

Vlatka Lj. Spasojević¹

Primary School "Sveti Sava", Bijeljina, Republic of Srpska, Bosnia and Herzegovina Original research paper

Paper received: Feb 22 2021 Paper accepted: Jul 10 2021 Article Published: Oct 29 2021

Mile Đ. Ilić

University of Banja Luka, Faculty of Philosophy, Banja Luka, Republic of Srpska, Bosnia and Herzegovina

Educational Effects of Contextual Learning in Serbian Language Classes

Extended summary

This research demonstrates the results of the first experimental assessment of the educational outcomes of contextual learning in the traditional and innovative teaching systems (responsible teaching and different complexity levels teaching).

The ultimate aim of the experimental assessment is to determine whether the contextual learning in teaching process results in more favorable educational effects while being realistically assessed and whether it is possible to enhance the contextual learning and innovative teaching in our schools to overcome the limitations of mainly de-contextual learning based on the conservative didactic paradigm.

After the conducted statistical procedures we can conclude that, on average, students of the lower school grades had significantly higher educational achievements when contextual learning was applied and on the variables: *text comprehension* (F(1, 284) = 70.10, p < .001, η 2 = .19); *silent reading speed* (L(1) = 35.74, p < .001), while the benefit on the variable *culture of expression* (F = 12.53, p < .001, η 2 = .04) was less significant.

After the initial and final assessments, it was determined that the systematic exercises of the contextual learning compared to the dominating de-contextual learning exercises made a significant impact on the increase of educational achievements determined by the *reading*

¹ vlatka.spasojevic@gmail.com

Copyright © 2021 by the authors, licensee Teacher Education Faculty University of Belgrade, SERBIA.

This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original paper is accurately cited.

speed and text comprehension tests. No significant impact was detected on the students' speaking ability.

During the 2018/19 school year, the experiment was carried out with grade five students from three elementary schools within the field of Serbian language. Each of the three elementary schools had two experimental and two assessment classes. The experimental effectiveness of the didactically and methodologically founded new exercises of contextual learning and complementary teaching was assessed.

The method of an experiment with parallel groups was the key method applied in the research. The method of theoretical analysis and synthesis, as well as comparative method, were used in the preparation, implementation, and finalization of the project. The analysis and synthesis method was used to analyze theoretical questions of experimental factor, different attitudes and approaches to contextual learning in the classroom.

The obtained results provide more reliable starting points for more systematic and comprehensive pedagogical, psychological, didactical, and methodological research of contextual learning in the teaching process with the aim of providing a more solid basis for gaining functional knowledge, productive skills, and developing creative skills and prosocial behavior of students.

Keywords: contextual learning, de-contextual learning, responsible teaching, different complexity levels teaching, educational effects

References

- Beatson, G. (1972). Steps to an Ecology of Mind Northvale. New Jersey: Jason Aronsoninc.
- Biggs, J. B., Kembler, D. & Leung, D. (2001). The revised two factor study process question-naire: R-SPQ-2F. *British Jurnal of Educational psyhology*, 71, 133–149.
- Brown, B. L. (1998). Aplying Constructivisim in Vocational and Career Education. *Information, Information Series no. 378*, 27-36. Columbs: ERIC Clearinghouse on Adult, Career, and vocational Education, Center on Educational and Training for Employment, the Ohio State University.
- Brown, T. A. (2015). *Methodology in the social sciences. Confirmatory factor analysis for applied research* (2nd Ed.). New York: The Guilford Press.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd Ed). Hillsdale, NJ: Lawrence Erlbaum.
- Cohen, B. H. (2008). *Explaining psychological statistics* (3rd Ed.). New Jersey: John Wiley & Sons Inc.
- Crocker, L. & Algina, J. (2006). *Introduction to classical and modern test theory.* Mason, OH: Cengage.
- Dewey, J. (1952). *Experience and Education*. New York: The Macm illan Company.
- Fajgelj, S. (2013). *Psihometrija: Metod i teorija psihološkog mjerenja* (4. dopunjeno izdanje). Beograd: Centar za primenjenu psihologiju.

