

News and Events / Novosti i događaji

Conference follow-up

"Teaching methodologies in the modern educational system"

A scientific conference honouring the 20th anniversary of the Croatian Academy of Educational Sciences (CAES) was held on 15 March 2012 in the Great Hall of the University of Zagreb building. The theme of the scientific conference was "Teaching methodologies in the modern educational system", and it was held under the aegis of the Ministry of Science, Education and Sports of the Republic of Croatia.

The purpose of the scientific conference, apart from honouring the anniversary, was to give a historical overview of the establishment and activities of the Croatian Academy of Educational Sciences and to develop guidelines for the future, bearing in mind the contribution of different sciences to the further development of education. Particular attention was focused on different teaching methodologies pertaining to their key role in the implementation of scientific achievements into high quality educational process.

Conference participants were welcomed by the Rector of the University of Zagreb - Professor Aleksa Bjeliš, PhD and CAES president - Professor Dragan Milanović, PhD.

The first plenary speech, delivered by Ivan Marijanović, MA, was an overview of CAES activities over the past twenty years, i.e. its activities since its establishment on 27 December 1991 to date. Activities of the Academy and its bodies have been public and regulated by the Statute of the Croatian Academy of Educational Sciences in compliance with state laws. The Academy is, as a legal entity, an independent and non-profit association of scientists who engage in research and development of education in accordance with scientific findings in the field of education in the most developed democratic countries in the world. The Academy's activities have also been in accordance with the tradition of scientific studies in the field of education in Croatia, especially those of the Croatian Pedagogical and Literary Society, since its foundation in 1871, as well as the Teaching Methodology Section of the Society of University Teachers, which preceded the establishment of CAES.

In addition to the research in the field of education, the basic tasks of the Academy also include: preparing detailed studies and advising state authorities and institutions, cooperating with scientific organizations and prominent individuals in Croatia and abroad for the purpose of exchanging information on the developments in the field

of education, organizing conferences and lectures, publishing scientific and other publications, informing the public about the developments in the field of education and educational sciences, professional development for scientific and other staff, and support for young researchers and scientists in the field of education. Scientists and experts whose professional activities are closely related to the development of educational activities can become regular, associate and honorary members of the Croatian Academy of Educational Sciences. Members conduct their activities within departments and according to scientific fields.

Former presidents of the Academy are: Professor Nedjeljko Kujundžić, PhD, Professor Vladimir Andrilović, PhD, Professor Ante Bežen, PhD and Professor Emeritus Vladimir Findak, PhD. The current president is Professor Dragan Milanović, PhD.

An insight into the activities of the Academy provides an overview of a variety of scientific activities:

- ▶ symposia and scientific conferences,
- ▶ public discussions, book promotions and other significant events,
- ▶ Dies Academicus, scientific and professional lectures,
- ▶ other activities (publishing scientific and professional publications, participation in the discussion on current topics in the field of education, etc.).

The second plenary speech, referring to the changes and developmental trends in the contemporary teacher education in the Republic of Croatia, was delivered by Branislava Baranović, PhD, Professor Vlatka Domović, PhD and Professor Vlasta Vizek Vidović, PhD. The speakers emphasised that the change in the development of the traditional, knowledge based curriculum towards the competence based curriculum, focusing on the development of students' core competences, requires significant changes not only in the approach but also in the manner of teaching and learning, and the inner life of schools. In connection with the new mode of teaching, i.e. the new role of the successful application and implementation of the curricular approach and development of curricular culture in schools, the issue of the education and professional development of future teachers, professional staff in schools and school principals is unavoidable. Over the past decade, teacher education in Croatia has undergone certain changes. The model of an integrated five-year study programme leading to Master's degree in primary education has been accepted, thus providing students with the possibility for vertical mobility to doctoral level studies. The new approach is evident in planning and implementation of programmes of study which have had their starting point in the model of the curriculum based on competences as learning outcomes, and the concept of lifelong learning and continuing teacher education has also been accepted.

Professor Ante Bežen, PhD delivered the third plenary speech entitled "Teaching methodologies in the modern educational system" focusing the attention on the

main starting points in considering teaching methodology and finding answers to the questions: “what, why and how to learn”. He emphasised that the answers to the first two questions have been provided by the curriculum experts, incorporated into the curriculum and the syllabus, and are further addressed by the professionals in the fundamental sciences for each individual subject.

The answer to the question how one can successfully teach and learn is researched from different perspectives by many different disciplines: philosophy, psychology, neuroscience, educational sociology, didactics, theory of curriculum and other disciplines. The role of the teaching methodology is to connect all the knowledge of these disciplines and provide the practical purposes, i.e. provide opportunities for its application in a specific educational act using its own educational strategies, systems, methods and procedures. Methodological knowledge and skills are necessary for the successful implementation of any educational activity (lesson, exercise, workshop, etc.) from preschool education to university classes. Acquiring methodological competences should be incorporated into the curricula for professional education of preschool education teachers, class teachers and subject teachers at all levels of lifelong education. In the contemporary educational system, this has already been implemented, and the curricula for preschool education teachers, class teachers and subject teachers have already incorporated corresponding teaching methodologies which provide the acquisition of methodological competences for the individual levels and educational programmes. Being well-founded on the content of education and its fundamental sciences as well as knowledge developed within these sciences is an essential component of teaching methodologies.

In the traditional pedagogical paradigm, teaching methodology was considered a derivative of didactics (special didactics), at the level of merely providing instruction for teaching, thus disabling it from obtaining the status of a scientific discipline.

