children attending regular primary schools. Thus, 2022 was the first year in which more children in residential care for children without parental care attended regular schools (RSZS, 2022; RZSZ, 2023).

**Table 1** *The Educational Status and Cohort of Children and the Youth in Residential Care in 2022*

| Educational status | CCD | CCWD | CCWPCWD | YCWD | YCWPC | YCWPCWD |
|---|---|---|---|---|---|---|
| Does not attend a preschool institution (preschool age) | 0.0% | 14.9% | 6.3% | / | / | / |
| Attends a preschool institution | 0.0% | 3.5% | 0.0% | / | / | / |
| Does not attend primary school | 5.3%% | 1.1% | 0.0% | 14.8% | 0.0% | 0.0% |
| Regular primary school (primary school age) | 2.0% | 27.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Special primary school | 48.7% | 20.3% | 87.5% | 1.4% | 2.0% | 8.6% |
| Does not attend secondary school (secondary school age) | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Regular secondary school | 14.5% | 16.8% | 0.0% | 0.0% | 25.0% | 0.0% |
| Special secondary school | 0,0% | 8.6% | 6.3% | 16.8% | 10.0% | 14.3% |

| Educational status | CCD | CCWD | CCWPCWD | YCWD | YCWPC | YCWPCWD |
|---|---|---|---|---|---|---|
| School for the primary education of adults | 0.0% | 2.4% | 0.0% | 7.6% | 0.0% | 0.0% |
| College/University Students | 0.0% | 0.0% | 0.0% | 0.0% | 25.0% | 0.0% |
| School-leavers – professionally unskilled | 28.3% | 1.6% | 0.0% | 36.8% | 3,0% | 2.9% |
| Graduated | 1.3% | 3.8% | 0.0% | 22.7% | 35.0% | 74.3% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

*Note.* CCD – Residential child care for children with disabilities; CCWD – Residential child care for children without parental care; CCWPCWD – Residential child care for children with disabilities without parental care; YCWD – Residential care for children with disabilities; YCWPC – Residential youth care for children without parental care; YCWPCWD – Residential youth care for children with disabilities without parental care; Source: RZSZ (2023).

In 2022, the largest percentage of children with disabilities (48.7%) attended special primary schools. While it can be assumed that children in residential care have a higher degree of disability, it is astounding that such a minuscule percentage of this population attended regular schools in the era of inclusion. School children without disabilities who lived in residential care for children without parental care attended regular and special schools in an almost 1:1 ratio. The question arises of why such a large number of primary-school-age children in this group attended special schools. In the group of youths with disabilities in residential care, there was a significantly higher percentage of those who left school compared to their peers without disabilities.

More children of secondary school age attended regular schools (25%) than special schools (10%). Young people were involved in various forms of education. While 3% dropped out of school or remained professionally unskilled, 25% of the youth were college or university students and 35% had completed their education.

## Conclusions and Scientific Implications

While legal acts recognize children with disabilities as a vulnerable group in the educational process, the same is not true for children in alternative care who have no developmental disabilities. According to the analyzed reports, all primary-school-age

children in alternative care attended school. However, there was no indication that the school system recognized the consequences of ACEs and complex trauma.

The available data raise important questions. Why did children with disabilities in residential care mostly attend special primary schools in the era of inclusion? Why did a large percentage of the youth with disabilities drop out of school? Can the adoption of a trauma-informed approach in schools help in the early identification of students struggling with trauma? Would adults in the education system benefit from a trauma-informed approach? Should we pay attention to the school success of children in the residential care system and should we obtain data on children's success because education is an important predictor of tomorrow's economic independence of an individual?

