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Editorial

For the second year in a row, we are publishing a bilingual (Slovenian and English) issue of Contemporary Pedagogy, Slovenia's main scientific magazine in the education field. The experience has been good; we received quite a few responses from abroad. Therefore, we have again prepared some truly topical and original articles by Slovenian authors as well as two contributions from abroad. The aim of the issue is to make foreign scientists, researchers, teachers and other practical users familiar with the latest Slovenian scientific findings and to simultaneously make Slovenian experts familiar with the discoveries of other scientists. Both foreign articles were prepared especially for our magazine.

First, we have an interview with Luke, one of the most influential Australian educational researchers and curricular thinkers of the last two decades. His critical view of contemporary school systems is certainly interesting and provocative for school policies. He created a new concept of general education which is to surpass those systems organised so as to prepare people for an economy and culture that is declining or in transition. It is interesting to see his assessment of the competent education model's ethical and social responsibility, literacy in education, and the actual value of the PISA project (Programme for International Student Assessment). The article should help Slovenian readers also get a wider (more realistic) insight into the role of other international comparative studies.

M. Kovač-Šebart, J. Krek and J. Vogrinc consider the educational plan in state primary school as shown by the results of empirical research. The goal of the research was to determine whether an educational plan is needed at all, what it comprises according to teachers and headmasters in their respective schools, and what it should comprise in the opinions of the headmasters.

An authentic Slovenian scientific article by Ljubica Marjanovič Umek and Urška Fekonja Peklaj discusses the effects of kindergarten on a child's speech development in connection with age and the family environment the child lives in. The study took three years. It was found that the effect of kindergarten only measured through the child's age is small, however, it grows if the level of education attained by the mother is also taken into account.

When the mother's level of education is low and when the family environment is less stimulating, the kindergarten has a major influence on the child's speech development. The authors find that in the future even greater attention will have to be paid to the gaining of knowledge about children's speech development and the self-evaluation of work in kindergarten units. Some important, perhaps only small steps will be needed at the procedural level to also make the effect of kindergarten on the speech development of children coming from a more stimulating family environment more recognisable.

It is interesting to read the treatise by D. Štefanc about the concept of competencies in education, its definition, approaches and dilemmas. The article shows that competencies can be defined in several ways. They are understood as the internalised cognitive-epistemological abilities of an individual to produce an infinite number of effects, while on the other side competence also has become established within the economy and management where it is understood as a

capacity to perform specific tasks in specific business environments. It is subject to special interpretations within the utilitarian concept related to the neoliberal economic paradigm. This utilitarian concept of competence has also entered the pedagogical field where there are tendencies to establish it as a goal of education not only in vocational but also in general education.

Following this, there are two treatises in the field of methodology. The first one is a paper by J. Sagadin on methodological problems concerning *gimnazija* candidate-selection criteria. The issue is how to combine various students' achievements with grades in individual subjects and the overall achievement on one side, and students' one-off achievements in external examinations on the other. This issue is topical when schools face the dilemma of which criteria to apply in the selection of candidates who fulfil the enrolment conditions but who cannot all be admitted due to limited enrolment capacity. The author points out that these criteria should be balanced and indicates some possible models for how to resolve this problem.

The second treatise, entitled From Monomethods towards Combined Research Approaches (J. Mažgon), focuses on the issue of the forms and possibilities of combining methods in researches involving quantitative and qualitative methodological starting points. The author first describes the evolutionary development leading from monomethods to combined research approaches. In the chapter concerning the taxonomy of researches with different methodological approaches, she presents three types of research: monomethodologial research, research using combined methods and research using combined models. The presentation of models is particularly thorough.

The author sees the highest reach of research in the combination (integration) of qualitative and quantitative research and the simultaneous application of both approaches in all stages of the research process, taking account of the needs of individual researchers and research goals. This is particularly true of research in the fields of the social sciences and the humanities.

Of equal interest is the article by the Islandia author K. Dýrfjörd, discussing education for democracy in early childhood. The purpose of the article is to look at two internationally very well known trends (concepts) in early childhood education from the point of view of education for democracy. These two concepts are developmentally appropriate practice (DAP) and the Reggio Emilia philosophy. Both are described in the contribution. The author says that it might be interesting for Slovenian readers to have the philosophy of, for example, the International Step by Step Association (ISSA) in mind when reading this article and to make some comparisons with it, for this philosophy was developed to satisfy the needs of countries striving to implement new ideas about early childhood and democratic (not collectivist) education.