The development of individual methodologies (in Croatia this particularly refers to those of Croatian and foreign languages, kinesiology, philosophy) has shown that teaching methodologies should be developed as applied disciplines which relate educational aims to knowledge essential for acquiring the competences for successful teaching of particular school subjects. Teaching methodologies have therefore been included in the system of science as interdisciplinary branches related to their respective fundamental sciences, and should accordingly be further developed.

The introduction of the curriculum into Croatian educational system, generally speaking, requires a paradigm shift in the organization of the disciplines dealing with research in education. Professor Bežen emphasised that the theory of curriculum is better at expressing the nature of the teaching methodology than the pedagogical system because, just as teaching methodology, it includes teaching content, whereas pedagogy and didactics develop their own theoretical views almost independently of the teaching content, i.e. fundamental sciences of school subjects, which is then essentially an incomplete approach. Thus, the introduction of the curriculum into

Croatian educational system enables the complete development of the teaching methodologies as micro-practical disciplines that directly connect educational theory and teaching practice.

The second part of the conference was dedicated to the discussion about teaching methodologies of individual subjects and teaching areas.

Professor Bežen talked about the new paradigm of Croatian language teaching methodology. The content paradigm of Croatian language as a school subject in primary schools consists of five subject areas: initial reading and writing, language, language expression, literature and media education, and in the secondary schools it consists of two subject areas: language and literature. The results of Croatian language teaching in primary schools show that the paradigms need to be changed because they favour more the categoric and reproductive, and less functional and communicative Croatian language learning/teaching.

Recommendations for the new subject curriculum of Croatian language (National Framework Curriculum) have introduced significant changes in the content paradigm of Croatian language for primary schools which now includes the new functional starting points for language activities: listening, speaking, reading and writing. Learning outcomes should primarily be the development of language skills, and not, as it has been so far, only the linguistic, literary, media and related knowledge.

Changing the paradigm in secondary schools, although still not stated in the official documents, should also encourage functional learning of the language and literature at this level. The exclusive literary and historical principle in teaching literature should be replaced by the communicative, because it has been shown that literary works whose manner of expression and themes the students are the least familiar with (antique and ancient literature) are learned when the learners are least prepared for them, i.e. at the beginning, while communicatively closer contemporary works are learned at the end of schooling.

Change in the content paradigm also necessarily involves the change of the methodological paradigms via more frequent application of communicatively developed methodological systems and methods.

Research in mathematics education in Croatia and abroad was discussed by Professor Aleksandra Čižmešija, PhD. The speaker pointed out that mathematics teaching methodology is a scientific, research and developmental discipline whose goal is to identify, characterize and understand the phenomena and processes that occur, or might occur, in learning and teaching mathematics at all levels of education. It further considers all prerequisites important for teaching and learning mathematics, the impact of technology, social aspects of teaching and learning mathematics, as well as attitudes towards mathematics and learning mathematics. Professor Čižmešija confirmed that today “the winds of change are blowing” when it comes to teaching methodology, even in places where, until recently, teaching methodologies were viewed with suspicion, as for instance, at some departments of the Faculty of Science.

Systematic scientific research in the field of mathematics education in the world have centuries-old tradition, and they have gained particular impetus over the past two decades. In that period, this huge research area was restructured under the patronage of the international organization ICMI (International Commission on Mathematical Instruction), and the European organization ERME (European Society for Research in Mathematics Education).

Professor Emeritus Vladimir Findak from the Faculty of Kinesiology, University of Zagreb emphasised in the introduction that kinesiology teaching methodology is one of the most developed teaching methodologies in the contemporary educational system in Croatia. The speaker highlighted three important periods that have marked the development of this scientific discipline. The first period lasted until 1986 when the syllabi for physical education teaching methodology courses, and later physical and health education teaching methodology, mainly focused on training future preschool education teachers and class teachers for the implementation of the basic syllabus. Professor Findak reminded that at the home faculty (College of Physical Education, Faculty of Physical Education, University of Zagreb and University of Split) this period lasted until 1987 when, within teaching methodology and under different names (e.g. from physical education teaching methodologies to didactics in kinesiology), future kinesiologists were trained largely for teaching regular classes, and to a lesser extent for extracurricular organizational forms of work. Another point that was mentioned referred to the fact that at the time teaching methodology was not yet accepted as a scientific discipline.

The second period in the development of kinesiology teaching methodology at non-home institutions (later Faculties of Teacher Education) marks the period prior to the founding of the Association of teaching methodologists in 2003 and at their home faculties (later Faculties of Kinesiology) this period lasted until 2006. Following the symposium Teaching methodology in science and education, which was held in 1985 in Zagreb, kinesiology teaching methodology was established as an independent scientific discipline.

The third period in the development of kinesiology teaching methodology has lasted to this day, and is characterized by the changes related to the status this scientific discipline holds at the postgraduate scientific study programme in kinesiology - elective module Kinesiological education and postgraduate professional study programme in kinesiology - elective module Kinesiological education.

Due to the fact that kinesiology teaching methodology is well positioned in these postgraduate studies, over the past twenty years, a number of young professionals have obtained their Master's or PhD degrees thus increasing the number of experts in the field of kinesiology teaching methodology both at home and non-home institutions.

Ružica Vuk, PhD from the Department of Geography of the Faculty of Science, University of Zagreb, spoke about geography teaching methodology in the educational system. The speaker emphasized that in recent years this teaching methodology has

been established as an independent discipline. It is a young scientific discipline, and many questions still have not been satisfactorily answered. It is a discipline within an interdisciplinary field of science, the field of geography and the branch of applied geography. Within the system of the disciplines of geography, geography teaching methodology is an integrative discipline with a complex research field that includes the following curricular elements: situational analysis of the condition and general objectives of the educational system; analysis, selection and transfer of scientific knowledge from all disciplines of geography and other related disciplines; external conditions of learning and teaching; educational and human resources, as well as student/pupil achievement in geography.