**Keywords:** children in alternative care, education, ACEs, trauma-informed school, trauma

# References

Borjanić Bolić, E., & Ristić, I. (2021). Škola senzitivna na traumatična iskustva dece, *Baština*, *31*(55), 469–486. https://doi.org/10.5937/bastina31-34256

Brend, D., Frechette, N., Milord-Nadon, A., Harbinson, T., & Collin-Vezina, D. (2020). Implementing trauma-informed care through social innovation in child welfare residential treatment centres serving elementary school. *Internationa Journal of Child and Adolescent Resilience*, *7*(1), 222–232. https://doi.org/10.7202/1072600ar

Centar za obrazovne politike (COP) (2021). *Kako podržati učenike iz osetljivih grupa u periodu tranzicije ka srednjoj školi?* Centar za obrazovne politike

Centre for Excellence for Children's Care and Protection (CELCIS). (2021). *Safe places, thriving children: Embedding trauma-informed practices into alternative care settings*. SOS Children's Villages International.

Chafouleas, S. M., & Iovino, E. (2021). Engaging a whole child, school, and community lens in positive education to advance equity in schools. *Frontiers in Psychology*, *12*, 1–11. https://doi.org/10.3389/fpsyg.2021.758788

Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, M., Cloitre, M., DeRosa, R., Hubbard, R., Kagan, R., Liautaud, J., Mallah, K., Olafson, E., & van der Kolk, B. (2005). Complex trauma in children and adolescents. *Psychiatric Annals*, *35*(5), 390–398. https://doi.org/10.3928/00485713-20050501-05

Lorig, C. E., Krupina, A., & Varjas, K. (2021). Social justice and trauma-informed care in schools. *International Journal of School Social Work*, *6*(2), 1–32. https://doi.org/10.4148/2161-4148.1080

National Child Traumatic Stress Network Schools Committee (NCTSNSC). (2008). *Child trauma tolkit for educators*. National Center for Child Traumatic Stress.

Overstreet, S., & Chafouleas, S. M. (2016). Trauma-informed school: Introduction to the special issue. *School Mental Health*, *8*(1), 1–6. https://doi.org/10.1007/s12310-016-9184-1

Pejović Milovančević, M., & Tošković, O. (2019). *Studija negativnih iskustava u detinjstvu (ACE Studija): Istraživanja o negativnim iskustvima u detinjstvu u Srbiji*. UNICEF u Srbiji.

Republički zavod za socijalnu zaštitu (RSZS) (2023a). *Izveštaj o radu ustanova za decu i mlade za 2021*. http://www.zavodsz.gov.rs/media/2351/izvestaj-o-radu-ustanova-za-decu-i-mlade-2021.pdf

Republički zavod za socijalnu zaštitu (RSZS) (2023a). *Izveštaj o radu ustanova za decu i mlade za 2022*. http://www.zavodsz.gov.rs/media/2573/izvestaj-o-radu-ustanova-za-decu-i-mlade-2022.pdf

Republički zavod za socijalnu zaštitu (RZSZ) (2023c). *Izveštaj o radu CSR u 2022*. http://www.zavodsz.gov.rs/media/2572/izvestaj-o-radu-csr-u-2022-godini.pdf

Republički zavod za socijalnu zaštitu (RZSZ) (2023b). *Deca u sistemu socijalne zaštite 2022*. http://www.zavodsz.gov.rs/media/2587/deca-u-ssz-2022-final-2672023.pdf

Substance Abuse and Mental Health Services Administration (SAMHSA) (2023). *Practical Guide for Implementing a Trauma-Informed Approach*. National Mental Health and Substance Use Policy Laboratory. https://store.samhsa.gov/sites/default/files/pep23-06-05-005.pdf

Townsend, M. L., Cashmore, J., & Graham, A. (2016). Education and out-of-home care transitions. *Developing Practice*, (45),71–85.

Van der Kolk, B. (2021). *Telo sve beleži*. Psihološko savetovalište Mozaik.

Žegarac, N. (Ur.) (2014). *U lavirintu socijalne zaštite*. FPN.