Like last year, the present issue of Contemporary Pedagogy is also being sent to more than 200 leading pedagogic magazines around the world and to renowned authors. We offer it as part of a free exchange for a foreign related magazine and simultaneously invite foreign authors to join us by contributing their original articles.

Dr Metod Resman
(Editor-in-chief)

Vida Vončina

Multiliteracies as a Core of New Basics

or

How to Educate Students for Critical Entry to Contemporary Culture and Society?

(Interview with Allan Luke)

UDK: 37.035

Allan Luke is among the most influential Australian educational researchers and curriculum thinkers of the last two decades. His extensive published work is among the most cited in Australia. With his research work he has continously shaped curricular and systemic change and pedagogical practices both in Australia and internationally. His last position was dean of the biggest research centre in the Asia-Pacific, where he led a new educational reform initiative in Singapore. Luke has led major international paradigm shifts in the teaching of literacy, his work influencing the shift internationally from traditional psychological models of reading to what has been termed 'the new literacy studies'. Two decades ago, he was among the first researchers to use sociological models to analyse and influence how children develop literacy in schools and classrooms and how literacy is conceptualized in curriculum. He is coauthor of the breakthrough work on literacy and new information economies, 'A Pedagogy of Multiliteracies', in Harvard Educational Review (1996). Together with Peter Freebody, Allan Luke developed the 'four resources reading' model, which is used in state curricula in all Australian states, New York, New Zealand,

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Hong Kong, Singapore, British Columbia, Alberta and the UK. Most of these countries have high achievement scores on the PISA assessment survey.

In the last decade you designed and orchestrated educational reforms in Queensland and in Singapore that are internationally interesting since they do not follow directions of major western educational reforms. How do you explain the shifts in educational systems and what kind of conditions do they address?

The schooling systems of the advanced and post-industrial countries know that they need to change. At the highest levels of governments much talk is about the demands of the new economy and the post 9/11 issues around intercultural relations, new social identities and definitely new technologies. The principal tools and architecture of the schools' curriculum systems and evaluation system have been around for 50, 70 years, even a hundred years and in effect do a pretty adequate job of preparing people for an old economy, for a mono-culture, pre-digital systems of print and for the kind of secure pathways through stable economies that these countries enjoyed for some periods of time. School systems are geared up to prepare people for an economy and the culture that is rapidly fading or in transition.

The demographics show that the 'normal student body' of the 1950s actually doesn't exist anymore, we see linguistic minorities in increasing numbers, very poor kids, children with special needs, Attention Deficit Disorder, etc. We have a very diverse student body whose childhood and whose youth are being fundamentally reshaped by the rapid advent of large scale consumer culture like in the case of Slovenia. Popular and mass media are their principal engagement, digital and on-line environments, with new forms of play and different forms of parenting. Adolescents face an environment where the idea of becoming a plumber or becoming a doctor and staying a plumber or a doctor for thirty or forty years without retraining is under a great deal of structural change and stress. So we're seeing change in everyday life and everyday cultures, with new technologies and new economies.

In the face of such radical change at multiple levels we find two reactions. One is almost that of the proverbial Dutch child with a leaky dyke, to put a finger in this hole and in that hole, adjust the curriculum one year, add another test here, than you have more kids who need second language support, or in your case a Romany population, you just add a special program for them. The response of many teachers is to just shut down and begin to say, well I just can't deal with this, so I'm going to keep doing what I've always done, which also becomes a real problem both for the system administration and the senior bureaucrats but also for the kids and for the teachers themselves. The second

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The interview with Allan Luke was held in Septembre 2006 in Brisbane at the Queensland University of Technology. The recurring themes of discussion were the issues of recent challenges of social and economic conditions for education. Furthermore, alternative ways to approach changes in education were addressed, with an emphasis on the key importance of literacy and its ethical dimension. The inteview ends with critical reflection upon the PISA survey and its influence on the international educational field.

response is what I think we can term an 'educational fundamentalism', a tendency to want to go back to a few simple truths and teaching kids things that will more or less reproduce what we were certain about in the 1950s, 60s or 80s. Each generation tends to do this, but now in the face of globalization the search for very simple answers, for moral anchors, ways to navigate these very difficult and new waters, is pretty much a logical and a sensible reaction by a lot of people. I think part of our job at this historical moment in curriculum debates is to re-envision what schooling for 2010, 2015 or 2020 might be like, and that begins to re-define the debates.