In the development of geography teaching methodology there are two periods. During the first period, geography teaching methodology was part of the scientific discipline of pedagogy, its object was defined solely on the basis of educational needs, and it was denied the status of a science. In the second period, geography teaching methodology was established as an independent scientific discipline, with clearly differentiated research field, research subject/object, research methods and epistemology.

Ružica Vuk, PhD emphasized that, by educating experts who will integrate the knowledge of geography and related disciplines, mainly history, teaching methodology provides scientific bases for actual working conditions in the educational institutions. It is necessary to take a realistic view of the state of the educational resources, use and workload of human resources in teaching geography, as well as the results of external evaluation, i.e. student achievement. These relations have proven to be stable enough, and the correlation between use and workload of human resources in teaching and student achievement was markedly high.

Theoretical and practical experiences in the education of history teachers were discussed by Snježana Koren, PhD from the Department of History of the Faculty of Humanities and Social Sciences, University of Zagreb. History teaching methodology is credited with 30 ECTS as a course within the programme of graduate studies at the Department of History. The course is mainly taught by academics elected to the rank of lecturers, but even if it is taught by someone elected to a higher academic rank (Assistant Professor or higher) their field of research is not primarily teaching and learning history. History teaching methodology has long been observed only as part of pedagogy, and only since 1985, that is since the symposium mentioned by Professor Findak, it has been defined as both historical and pedagogical science. Today it is considered one of the auxiliary historical sciences at the Department of History of the Faculty of Humanities and Social Sciences. It deals with specific issues of learning and teaching history at all levels, from primary to higher education, but it is no longer the primary objective of this course. In fact, historical culture in a society has been considered a new area of research with the focus of research not only on the results of institutional learning and teaching history, but also on the impact of various other

factors on the knowledge of our pupils and students about the past and on shaping the historical culture in the society.

Ivan Marijanović, MA introduced the teaching methodology of religious education in primary and secondary schools as well as in contemporary theological education. Religious education teaching methodology, as well as other teaching methodologies has been struggling for its autonomy as a scientific discipline. Sometimes it is constricted between disciplines that determine the objective and the content on the one hand, and disciplines that expand their scope and remain closed for interdisciplinary dialogue, on the other hand.

Professor Ana Petravić, PhD talked about recent trends in Glottodidactics in the “European perspective”. Although foreign language teaching methodology has for decades been one of the most developed teaching methodologies in teacher education in our country, due to the intense social, political, economic and technological changes in the world, Europe and Croatia, it is also facing new challenges. Professor Petravić maintains: “Glottodidactic contemplations of the foreign language teaching objectives in the globalised, internationalised, networked, and increasingly multicultural and multilingual environment, wherein children and young people in European countries have been growing up, has on the one hand resulted in the modification of the global objective of foreign language teaching, and on the other hand in seeing the importance of developing multilingual European citizens. Thus, communicative competence, until recently the dominant goal of foreign language teaching, has been added the intercultural component, and has since 1990s increasingly been formulated as intercultural communicative competence, while the native speaker, as a role model of linguistic competence, has to a great extent been replaced by the intercultural speaker.”

Maja Planinić, PhD from the Physics Department of the Faculty of Science, University of Zagreb, talked about physics teaching methodology in the context of educational research in physics. The speaker believes that physics teaching methodology has experienced numerous transformations over the past thirty years. This development was prompted by the growing needs of the society for more effective physics teaching at all educational levels. Educational research in physics has focused on understanding students’ fundamental problems in physics classes, such as their conceptual, and mathematical and logical difficulties, as well as on the development of new teaching methods and strategies, and their evaluation. Studies conducted in Croatia as part of the project “Educational research in physics and mathematics” can be related to studies from around the world and also state some important issues in teaching physics in Croatia. The first doctorate in educational physics was awarded in 2005 at the Physics Department of the Faculty of Science in Zagreb thus symbolising the first steps in the development of this branch of research.

The theme of the speech delivered by Zrinka Ristić Dedić, PhD from the Institute for Social Research - Centre for Educational Research and Development was “Investigative

learning as the aim and the means in natural science education: psychological perspective.” Contemporary natural science education has particularly emphasised student participation in research activities as the primary educational goal, and has promoted inductive, investigative learning as learning which, in addition to the construction of their own understanding of the world, enables the students to develop not only research skills, but also a wide range of related skills (independent learning skills, communication skills, group work skills...). Such learning simultaneously increases students’ curiosity and interest in science. Although investigative learning is normally considered part of the natural science education, it has been shown that this educational approach is not only applicable in various subject areas, but is also educationally relevant to all students.

Zrinka Ristić Dedić, PhD emphasised that investigative learning has, in principle, been recognised as an educational goal in the syllabi of natural science subjects in Croatian primary education; however, it has not been systematically implemented in the educational practice. Investigative learning is in the classrooms usually confined to occasional demonstration of an experiment conducted by teachers for the purpose of illustrating their own claims, or conducted by pupils strictly following “the recipe” with no real opportunities to assume an active role in constructing their own knowledge, or using investigative skills and higher cognitive processes. Psychological studies of the development of scientific thinking in children and adolescents have shown that pupils’ participation in repeated situations of investigative learning is crucial for the development of research and metacognitive skills and strategies. It has been shown that mere practising of these skills is not the optimal method for most pupils, on the contrary, it is necessary to directly develop metacognitive skills and knowledge about the goals and strategies of investigative learning.