# THE CURRENT STATE AND PERSPECTIVES OF THE FUNCTIONAL BASIC EDUCATION OF ADULTS IN SERBIA[1]

**Jovan Miljković[2], Vukašin Grozdić and Bojan Ljujić**

*Institute of Pedagogy and Andragogy, Department of Pedagogy and Andragogy, Faculty of Philosophy, University of Belgrade, Belgrade, Serbia*

## Introduction

Throughout its modern history, Serbia has struggled with the problem of illiteracy and the coverage of the entire population with compulsory primary education. The scale of the problem is evidenced by Table 1, which shows the state in this domain from World War II to the present day.

**Table 1** *The Educational Attainment of the Serbian Population Aged 15 and Over According to the 1953-2022 Censuses (Modified Based on: Statistical Office of the Republic of Serbia, 2023: 15)*

|  | 1953 | 1961 | 1971 | 1981 | 1991 | 2002 | 2011 | 2022 |
|---|---|---|---|---|---|---|---|---|
| Population | 4,980,252 | 5,397,741 | 6,360,012 | 7,074,075 | 6,294,350 | 6,321,231 | 6,161,584 | 5,691,551 |
| Without Educational Attainment (1) | 2,178,437 (43.74%) | 1,579,552 (29.26%) | 1,313,083 (20.65%) | 1,061,175 (15%) | 590,682 (9.38%) | 357,552 (5.66%) | 164,884 (2.68%) | 57,667 (1.01%) |
| Incomplete Primary Education (2) | 2,132,306 (42.82%) | 2,802,926 (51.94%) | 2,866,661 (45.06%) | 2,107,958 (29.80%) | 1,522,639 (24.19%) | 1,022,974 (16.18%) | 677,499 (11%) | 299,739 (5.27%) |
| Total (1) + (2) | 4,310,743 (86.29%) | 4,382,478 (81.2%) | 4,179,744 (65.71%) | 3,169,133 (44.80%) | 2,113,321 (33.57%) | 1,380,526 (21.84%) | 842,383 (13.68%) | 357,406 (6.28%) |

2   jovan.miljkovic@f.bg.ac.rs, miljkovicj@gmail.com

After World War II, Serbia attempted to eradicate illiteracy with mass literacy campaigns (Bondžić, 2002), which did not produce the results envisioned by the state leadership. Later, during the existence of the FPRY and the SFRY, numerous schools for the primary education of adults were founded in which the eight-year primary education was completed in four years, according to a program that "differs from the program taught to children only in terms of duration" (Medić et al., 2009, p. 29). The 1990s saw a dramatic reduction in the number of schools for the primary education of adults, from a few dozen that operated in Serbia in the 1970s to only 16 (Medić et al., 2009, p. 18), while institutions such as workers', public, and open universities were "denied the right to engage in formal adult education".

It is important to emphasize that everyone over the age of 15 who has not completed primary education can be considered a member of a marginalized social group, with the most oppressed subgroups being the Roma national minority and prisoners. It is worth pointing out that the distinctive way of life of the Roma population, in addition to multiple other social-psychological factors, often serves as an explanation or the stated reason for the evidently low motivation for education, non-inclusion in the education system, early abandonment of the educational process, low educational achievements, and the underestimation of education as a possible way of social promotion and a way of getting out of poverty" (Medić & Popović, 2008, p. 117). After the democratic changes (October 5, 2000), reforms were launched in all parts of society, including adult education. In 2005, the Institute of Pedagogy and Andragogy and its partners launched the Functional Basic Education of Roma Adults, a systemic project with the status of a pilot program. The program was active until 2007 and it aimed to raise the general educational level of Roma adults and support their acquisition of basic education. It brought numerous changes to the legislation and educational practice and served as the basis for the development and implementation of a much larger systemic project entitled the Functional Basic Education of Adults (FBEA), which now constitutes the dominant concept for the implementation of adult primary education in Serbia. "It is undeniable that adult education and learning represent a social and individual instrument that enables people to live better, participate in the process of social change, and develop as human beings. In other words, this also means that adult education has an economic value, that it contributes to the participation of adults in socio-political activities, and that it encourages the development of an authentic inner self and individual needs"

(Kulić & Despotović, 2004, p. 24). This understanding clearly recognizes education as a prerequisite to equity and primary education is the first and most important step in this direction.