How have your reform projects approached those issues differently and what they envisioned?

The first thing that we tried to do with the reform project New Basics in Queensland, and some of the work that was being done in Singapore, was to create a curriculum debate that focused on futures: social futures, life futures, economic futures, cultural futures, technological futures - what kinds of skills, knowledge, competencies and values would be needed for this next generation - as opposed to a debate that was principally mired in a nostalgia for the past. The second principle for change was based on the knowledge that curriculum reform was but one of the 3 message systems: that we had to try to move pedagogy, curriculum and assessment all at once, if we wanted to get better outcomes from schools and to reorient to new knowledge, values and technologies. The other principle that we used was taken from Theodore Sizer in the United States, that 'less is more'. It means that instead of schools doing more things in response to all these changes they should be doing fewer things with more depth, more clarity, more intellectual rigor. The focus on intellectual, critical work was a distinctively Australian element. The world has been around the block with models of higher order thinking, critical thinking etc. Our approach to it was to run an open model that ranged from critical literacy that involved text analysis and critical analysis, new multiliteracies that involve the new technologies, to fairly traditional debates around values and literature.

The foundational bases for the curriculum reforms were old and new. And the old things we drew on were Dewey's focus on problem-solving and project work, which has been around for a hundred years, Freire's focus on critical education, that's about identifying problems in the world, critically analysing them and solving them, and Vygotsky's concepts of zones of proximal development which give a vocabulary for changing the social relations of the schools to generate different kinds of thinking, and different kinds of cultural practice. So we were really working from 3 good early-century models, Vygotsky, Freire and Dewey, but we were doing this with a strong eye on educational and social futures.

Can you briefly describe the structure of your alternative curriculum model?

The alternative curriculum was based upon the performance in its original sense and it was implemented in 52 schools in Queensland (from year 1 to 11). We have tried to sort the curriculum and simplify it by giving teachers projects or rich tasks, a battery of 8 or 9 rich tasks for every 3 years, around which they could organize for this period. At the same time these projects and their accomplishment became our assessment devices, replacing tests in years 4 and again in years 7 and 9/10. So the curriculum would be built at the school and cluster level (with schools gathering in local groups) to enable them to solve these problems. The tasks ranged from organizing panels of bio-ethics experts, to developing their own web pages, community health plans, itineraries for people who might be visiting from other countries, to designing buildings.

We organized the tasks under four broad curriculum categories which were new: multi-literacies and communications technologies, life pathways and social futures, active citizenship, and environments and technologies. Part of the problem we had was the schools were always fighting about traditional subject areas - Science, English, Mathematics, Social Studies, Physical Education, Arts and Music - and which of these would get the most time. So we came up with these four umbrella categories as a deliberate way to try to get the teachers out of their boxes, because teachers were tending to cling to their disciplines, defend them to the death, teach them separately.

Before New Basics, high schools typically featured an extremely boundaried curriculum, that was broken into different territories with the territorial warlords not talking to each other. We wanted the children to have a more integrated, seamless educational experience and part of our job was to get the Maths and the Physics and the English teachers all sitting at the table talking about what bits they could contribute to the projects. We also made a strong push to give teachers a vocabulary for talking about the different kinds of planning and teaching approaches that they would take to achieve these tasks. We called this 'Productive Pedagogies'.

You have mentioned that your curriculum was based upon performance, how do you understand that? This is an interesting issue, since one of the important current dilemmas in the European educational field is the revision of the concept of knowledge, which is shifting away from a classical ideal of humanistic education towards knowledge better connected with the modern world. The concern in these debates is whether this shift is possible without slipping to the narrow functional expectations of the neoliberal imperative. How does the New Basics Project address this dilemma?

First of all we developed a holistic, situated and contextual approach to performance. For conceptualising rich tasks we went all the way back to Dewey and looked very closely at his notion of enterprise or project as a way of requiring that students actually assemble skills in a demonstrable way to generate not

test scores but artefacts, performances, webpages, presentations, speeches, and essays that were of demonstrable quality.