Following the four-hour discussion, Professor Vlasta Vizek Vidović, PhD summarised the main points of the conference. They will be used to prepare common conclusions of the discussion which will then be forwarded to policy makers, presenting the views of a very important part of the scientific community in the field of education. In the opinion of Professor Vizek Vidović, CAES has proved to be an integrative factor in linking the different aspects of research in education. A recurrent issue of the discussion was also the question of how the results of these studies can be presented to the wider public, i.e. how a dialogue on this issue could be initiated with the policy makers and how the public could at least be informed about the research results.

The event was dominated by curricular themes and curricular orientation to learning outcomes. A number of presentations have shown that there is a growing awareness of the fact that curricular approach requires structural changes in the educational system, especially pertaining to the duration of compulsory and primary education, and structuring of the curriculum and syllabi. These views need to be substantiated

and based on the obtained knowledge, not only in the field of educational sciences but also neuroscience and developmental psychology.

Some of the presentations touched upon teacher education, and the main conclusion is that serious changes in teacher education are necessary, and that teaching should be recognized as a profession, not as an occupation. This presupposes the development of professional identity of teachers at the individual level and establishing certain standards pertaining to competences. In initial teacher education there should be a closer integration of theoretical premises of educational sciences and actual teaching experience of future teachers.

Professor A. Dulčić, PhD, D.Bertić, MEd, Professor V. Šimović, PhD and D. Moroš, BSc also participated in the discussion. They complimented the plenary speeches and added that the presented topics were interesting and dealing with current issues, and especially because of the emphasis on the importance of scientific and research approach in the development of teaching methodologies. It was also indicated that the significance of teaching methodologies as “practical disciplines” largely depends on the quality of the host schools for teaching practice. They are the “teaching laboratories” where future teachers have an opportunity to improve their teaching skills.

Conclusions of the conference will be published following their acceptance by the CAES Board Members.

Katarina Franjčec and Vesna Budinski

Održan znanstveni skup

„Metodike u suvremenom odgojno – obrazovnom sustavu“

Prigodom obilježavanja dvadesete obljetnice Akademije odgojno - obrazovnih znanosti Hrvatske održan je 15. ožujka 2012. godine znanstveni skup u auli Sveučilišta u Zagrebu. Tema skupa bila je „Metodike u suvremenom odgojno – obrazovnom sustavu“, a pokrovitelj Ministarstvo znanosti, obrazovanja i sporta.

Svrha znanstvenog skupa, uz obilježavanje obljetnice, bila je i osvrt na povijest nastanka i rada AOOZH-a te postavljanje smjernica za rad u budućnosti imajući u vidu doprinos različitih znanosti u daljem razvoju odgoja i obrazovanja. Osobita pozornost usmjerena je na metodike nastave s obzirom na njihovu ključnu ulogu u ostvarivanju implementacije znanstvenih spoznaja u kvalitetni odgojno – obrazovni proces.

Pozdravne riječi sudionicima skupa uputili su prof.dr.sc. Aleksa Bjeliš, rektor Sveučilišta u Zagrebu i prof.dr.sc. Dragan Milanović, predsjednik AOOZH-a.

Uvodno izlaganje mr.sc. Ivana Marijanovića bilo je usmjereno na pregled djelovanja AOOZH-a u proteklih dvadeset godina, tj. na rad od njezina osnivanja 27.prosinca 1991. do danas. Djelovanje Akademije i njezinih tijela je javno i uređeno je Statutom Akademije u skladu s državnim zakonima, a ona je kao pravna osoba neovisna i neprofitna udruga znanstvenih djelatnika koji se bave istraživanjem i razvojem odgoja i obrazovanja u skladu sa znanstvenim spoznajama o odgoju i obrazovanju u demokratski najrazvijenijim zemljama svijeta. Nije zanemaren ni sklad s tradicijom znanstvenih istraživanja odgoja i obrazovanja u Hrvatskoj, posebice Hrvatskog pedagoško – književnog zbora od njegova osnutka 1871.godine i Sekcije za metodiku Društva sveučilišnih nastavnika u Zagrebu, koja je prethodila osnivanju AOOZH-a.

Uz istraživanja na području odgoja i obrazovanja, u temeljne zadaće Akademije ubrajaju se: izrada studija i savjetovanja državnih tijela i institucija, povezivanje sa znanstvenim organizacijama i pojedincima u zemlji i svijetu s ciljem razmjene informacija o dostignućima na području odgoja i obrazovanja, organiziranje znanstvenih skupova i predavanja, tiskanje znanstvenih i drugih izdanja, informiranje

javnosti o zbivanjima u odgoju i obrazovanju i u odgojnim znanostima, usavršavanje znanstvenih djelatnika i skrb o znanstvenom podmlatku. Članom Akademije može postati znanstvenik i stručnjak koji svojim djelovanjem potiče razvoj odgojno-obrazovne djelatnosti. Akademiju čine redovni, suradni i počasni članovi. Oni djeluju putem odjela, a svrstavaju se po znanstvenim područjima.

Dosadašnji predsjednici Akademije bili su : prof.dr. sc. Nedjeljko Kujundžić, prof. dr. sc. Vladimir Andrić, prof. dr. sc. Ante Bežen i profesor emeritus Vladimir Findak, a sada je predsjednik prof.dr. sc. Dragan Milanović.