## Methodology

The present research aimed to shed light on the current state of the primary education of adults and the problems in its implementation identified by the government. We conducted a qualitative study, particularly focusing on Roma adults' and prisoners' participation in primary education. We employed descriptive and comparative methods and conducted a content analysis of the relevant data obtained from the official documents of the Government of the Republic of Serbia and the responsible ministry published between 2018 and 2022. Specifically, the analyzed documents included the Annual Plans for Adult Education (APEP) and reports on their implementation. The unstandardized structure of the reports made it difficult to locate all the necessary data.

## Results

Table 2 shows abstracted data on FBEA participation based on the analysis of the APEP and APEP implementation reports for the period of 2018–2022.

**Table 2** *Participation in the FBEA in the Period of 2018–2022*

|  | The Number of Schools That Implemented the FBEA | The Number of Teachers in the FBEA | The Number of Andragogical Assistants in the FBEA | The Planned Number of Participants | The Number of Participants Enrolled | The Percentage of Participants Who Completed the Attended Cycle | The Percentage of Participants Who Dropped out of School |
|---|---|---|---|---|---|---|---|
| 2018 | 64 | N/A | N/A | 5,912 | 6,090 | N/A | N/A |
| 2019 | 65 | N/A | N/A | 6,315 | 5,626 | 52% | 48% |
| 2020 | 65 | 896 | 79 | 6,246 | 6,299 | 55% | 45% |
| 2021 | 65 | 896 | 69 | 6,156 | 6,080 | 51% | 49% |
| 2022 | 65 | 858 | 86 | 5,758 | 6,015 | 53% | 47% |

Each year, around 6,000 participants enrolled in the FBEA, which amounts to 1.67% of the population without primary education, according to the latest census. With about one in two participants completing the attended cycle, the average dropout rate was nearly 50% (Table 2).

**Table 3** *The Ratio of Enrolled Participants to Participants Who Dropped out of School by Cycle*

|  | Cycle 1 – Enrolled | Cycle 1 – Completed | Cycle 2 – Enrolled | Cycle 2 – Completed | Cycle 3 – Enrolled | Cycle 3 – Completed |
|---|---|---|---|---|---|---|
| 2018 | N/A | N/A | N/A | N/A | N/A | N/A |
| 2019 | 1,552 | 665 (42.84%) | 1,953 | 986 (50.48%) | 2,128 | 1,279 (60.10%) |
| 2020 | 1,721 | 751 (43.63%) | 2,216 | 1,231 (55.55%) | 2,378 | 1,456 (61.22%) |
| 2021 | 1,694 | 692 (40.85%) | 2,127 | 1,073 (50.44%) | 2,259 | 1,346 (59.58%) |
| 2022 | 1,553 | 613 (39.47%) | N/A | N/A | N/A | N/A |

The highest dropout rate was recorded for the first cycle. In each subsequent cycle, there were about 10% more successful participants compared to the previous cycle (Table 3).

**Table 4** *The Roma and Prisoner Populations in the FBEA*

|  | Roma Participants | Prisoners Enrolled in the FBEA | Enrolled Prisoners Who Completed the Attended Cycle |
|---|---|---|---|
| 2018 | N/A | N/A | N/A |
| 2019 | 4255 (75%) | 266 | 187 |
| 2020 | 4839 (76.8%) | 325 | 243 |
| 2021 | 5001 (82.2%) | 310 | 237 |
| 2022 | 4644 (77.2%) | 365 | N/A |

More than 75% of the participants were Roma, while the share of prisoners in the total number of participants was relatively small (Table 4).