- Hamilton, J. & Singwhat, T. (2010). Teaching and learning: ASEM blended learning system approach, *Higher Education Research and Development (HERD)*, 29, 1–16.
- Harwell, M. (2003). Summarizing Monte Carlo results in methodological research: The single-factor, fixed-effects ANCOVA case. *Journal of Educational and Behavioral Statistics*, 28, 45–70.
- Huitema, B. E. (2011). The analysis of covariance and alternatives: Statistical methods for experiments, quasi-experiments, and single-case studies (2nd Ed). Hoboken, NJ: Wiley.
- Ilić, M. (2002). Responsibilna nastava. Banja Luka: Univerzitet u Banjoj Luci.
- Ilić, M. (2010). Inkluzivna nastava. Istočno Sarajevo: Univerzitet u Istočnom Sarajevu.
- Ilić, M. (2015). Didaktika i sloboda učesnika nastavnog procesa. U: Vujević, V. (ur.). *Nauka i sloboda* (645–667). *Naučni skup Nauka i sloboda*, 6. 6. 2014. Istočno Sarajevo: Filozofski fakultet Univerziteta u Istočnom Sarajevu.
- Ilić, M. (2017). Kontekstualizovana nastava u teoriji i prasksi. U: Mikanović, B. (ur.). *Banjalučki novembarski susreti* (391–40). *Naučni skup Istraživanja u psihologiji; Izazovi vaspitanja i obrazovanja u teoriji i praksi*, 18. 11. 2016. Banja Luka: Filozofski fakultet.
- Ilić, M. (2020). Didaktika. Banja Luka: Filozofski fakultet.
- Johnson, P. O. & Fay, L. C. (1950). The Johnson-Neyman technique, its theory and application. *Psychometrika*, 15 (4), 49–367.
- Johnson, E. B. (2002). *Contextual teaching and learning: what it is and why it's here to stay.* Thousand Oaks, CA: Corwin Press, INC.
- Lewis-Beck, M. S., Bryman, A. & Liao, T. F. (2004). *The Sage encyclopedia of social science research methods.* Thousand Oaks, Calif: Sage.
- Maričić, S., Špijunović, K. (2017). Kontekstualni pristup učenju i poučavanju u početnoj nastavi matematike. U: Mikanović, B. (ur.). *Banjalučki novembarski susreti* (253–266). *Naučni skup Istraživanja u psihologiji; Izazovi vaspitanja i obrazovanja u teoriji i praksi*, 18. 11. 2016. Banja Luka: Filozofski fakultet.
- Maričić, S., Milinković, N. (2017). Udžbenik u stvaranju uslova za kontekstualni pristup učenju sadržaja algebre u početnoj nastavi matematike. *Zbornik radova*, XX (19), 117–130.
- Pavlović, Z. (2016). Prezentovanje znanja u udžbenicima fizike. *Radovi Filozofskog fakulteta*, 18 (2), 165–177. DOI: 10.7251/FIZN1701165P
- Piters, R. S. (2012). Ciljevi obrazovanja pojmovno istraživanje. *Reč*, 28, 11–41.
- Puri, M. L. & Sen, P. K. (1969). Analysis of covariance based on general rank scores. *Annals of Mathematical Statistics*, 40, 610–618.
- Rutter, M. (1983). School effects on pupil progress: research findings and policy implications. *Child Development*, 54 (1), 1–29.
- Rutherford, A. (1992). Alternatives to traditional analysis of covariance. *British Journal of Mathematical and Statistical Psychology*, 45 (2), 197–223. DOI: 10.1111/j.2044-8317.1992. tb00988.x
- Stepansky, V. I. (2006). *Psihoinformatsiya*. *Teoriya*. *Exsperiment (Psiho-information. Theory. Exsperiment)*. Moscow: Moscowskiji psihologosotsialnyj institut.

- Schunk, D. (2005). Commentary on self-regulation in school contex. *Learning and Instruction*, 15 (2005), 173–177.
- Tabachnick, B. G. & Fidell, L. S. (2019). *Using multivariate statistics (7th Ed.)*. Boston: Allyn & Bacon/Pearson Education.
- Verbitsky, A. A. (2004). *Kompetentnostny podkhod I teoriya kontekstnogo obuchenya*. Moscow: ITS PKPS.
- Verbitsky, A. A. & Kalashnikov, V. G. (2010). Category of "Contekst" in Psychology and Pedagogocs. Moscow: Logos.
- Wilcox, R. R. (2003). Applying contemporary statistical procedures. San Diego, CA: Academic.