Iz pregleda djelovanja Akademije vidljivi su raznovrsni oblici rada :

- ▶ simpoziji, savjetovanja i znanstveni skupovi
- ▶ tribine i promocije knjiga i događaja
- ▶ Dies Academicus, znanstvena i stručna predavanja
- ▶ ostale aktivnosti (izdavanje znanstvene i stručne literature, uključivanje u raspravu o aktualnim temama iz područja prosvjete...).

O drugoj uvodnoj temi skupa, o promjenama i razvojnim pravcima u suvremenom obrazovanju učitelja u Republici Hrvatskoj, govorele su dr.sc. Branislava Baranović, prof.dr. sc. Vlatka Domović i prof. dr. sc. Vlasta Vizek Vidović. Naglasile su da zaokret u razvoju kurikula od tradicionalnog, koji je orijentiran na transmisiju znanja, prema kurikulu usmjerenom na razvoj temeljnih kompetencija učenika, pretpostavlja značajne promjene, ne samo u pristupu nego i u načinu poučavanja i učenja te unutrašnjem životu škole. Za novi način rada, tj. novu ulogu uspješne primjene i provedbe kurikulskog pristupa i razvijanje kurikulske kulture u školama nezaobilazno je pitanje obrazovanja i profesionalnog razvoja učiteljskog kadra, stručnog osoblja u školama i ravnatelja. U prošlom desetljeću obrazovanje nastavnika u Hrvatskoj doživjelo je promjene. Prihvaćen je model integriranog petogodišnjeg studija koji završava diplomom magistra primarnog obrazovanja i omogućena je vertikalna mobilnost studenata do razine doktorskog studija. Novi pristup vidljiv je u planiranju i provedbi studijskih programa koji polazište imaju u modelu kurikula temeljenom na kompetencijama kao ishodom učenja, a prihvaćen je i koncept cjeloživotnog učenja i kontinuiranog obrazovanja učitelja.

Prof. dr. sc. Ante Bežen, u trećem uvodnom izlaganju pod naslovom „ Metodike u suvremenom odgojno – obrazovnom sustavu“, usmjerio je pozornost na glavna polazišta u razmatranju metodike i traženju odgovora na pitanja: „što, zašto i kako učiti“. Naglasio je da odgovor na prva dva pitanja daju stručnjaci za programiranje obrazovanja i oni su sadržani u nastavnim programima i kurikulumima te se njima bave stručnjaci matičnih znanosti nastavnih predmeta.

Odgovor na pitanje kako uspješno poučavati i učiti, svaka iz svoje perspektive, istražuju razne discipline: filozofija, psihologija, neuroznanost, sociologija obrazovanja, didaktika, teorija kurikula i druge discipline, a metodika je disciplina koja povezuje sve njihove spoznaje s praktičnom svrhom, tj. primjenom u konkretnom odgojno –

obrazovnom činu pomoću vlastitih obrazovnih strategija, sustava, metoda i postupaka. Metodičko znanje i vještine nužni su za uspješno izvođenje odgojno – obrazovnog čina (nastavnog sata, vježbe, radionice i dr.) od vrtića do sveučilišne nastave. Stjecanje metodičkih kompetencija treba biti ugrađeno u programe profesionalnog obrazovanja odgojitelja, učitelja i nastavnika na svim razinama cjeloživotne pouke. U suvremenom obrazovnom sustavu to se primjenjuje te programi odgojiteljskih, učiteljskih i nastavničkih studija sadrže odgovarajuće metodike kojima se stječu metodičke kompetencije za pojedine razine i programe obrazovanja. Bitna je utemeljenost metodike na sadržaju obrazovanja i njegovim matičnim znanostima te na spoznajama temeljnih odgojno – obrazovnih znanosti.

U tradicionalnoj pedagoškoj paradigmi metodika se smatrala derivatom didaktike (specijalna didaktika), i to na razini upute za izvođenje nastave, te nije mogla dobiti status znanstvene discipline.

Rad na razvoju pojedinih metodika (u Hrvatskoj osobito hrvatskog i stranih jezika, kineziologije, filozofije) pokazao ja da metodike treba izgrađivati kao prakseološke discipline koje povezuju ciljeve obrazovanja sa spoznajama bitnim za stjecanje kompetencija uspješnog poučavanja pojedinih nastavnih predmeta. Metodike su, stoga, unijete u sustav znanosti kao interdiscipline vezane za polje matične znanosti te ih u tome pravcu treba dalje razvijati.

Uvođenje kurikula u hrvatski odgojno – obrazovni sustav općenito zahtijeva promjenu paradigme u organizaciji disciplina koje istražuju odgoj i obrazovanje. Teorija kurikula, naglašava profesor Bežen, bolje izražava prirodu metodike od pedagoškog sustava jer ona uključuje nastavne sadržaje kao i metodika, dok pedagogija i didaktika razvijaju svoje teorijske poglede gotovo neovisno o nastavnim sadržajima, tj. matičnim znanostima nastavnih predmeta, što je u polazištu nepotpun pristup. Tako upravo uvođenje kurikula u hrvatski obrazovni sustav omogućuje puni razvoj metodika kao mikroprakseoloških disciplina koje izravno povezuju odgojno-obrazovnu teoriju i praksu.

U drugom dijelu skupa bilo je riječi o metodikama pojedinih nastavnih predmeta i nastavnih područja.