Analyzing the APEP and APEP implementation reports for the period of 2018–2022, we can conclude that the responsible ministry highlighted numerous reasons for the high participant dropout rates. Prior to 2021, one of the main reasons for dropout was the unresolved issue of the costs of participants' transportation from home to school. This issue has since been resolved. The method of organizing the final exam

was problematic, with a limited number of exam dates that overlapped with seasonal fieldwork. This problem was resolved in 2021 by enabling participants to take the entire final exam in one day. However, dropouts due to seasonal fieldwork and moving abroad remained common, particularly among the Roma population. Furthermore, the FBEA system failed to organize the planned professional training in the second half of the third cycle. In May 2021, the National Employment Agency piloted a professional training program based on vouchers for unemployed persons that included FBEA participants, but this practice was not continued. Moreover, the teaching staff lacked the professional competencies necessary for working with adults. However, in 2023, most teachers attended half of the mandatory training sessions and Entrepreneurship and Responsible Living in Civil Society teachers completed the training process. It is worth mentioning that during the COVID-19 pandemic, inadequate technical conditions and a lack of digital competencies for conducting online classes constituted major obstacles. The most persistent problems included participants' low motivation and lack of awareness of the importance of finishing primary school. For Roma participants, the situation was aggravated by the absence of solutions for a better social integration of the Roma population and insufficient understanding of the language used in classes. Finally, numerous participants complained about the lack of transportation in the evening and family problems.

As for participants in prisons, the reasons for their withdrawal were different and pertained to their relocation, sentence termination, change in status, and penal measures.

Suggestions for the improvement of the FBEA include the development of a more efficient model of financing professional training and the introduction of measures aimed at making the FBEA more accessible to specific target groups (migrants, disabled, Roma, prisoners). It is crucial to ensure the networking of stakeholders at the local level and introduce the FBEA as an active labor market measure. Finally, it is important to organize additional FBEA teacher training as a quality assurance measure.

## Instead of a Conclusion

Our analysis of the official documentation revealed the responsible ministry's awareness of the key problems in the implementation of the FBEA and their potential solutions. However, the resolution of these problems exceeds the authority of the responsible ministry and requires a more functional social partnership.

**Keywords:** functional basic education of adults, Roma literacy, prisoner literacy

## References

Bondžić, D. (2002). Opismenjavanje u Jugoslaviji i Srbiji u periodu 1945 – 1950: nasleđe, ciljevi, tok, rezultati i nedostaci, *Andragoške studije*, *1*, 91–110.

Kulić, R., & Despotović, M. (2005). *Uvod u andragogiju*. Svet knjige.

Medić, S., & Popović, K. (2008). Preferencije životnog stila mladih odraslih Roma u Funkcionalnom osnovnom obrazovanju odraslih. U Š. Alibabić, A. Pejatović (Ur.), *Obrazovanje i učenje – pretpostavke evropskih integracija* (117–130). IPA.

Medić, S., Milanović, M., Popović, K., & Despotović, M. (2009). *Funkcionalno osnovno obrazovanje odraslih*. IPA.

Ministarstvo prosvete, nauke i tehnološkog razvoja Republike Srbije (2018). *Izveštaj o realizaciji Godišnjeg plana obrazovanja odraslih u Republici Srbiji u 2018. godini*. https://prosveta. gov.rs/wp-content/uploads/2019/04/Izvestaj-GPOO-za-2018..pdf.

Ministarstvo prosvete, nauke i tehnološkog razvoja Republike Srbije (2019). *Izveštaj o realizaciji Godišnjeg plana obrazovanja odraslih u Republici Srbiji u 2019. godini*. https://prosveta. gov.rs/wp-content/uploads/2021/11/Izvestaj-GPOO-2019.-STAMPA.pdf.

