

## Editorial

The second issue of volume ten of the CEPS Journal presents seven articles, covering different topics from the field of education.

The first article, entitled *Teachers' Opinions about the Effect of Chemistry Demonstrations on Students' Interest and Chemistry Knowledge*, by Luka Vinko, Seamus Delaney, and Iztok Devetak, is from the area of chemistry education. Since chemistry is an experimental discipline that also uses experimentation as a research method, laboratory work and other practical work are essential in chemistry lessons. The quantitative research approach was used to gather data on 81 primary and secondary school teachers from different regions of Slovenia. Teachers completed an online questionnaire on their perceptions of the impact of chemistry demonstrations on students' interest and performance in chemistry classes and on the quality of students' chemistry knowledge. The study results revealed that the participating teachers consider the chemistry demonstration to have a positive effect on the motivation and performance of the students in chemistry and on the quality of the students' chemistry knowledge irrespective of the years of teaching experience and the frequency of performing chemistry demonstrations.

The second article, by Tatik Retno Murniasih, Cholis Sa'dijah, Makbul Muksar, and Susiswo, with the title *Fraction Sense: An Analysis of Preservice Mathematics Teachers' Cognitive Obstacles* is from the area of mathematics and education. In the article, the authors analyse pre-service mathematics teacher's cognitive obstacles and present specific obstacles with fraction sense tests. The authors focus on two types of obstacles: epistemological and didactic ones. A qualitative descriptive approach of 20 pre-service mathematics teachers was carried out in order to analyse the research problem. The findings showed that five pre-service teachers had overlapping obstacles, ranging from language representation and tendency to generalise; tendency to generalise and less meaningful learning; language representation, tendency to rely on intuition and trial and error strategy; language representation and trial and error; and to language representation and tendency to rely on intuition.

The third article is by Robert Potočnik, entitled *Heritage Preservation Education: Teachers' Preconceptions and Teachers Implementation in Visual Arts Classes*. Altogether, 125 teachers of the school subject visual arts in Slovenia were included in the study with the aim of identifying the teachers' preconceptions about the preservation of architecture in the Slovenian countryside and the implementation of heritage preservation concepts in visual arts teaching. These teachers play a significant role in planning and implementing visual arts

tasks with preservation concepts. The study revealed the teachers' preconceptions regarding some problems in the Slovenian countryside, as well as sufficient awareness of the importance of the implementation in heritage preservation concepts in visual arts activities, according to contemporary professional guidelines. Also, teachers' preconceptions reveal a lack of some basic knowledge of preservation concepts. The author concludes that that greater emphasis should be placed on developing training programmes for teachers and more heritage preservation education contents should be incorporated into pre- and in-service teachers' education.

The author Sintayehu Kassaye Alemu in his article entitled *Transnational Mobility of Academics: Some Academic Impacts* defines transnational academic mobility as academic travel across borders of states and as one of the aspects of the new internationalisation of higher education. It is presented in terms of the roles of academics in teaching-learning experiences as well as knowledge production and transfer. The article deals with the academic impacts of the short- and long-term transnational mobility of academics in relation to institutional affiliation and academic status and profile. It also shows that academics have gained benefits with transnational mobility, but sometimes they also face challenges.

The article entitled *Between Retributive and Restorative Compulsory School Teachers' Discipline Activities* by Katja Jeznik, Robi Kroflič, and Metka Kuhar addresses the concept of moral and character education which needed to be defined by each of the compulsory schools in Slovenia since 2009 under the formal framework of the Primary School Act. The study presents the views of teachers regarding disciplinary measures through the prism of the paradigmatic divide of two main punishment theories: the more traditional retributive responses to undesired conduct, and the more recent restorative approach. The authors conclude that schools need a clearer disciplinary framework with the systematic acquisition of knowledge and practical experience in the field of educational and discipline strategies and that teachers must continuously reflect on their disciplinary practices.

The next article, written by Mehmet Semih Summak and Mahmut Kalman, is entitled *A Q-Methodological Analysis of School Principals' Decision-Making Strategies during Change Process at Schools*. This study aimed to explore the decision-making strategies that school principals employ while dealing with the challenges faced during the change process at schools by using Q methodology, a qualitative-dominant mixed methods research design. The findings revealed that school principals shared similar views and had a similar profile in terms of decision-making and related strategies. It is shown that the dominant

beliefs driving principal's decision-making strategies seemed to incorporate a comprehensive evaluation of the current situation, ethical concerns and organisational values, assessment of technical details.

The last article is entitled *Structural Reasons for School Violence and Education Strategies*, and it is written by Janez Krek. For the purposes of the research, the author developed a concept of structural reasons in which it was theoretically assumed to appear as typical structural reasons for violence in schools, and empirical research was used in order to determine how primary school teachers recognise violent behaviour and how they execute moral education in the areas of the specific structural reasons for violence. Although the majority of teachers have appropriate pedagogical knowledge to recognise the specific structural reasons for violence and are able to identify the appropriate moral education or support strategy to address the identified violent or disruptive behaviour, the results showed that teachers only begin to engage with the factors or reasons behind violent incidents in individual cases, and not systematically. The author suggests that schools introduce the systematic differentiation of structural reasons for violence and should incorporate this approach in the schools' moral education plan and the work of teachers.

This issue is rounded off with two book reviews. The first review, of the book entitled *Teaching Chemistry in Higher Education* and written by Iztok Devetak, represents a compendium of different chapters authored by respected higher education chemistry teachers and chemistry education researchers from the United Kingdom, Ireland, and Australia. The book is dedicated to Prof. Tina Overton, one of the most prominent chemistry education researchers.

The second book review is written by Metka Knez. It is a review of the Slovene translation of the book entitled *How Institutions Think* (Kako mislijo institucije) by Mary Douglas, the social anthropologist who, when dealing with institutions, relies on various authors and theories in other disciplines: biology, medicine, sociology, philosophy, among others.

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