O novoj paradigmi metodike hrvatskoga jezika govorio je profesor Bežen. Sadržajna paradigma nastavnog predmeta Hrvatski jezik u osnovnim školama sastoji se od pet predmetnih područja: početno čitanje i pisanje, jezik, jezično izražavanje, književnost i medijska kultura, a u srednjim od dva područja: jezik i književnost. Rezultati nastave hrvatskoga jezika u tim školama pokazuju da te paradigme treba mijenjati jer one više pogoduju kategorijalno –reproduktivnom, a manje funkcionalno–komunikacijskom učenju/poučavanju hrvatskoga jezika.

U pripremama za izradu novog predmetnog kurikula hrvatskoga jezika (Nacionalni okvirni kurikulum) bitno je promijenjena sadržajna paradigma hrvatskoga jezika za osnovne škole u kojoj su sada nova funkcionalna polazišta jezične djelatnosti: slušanje, govorenje, čitanje i pisanje. Ishodi učenja trebale bi, u prvom redu, biti razvijene jezične vještine, a ne, kao do sada, samo jezična, književna, medijska i slična znanja.

Promjena paradigme u srednjoj školi, iako još nije naznačena u službenim dokumentima, također bi trebala potaknuti funkcionalno učenje jezika i književnosti na toj razini. Isključivo književnopovijesno načelo u nastavi književnosti valja zamijeniti komunikacijskim jer se ispostavilo da učenici izražajno i tematski najudaljenija djela (antička i stara književnost) uče kad su za njih najmanje spremni, tj. na početku, a komunikacijski bliža suvremena djela tek na kraju školovanja.

Promjena sadržajne paradigme uključuje nužno i promjenu metodičke paradigme češćom primjenom komunikacijski razvijenih metodičkih sustava i metoda.

O istraživanjima matematičkog obrazovanja u Hrvatskoj i svijetu govorila je prof. dr. sc. Aleksandra Čižmešija. Naglasila je da metodika matematike predstavlja znanstveno istraživačku i razvojnu disciplinu čiji je cilj identificirati, okarakterizirati i razumjeti pojave i procese koji se javljaju, ili bi se mogli javiti, u učenju i poučavanju matematike na svim stupnjevima obrazovanja. Razmatra i sve pretpostavke važne za poučavanje i učenje matematike, utjecaj tehnologije na učenje i poučavanje matematike te društvene aspekte poučavanja i učenja matematike, kao i stavove prema matematici i učenju matematike. Danas „pušu drugačiji vjetrovi“, kad je riječ o metodici, i na onim mjestima gdje se donedavno na metodike gledalo sa sumnjom, npr. na nekim odsjecima prirodoslovno – matematičkog studija, potvrdila je profesorica Čižmešija.

Sustavna znanstvena istraživanja u području matematičkog obrazovanja u svijetu bilježe stoljetnu tradiciju, a osobit su zamah dobila tijekom protekla dva desetljeća. U tom je vremenu došlo do strukturiranja ovog velikog istraživačkog prostora pod okriljem svjetske organizacije ICMI (International Commission on Mathematical Instruction) te europske organizacije ERME (European Society for Research in Mathematics Education).

Profesor emeritus Vladimir Findak s Kineziološkog fakulteta Sveučilišta u Zagrebu uvodno je naglasio da je kineziološka metodika jedna od najrazvijenijih metodika u suvremenom odgojno – obrazovnom sustavu u Hrvatskoj. Izdvojio je tri važna razdoblja koja su obilježila razvoj te znanstvene discipline. Prvo je razdoblje trajalo do 1986. godine kada su programi kolegija metodike tjelesnog odgoja, a kasnije metodike tjelesne i zdravstvene kulture, bili uglavnom usmjereni na osposobljavanje budućih odgojitelja i nastavnika razredne nastave za realizaciju osnovnog programa. Na matičnim fakultetima (Visoka škola za fizičku kulturu, Fakultet za fizičku kulturu Sveučilišta u Zagrebu i u Splitu), podsjetio je profesor Findak, ovo je razdoblje trajalo do 1987. godine, kada se u okviru kolegija metodika pod različitim nazivima (npr. od metodika fizičkog odgoja do kineziološka didaktika) buduću kineziolozi osposobljavali u većoj mjeri za nastavu, a u manjoj mjeri za izvannastavne organizacijske oblike rada, a metodika je egzistirala bez atribucija znanstvenosti.

Drugo razdoblje u razvoju kineziološke metodike na nematičnim fakultetima (kasnije Učiteljskim fakultetima) obilježava vrijeme do osnivanja Udruge metodičara 2003. godine, a na matičnim fakultetima (kasnije Kineziološkim fakultetima) do 2006. godine. Nakon znanstvenog skupa Metodika u sustavu znanosti i obrazovanja, koji je

održan u Zagrebu 1985. godine ova je metodika etabliрана kao samostalna znanstvena disciplina.

Treće razdoblje u razvoju kineziološke metodike traje do današnjih dana, a karakteriziraju ga promjene vezane uz status ove znanstvene discipline na poslijediplomskom znanstvenom studiju kineziologije – izborni modul kineziološka edukacija, te na poslijediplomskom specijalističkom studiju kineziologije – izborni modul kineziološka edukacija.

Zahvaljujući tome što je kineziološka metodika dobro pozicionirana u spomenutim poslijediplomskim studijima, u posljednjih dvadesetak godina je magistrirao, odnosno doktorirao veći broj mladih stručnjaka, pa je kolegij kineziološke metodike stručno zastupljen na matičnim i nematičnim fakultetima.