Ministarstvo prosvete, nauke i tehnološkog razvoja Republike Srbije (2020). *Izveštaj o realizaciji Godišnjeg plana obrazovanja odraslih u Republici Srbiji u 2020. godini*. https://prosveta. gov.rs/wp-content/uploads/2021/03/Izvestaj-GPOO-u-2020-god-final-2.pdf.

Ministarstvo prosvete, nauke i tehnološkog razvoja Republike Srbije (2021). *Izveštaj o realizaciji Godišnjeg plana obrazovanja odraslih u Republici Srbiji u 2021. godini*. https://prosveta. gov.rs/wp-content/uploads/2022/04/IZVESTAJ-GPOO-za-2021-final.pdf.

Ministarstvo prosvete, nauke i tehnološkog razvoja Republike Srbije (2022). *Izveštaj o realizaciji Godišnjeg plana obrazovanja odraslih u Republici Srbiji u 2022. godini*. https://prosveta. gov.rs/wp-content/uploads/2023/03/Izvestaj-GPOO-2022.pdf.

Republički zavod za statistiku (2023). *Školska sprema, pismenost i kompjuterska pismenost*. Republički zavod za statistiku.

Vlada Republike Srbije (2018). *Godišnji plan obrazovanja odraslih u Republici Srbiji za 2018. godinu*. „Službeni glasnik RS“ br. 60 od 3. avgusta 2018.

Vlada Republike Srbije (2019). *Godišnji plan obrazovanja odraslih u Republici Srbiji za 2019. godinu*. „Službeni glasnik RS“ br. 21 od 27. marta 2019.

Vlada Republike Srbije (2020). *Godišnji plan obrazovanja odraslih u Republici Srbiji za 2020. godinu*. „Službeni glasnik RS“ br. 26 od 21. marta 2020.

Vlada Republike Srbije (2021). *Godišnji plan obrazovanja odraslih u Republici Srbiji za 2021. godinu*. „Službeni glasnik RS“ br. 20 od 10. marta 2021.

Vlada Republike Srbije (2022). *Godišnji plan obrazovanja odraslih u Republici Srbiji za 2022. godinu*. „Službeni glasnik RS“ br. 45 od 7. aprila 2022.

# THE VOUCHER SYSTEM – AN ATTEMPT TO INCREASE ENROLMENT IN ADULT EDUCATION AND STRENGTHEN SKILLS IN THE REPUBLIC OF CROATIA

**Lucija Tomac**[1]

*Dante Adult Education Institution, Rijeka, Croatia*

**Anita Zovko**

*Faculty of Humanities and Social Sciences, University of Rijeka, Rijeka, Croatia*

**Jadranka Herceg**

*Dr. Franjo Tuđman Croatian Military Academy, Zagreb, Croatia*

## Introduction

The inclusion of learners in adult education is influenced by many factors such as family obligations, workplace, and life dynamics. However, even if adults manage to reconcile their private obligations with the decision to enroll in further education, they still have to solve the issue of the money that needs to be invested in education. Since there are numerous learner profiles in adult education with different family, professional, and financial backgrounds, there are some specific issues that need to be addressed, including the financial and motivational aspects of choosing to enroll in further education. Prices vary depending on the type and duration of the program and various other factors. Interestingly, many studies have explored the financial aspects of education, funding in general, and its results, but only a few of them have exclusively focused on adult learning and education (Popović, 2021). In response to citizens' need for training and skill improvement, the Republic of Croatia introduced the Voucher System, thus allocating funds for strengthening specific competencies.

---

1   lucija.tomac@ufri.uniri.hr

This paper aims to describe the basic principles of the Voucher System and the fundamental determinants of its implementation as a mechanism for empowering participants to continue their education.

A content analysis was conducted with an emphasis on legislative documents, statistical data, and recommendations for the education enrolment policy and the scholarship policy.

## The Framework and Main Determinants of Vouchers

Article 2 of the Act on Adult Education (NN, 144/21) defines a voucher as "a financial instrument for the allocation of public funds to participants in adult education, which is awarded based on an adult education contract". Participants freely choose the education program and the education provider to assist them in acquiring or perfecting the competencies necessary for a specific line of work. In the Republic of Croatia, the Croatian Employment Service (CES) is in charge of the Voucher System and the financing of formal education. Vouchers can be used to co-finance the attendance of any education program that complies with the Croatian Qualitative Framework (CROQF) standard and is offered by an education provider who registered it in the CES Voucher System. The Voucher System has been implemented through accredited institutions since April 1, 2022, per the Act on Adult Education (NN, 144/21).

According to the data provided by the Croatian Bureau of Statistics (CBS), in Q4 of 2022, there were 1,719,000 employed persons in the Republic of Croatia, that is, 27,000 or 1.6% more than in Q4 of 2021. On the other hand, in Q4 of 2022, there were 124,000 unemployed persons in the Republic of Croatia, that is, 9,000 or 8.2% more than in Q4 of 2021 (CBS, 2023). The greatest advantage of the Voucher System lies in the fact that vouchers can be used by nearly all unemployed and employed persons over the age of 15, who are guaranteed the acquisition of the skills necessary for career development, employment, or job retention. Members of this demographic who do not qualify for vouchers include persons in the system of regular education and training, pensioners, persons from other countries who work in the Republic of Croatia, and state and public service workers participating in the implementation of the Voucher System.

At the beginning of the implementation of the Voucher System, the acquisition of *green and digital skills* was co-financed through funds from the National Recovery

and Resilience Plan (NPOO). Programs focusing on *green skills* are oriented towards ecological sustainability and the green transition, while *digital skills* are acquired through programs centering on the digital transformation of the private and public sectors.

The biggest change in the Voucher System occurred in June 2023, when the coverage of the financial measure was expanded to include general area programs focusing on competencies specific to certain professions that cannot be labeled as digital or green. The total number of programs increased, allowing for the selection of programs corresponding to the needs of a wider range of potential learners.

## The Main Actors in the Implementation of the Voucher System

The implementation of the Voucher System involves the cooperation of three main stakeholders: adult education institutions, the Croatian Employment Service, and learners themselves. Institutions adopt education programs based on the CROQF, in accordance with the needs of the labor market and/or a specific group of participants in communication with the CES. Participants find the necessary and desired competencies in the program database and express an interest in enrolling in the given education program. Before the approval of funding, adult education institutions usually conduct advisory and informational interviews with potential participants to ensure the optimal satisfaction of the needs of these two stakeholders. At the same time, participants can consult with CES advisors. After the decision is made, each participant is granted a voucher for the desired program at the chosen institution. During their participation in the program, participants achieve the intended learning outcomes. The completion of the program is followed by an evaluation that adult education institutions use as feedback on the quality of the program and the CES uses as feedback on participants' success and the quality of the selected institution.

In this process, the emphasis is placed on participants' individual needs, which are met by following modern curricula and programs whose outcomes are standardized among adult education institutions. Finally, upon completion of the program, participants receive public certificates of completion of formal education, which are entered into their electronic employment booklets and ensure advancement in the current workplace or help secure another job.

## The Voucher System and an Attempt to Promote VET

This type of financing and organization at adult education institutions allows participants to acquire various competencies and strengthens and promotes the role of Vocational Education and Training (VET). Namely, since the 19th century, VET has been in the background compared to grammar schools, which have been considered a sign of high social status, wealth, and privilege (Ivanović, 2002; Vrcelj, 2018). The trend of neglecting vocational occupations is also visible in the CES's annual recommendations on enrolment quotas. Four years ago, three-year and four-year vocational schools were positioned at the top of the list of recommended enrolment quotas in each Croatian county (CEO, 2018; CEO 2019; CEO 2020; CEO, 2021). The Voucher System also represents a good basis for the use of a new methodology for the development and implementation of adult education programs in the Republic of Croatia, precisely because the financed programs of shorter duration were created in line with the Occupational Standards and Qualification Standards on which the CROQF is based. This claim is supported by the fact that in the first 6 months of the implementation of the measure, interest in additional education was already high. More precisely, by November 11, 2022, 7,759 citizens requested education vouchers and 5,821 requests were approved (HINA, 2022). These data suggest that citizens are interested in engaging in educational activities, which can lead to the strengthening of the adult education system in the Republic of Croatia.