Dr. sc. Ružica Vuk s Geografskog odsjeka PMF – a Sveučilišta u Zagrebu govorila je o metodici geografije u sustavu odgoja i obrazovanja. Naglasila je da se ta metodika zadnjih godina afirmirala kao samostalna disciplina. Ona je mlada znanstvena disciplina i na mnoga pitanja još nije dala zadovoljavajuće odgovore. To je disciplina u interdisciplinarnom području znanosti, polju geografija i grani primijenjena geografija. U sustavu geografskih disciplina metodika geografije je integrativna disciplina s kompleksnim istraživačkim poljem koje uključuje kurikulske elemente: situacijsku analizu stanja i općih ciljeva u sustavu odgoja i obrazovanja; propitivanje, selekciju i transfer znanstvenih spoznaja iz svih disciplina geografije, njoj srodnih disciplina; vanjske uvjeta učenja i poučavanja; obrazovne resurse i ljudske potencijale i postignuća učenika iz geografije.

U razvoju metodike geografije razlikuju se dva razdoblja. U prvom je metodika geografije pozicionirana među pedagoške discipline, a njezin je objekt definiran isključivo nastavnim potrebama, uz osporavanje znanstvenosti. U drugom razdoblju metodika geografije etablira se kao samostalna znanstvena disciplina, s jasno diferenciranim istraživačkim poljem, predmetom/objektom istraživanja, metodama istraživanja i epistemologijom.

Dr. sc. Vuk naglašava da se obrazovanjem stručnjaka koji će integrirati znanja iz geografije i geografiji bliskih disciplina, u prvom redu povijesti, u metodici na znanstveno utemeljen način pripremaju realni uvjeti rada na terenu. U realan odnos potrebno je staviti stanje obrazovnih resursa za nastavu geografije, iskorištenost i opterećenost ljudskih potencijala u nastavi geografije s rezultatima dobivenima vanjskim vrednovanjem, zapravo učeničkim postignućima. Pokazalo se da su ti odnosi dosta čvrsti, da postoji izrazito visoka korelacija između iskorištenosti i opterećenosti ljudskih potencijala u nastavi i učeničkih postignuća.

O teorijskim i praktičnim iskustvima u obrazovanju nastavnika povijesti govorila je dr.sc. Snježana Koren s Odsjeka za povijest Filozofskog fakulteta Sveučilišta u Zagrebu. Metodika nastave povijesti zastupljena je s 30 ECTS bodova kao nastavni predmet u programu diplomskog studija Odsjeka za povijest. Nastavnici toga predmeta

uglavnom su birani u nastavno zvanje predavača, a ako već jesu u tom znanstveno – nastavnom zvanju, tada se istraživački primarno ne bave učenjem i poučavanjem povijesti. Metodika povijesti dugo se promatrala isključivo kao dio pedagogije, a tek od 1985. godine, tj. od skupa koji je spomenuo i profesor Findak, počinje se definirati i kao povijesna i kao pedagoška znanost. Danas se na Odsjeku za povijest Filozofskog fakulteta ona svrstava u pomoćne povijesne znanosti. Bavi se specifičnim pitanjima učenja i poučavanja povijesti na svim razinama, od osnovnoškolske do visokoškolske, ali više ne isključivo samo time. Kao novo područje njezina istraživanja doživljava se povijesna kultura u društvu, pri čemu se ne istražuju samo rezultati institucionalnog učenja i poučavanja povijesti nego i utjecaj drugih različitih čimbenika koji utječu na znanje naših učenika i studenata o prošlosti kao i na oblikovanje povijesne kulture u društvu.

Tema izlaganja mr.sc. Ivana Marijanovića bila je Metodika nastave vjeronauka u osnovnoj i srednjoj školi i u suvremenom teološkom obrazovanju. Ta se metodika, kao i druge, bori za autonomiju znanstvene discipline. Katkad je metodika stisnuta između disciplina koje određuju cilj i sadržaj s jedne strane, a s druge strane, disciplina koje proširuju svoje područje i ostaju zatvorene za interdisciplinarni dijalog.

O novijim glotodidaktičkim trendovima promatranim u „europskoj perspektivi“ govorila je prof. dr. sc. Ana Petravić. Iako je metodika nastave stranih jezika desetljećima bila jedna od razvijenijih metodika u obrazovanju nastavnika kod nas, pred tu se metodiku postavljaju novi izazovi uslijed intenzivnih društvenih, političkih, gospodarskih i tehnoloških promjena u svijetu, Europi i kod nas. Profesorica Petravić ističe: “ Glotodidaktička promišljanja zadaće nastave stranih jezika u globaliziranom, internacionaliziranom, medijalno umreženom, sve multikulturalnijem i višejezičnijem okruženju u kojem u novije vrijeme odrastaju djeca i mladi u europskim zemljama rezultirala su s jedne strane modificiranjem globalnog cilja nastave stranih jezika, a s druge strane uviđanjem važnosti razvoja višejezičnosti građana Europe. Tako je komunikacijska kompetencija, donedavno dominantni cilj nastave stranih jezika, proširena komponentom interkulturalnosti te se od kraja devedesetih godina 20.stoljeća sve češće formulira kao interkulturalna komunikacijska kompetencija, a uzor jezične kompetencije izvornog govornika u rastućoj se mjeri zamjenjuje profilom interkulturalnog govornika.“

Dr. sc. Maja Planinić s Fizičkog odsjeka PMF–a Sveučilišta u Zagrebu govorila je o metodici nastave fizike, u kontekstu edukacijskih istraživanja u fizici. Ona smatra da je metodika nastave fizike doživjela brojne transformacije u posljednjih tridesetak godina. Taj je razvoj bio potaknut rastućom potrebom društva za učinkovitijom nastavom fizike na svim razinama. Edukacijska istraživanja u fizici usmjerena su na razumijevanje temeljnih učeničkih problema u nastavi fizike, kao što su njihove konceptualne i matematičko – logičke poteškoće, kao i na razvijanje novih nastavnih metoda i strategija te njihovu evaluaciju. Istraživanja provedena u Hrvatskoj u sklopu

projekta „Edukacijska istraživanja u fizici i matematici“ nadovezuju se na istraživanja u svijetu i ukazuju na neke važne probleme u hrvatskoj nastavi fizike. Prvi doktorat iz fizike s temom edukacijske fizike dodijeljen je 2005. godine na Fizičkom odjelu PMF – a u Zagrebu i time su načinjeni prvi koraci u razvoju te grane istraživanja.

Tema izlaganja dr.sc. Zrinke Ristić Dedić iz Instituta za društvena istraživanja – Centra za istraživanje i razvoj obrazovanja bila je „Istraživačko učenje kao sredstvo i cilj prirodnoznanstvenog obrazovanja: psihologijska perspektiva“. Suvremeno prirodnoznanstveno obrazovanje stavlja izraziti naglasak na sudjelovanje učenika u istraživačkim aktivnostima kao obrazovni cilj te promiče induktivno, istraživačko učenje kao ono koje uz konstrukciju vlastitog razumijevanja svijeta, kod učenika razvija ne samo istraživačke, već i širi spektar vještina (vještine samostalnog učenja, komunikacijske vještine, vještine rada u grupi...). Takvo učenje djeluje istovremeno na povećanje znatiželje i interesa učenika za znanost. Iako se istraživačko učenje uobičajeno smatra dijelom prirodnoznanstvenog obrazovanja, pokazuje se da je taj obrazovni pristup primjenjiv u različitim predmetnim područjima, kao da je i obrazovno relevantan za sve učenike.

U hrvatskom osnovnoškolskom obrazovanju istraživačko učenje je načelno prepoznato kao obrazovni cilj u programima prirodoslovnih predmeta, ali nije sustavno implementirano u obrazovnu praksu, naglasila je profesorica Ristić Dedić. Istraživačko učenje u nastavi se uobičajeno svodi na povremene demonstracijske pokuse koje provode nastavnici u svrhu ilustracije vlastitih tvrdnji ili učeničko izvođenje pokusa „po receptu“, bez prave mogućnosti za zauzimanje aktivne uloge u konstrukciji vlastitog znanja i korištenje istraživačkih vještina i viših kognitivnih procesa. Psihologijska istraživanja razvijenosti znanstvenog razmišljanja kod djece i adolescenata pokazuju da je sudjelovanje učenika u ponavljanim situacijama istraživačkog učenja ključno za razvoj istraživačkih i metakognitivnih vještina i strategija. Pokazuje se, da samo njihovo uvježbavanje nije optimalna metoda za većinu učenika, već je potrebno izravno jačati metakognitivne vještine i znanja o cilju i strategijama istraživačkog rada.

Četverosatnu raspravu pokušala je sažeti prof.dr. sc. Vlasta Vizek Vidović u nekoliko zaključnih misli. One bi trebale poslužiti za izradu zaključaka rasprave, a bit će upućeni kreatorima obrazovne politike, kao stav jednoga vrlo važnoga dijela znanstvene zajednice u području odgoja i obrazovanja. Po njezinu mišljenju, AOOZH se pokazala kao integrativni faktor u povezivanju različitih aspekata istraživanja u odgoju i obrazovanju. Višekratno se nametnulo i pitanje kako rezultate tih istraživanja proslijediti javnosti, tj. kako stupiti u dijalog s kreatorima obrazovne politike, kako bi javnost bila barem informirana o istraživačkim rezultatima.

Na skupu su dominirale kurikulske teme i kurikulska orijentacija na ishode učenja. Iz više izlaganja vidljivo je i osvješćivanje situacije da kurikulski pristup zahtijeva i strukturne promjene obrazovnog sustava, prije svega, kad je riječ o trajanju

obvezatnoga i primarnoga obrazovanja te i o strukturiranju nastavnih planova i programa. To sve treba argumentirati i temeljiti na spoznajama ne samo edukacijskih znanosti nego i neuroznanosti i razvojne psihologije.

Dio izlaganja doticao se i obrazovanja nastavnika, a temeljna poruka jest da su potrebne ozbiljne promjene u obrazovanju nastavnika i da bi nastavnički poziv trebalo prepoznati kao profesiju, a ne kao zanimanje. To pretpostavlja razvijanje profesionalnog identiteta učitelja na individualnoj razini i postavljanje određenih kompetencijskih standarda. U inicijalnom obrazovanju nastavnika trebalo bi doći do čvršće integracije teorijskih postavki edukacijskih znanosti i konkretnog iskustva budućih učitelja u praksi.

U diskusiju na kraju savjetovanja uključili su se: prof. dr. sc. A. Dulčić, D. Bertić, mr., prof. dr. sc. V. Šimović i D. Moroš, prof. Njihovi osvrti bili su ispunjeni pohvalama o sadržaju uvodnih predavanja, zanimljivosti i aktualnosti teme te naglascima o značaju znanstveno – istraživačkog pristupa u razvoju metodika. Posebice je naglašeno da smisao metodika kao „praktičnog čina“ u velikoj mjeri ovisi o kvaliteti vježbaonica. One su laboratoriji nastave u kojima se usavršava metodički čin.

Zaključci savjetovanja bit će objavljeni nakon što ih usvoji Predsjedništvo AOOZH -a.

Katarina Franjčec i Vesna Budinski