## Conclusion

Based on the results of the involvement and inclusion of different profiles of learners in education financed through the Voucher System, it can be concluded that addressing the financial aspect of education is one of the steps towards inclusive education for employed and unemployed people. Furthermore, the promotion of green and digital skills and general education programs can propel the creation of programs that follow green and digital transition trends.

The notable increase in the number of persons involved in adult education also has a positive effect on the image of adult education in the Republic of Croatia.

Likewise, it can be assumed that such measures support the trend of student inclusion in education and reduce the educational gap between social groups by making education more accessible. Finally, programs aimed at achieving learning outcomes from the VET sphere can lead to the recognition of the importance of vocational curriculums and their impacts on society and demography.

**Keywords:** vouchers, financing adult education, the Voucher System in the Republic of Croatia

## References

Adult Education Act, Narodne Novine, 144/21 (2021). https://narodne-novine.nn.hr/clanci/sluzbeni/2021_12_144_2460.html

Croatian Bureau of Statistics (CBS) (2023). *Aktivno Stanovništvno u Republici Hrvatskoj u četvrtom tromjesečju 2022*. Croatian Bureau of Statistics. https://podaci.dzs.hr/media/cxelg1ka/rad-2022-3-1_4-aktivno-stanovni%C5%A1tvo-u-republici-hrvatskoj-u-iv-tromjese%C4%8Dju-2022.pdf

Croatian Employment Office (CEO) (2018). Preporuke za obrazovnu upisnu politiku i politiku stipendiranja. https://publikacije.hzz.hr/media/1326/preporuke_18.pdf

Croatian Employment Office (CEO) (2019). *Preporuke za obrazovnu upisnu politiku i politiku stipendiranja*. https://publikacije.hzz.hr/media/7706/hzz-preporuke-za-obrazovnu-upisnu-politiku-i-politiku-stipendiranja-1220.pdf

Croatian Employment Office (CEO) (2020). *Preporuke za obrazovnu upisnu politiku i politiku stipendiranja*. https://publikacije.hzz.hr/media/7706/hzz-preporuke-za-obrazovnu-upisnu-politiku-i-politiku-stipendiranja-1220.pdf

Croatian Employment Office (CEO) (2021). *Preporuke za obrazovnu upisnu politiku i politiku stipendiranja*. https://publikacije.hzz.hr/media/8221/hzz-preporuke-za-obrazovnu-upisnu-politiku-i-politiku-stipendiranja-21-301221.pdf

Croatian Employment Office (CEO) (nd.) *Vaučer za obrazovanje*. Retrieved from https://vauceri.hzz.hr/

HINA (2022). *Putem vaučera dodatno će se obrazovati 4000 osoba, broj zainteresiranih raste na mjesečnoj razini"*. https://www.jutarnji.hr/vijesti/hrvatska/putem-vaucera-dodatno-ce-se-obrazovati-4000-osoba-broj-zainteresiranih-raste-na-mjesecnoj-razini-15274326

Ivanovic, N. (2002). Obrazovanje žena: izazov zajednici? *Reč*, *65*(11), 169–193.

Popović, K. (2021). *Financing adult learning and education*. ICAE and DVV International.

Vrcelj, S. (2018). *Što školu čini školom?* Filozofski fakultet.

# BOOK OF PROCEEDINGS

## TOWARDS A MORE EQUITABLE EDUCATION: FROM RESEARCH TO CHANGE