When we set out to shift some of the high stakes assessment in our system, from standardised tests and exams, which are cheap and easy to administer but only cover part of a broader canvas of real world performance, this raises a whole set of technical, cultural and political questions. The technical questions pivot around validity and reliability. There are those who would argue that the most reliable indicators are the simplest indicators, like standardised achievement tests, which is the case with most competence driven models. I see fundamental problems with the competency model, since the push for it comes from a behaviourist educational psychology paradigm and from a model of neo-liberal policy on the other, that wants cost benefit analysis in production of human capital. Its tendency to identify generic skills and competences tends to ride over the significance of context and can often lead to a focus less upon what students know, their cultural background and their linguistic competences and more on acquisition of measurable skills.

Another important issue regarding the competence model is that they only represent one indicator of one's overall, in Bourdieu's terms, 'cultural capital' and human capital. It tends to move away from questions about values and ethics. It moves away from the very things that the new rhetoric of the EU, OECD around new economies tend to emphasize, such as group work, critical thinking, independent problem solving, entrepreneurship. So we have several contradictions around the competency-based agenda: (1) it's driven by political, economic and policy reasons, as much as it is for genuine educational reasons; (2) it's only part of the educational picture - skills and competencies, psychologically measured, observable, are only part of what you learn, and what you want people to learn; and (3) it will not give us, or drive the system in the direction of the broader, holistic, and contextual learning that we require for the new economies.

In New Basics we assumed that rich tasks are extremely valid, because they capture a wide range of student behaviours, performances, knowledges, actions and practices – the transfer of training and assembly of skills. Yet the assessment and evaluation of them needs to be put within a technical system that won't decrease its reliability. In Queensland we have got quite a bit of experience with that because we haven't had examinations since 1973. We assemble panels of teachers to look at portfolios of students' work. We engage them in a process of showing their own students' work, evaluating them at school level and then coming together in regional district and state wide panels to actually set standards and to make claims about what they think is good work, mediocre work and so forth. We have also put standardized core skills testing program underneath. But it is not used to evaluate individual students, instead it allows us to spot ranking or marking any anomalies in the teacher judgement moderation process. We check on interrater reliability and between school variance.

Where the students may score very poorly on the standardised test, but

may have very highly rated projects, we can go back end check the moderation process to see whether there are any glitches. So we use standardised tests here to moderate and to review and scale teacher judgement.

This brings me to the cultural issues around teacher moderated judgements. First of all, it marks out for us a very positive shift in teacher culture in Queensland. If teachers feel that the tests, competencies, scales or exams are being designed and imposed upon them by testing authorities, by universities, by educational researchers, external of the school, they will simply comply to the test or resist the test, but they won't see the assessment practices as being of their own making or having immediate diagnostic, formative use. So while they have control over pedagogies, and they have control to an extent over an enacted curriculum, they will very much become slaves to an external examination or testing system that they don't necessarily buy into. By enfranchising teachers into the moderation process we get local ownership of the standards and criteria. The professional development benefits are huge.

When you sit teachers around students' work and have them bring their own students' work, compare and moderate it, teachers inevitably turn this process into the richest professional development experience. This is the most powerful way of de-privatising teacher culture, of building communities of practice and collegiality and of getting teacher ownership of the standards setting and accountability processes. They start saying: 'I did not know that you can get that out of a 15 year old. How did you go about doing that?' or 'Maybe I need to look at some different approaches?' So it marries teacher conceptions with execution, it brings back the alignment between pedagogy and assessment that is being destroyed in a neoliberal policy environment that just tests for the sake of external accountability. The third element in the cultural political aspect of it is external accountability to parents, media, politicians and communities. The approach of the world bank, OECD, EU, and the approach driven by PISA is that single shot, single day test scores are the best way of assuring legislatures, and communities and parents in that their children are doing well.

We have taken a different approach based upon the work of Theodore Sizer of Brown University. What we tried to do was bring accountability back to school halls, back to communities, and back to parents in demonstrable ways. A very powerful component of the rich task agenda in New Basics was the engagement of parents in public demonstrations of the project work, where parents and community members are invited into the school. Kids show the parents their writing or give examples of their debating and their oration skills. Schools have nights when Aboriginal parents would come in and see their kids' web pages. In some cases, parents were directly involved in times even in judging and the assessment of the task.

Literacy has an important position in constructing curriculum and knowledge in your projects, you have also mentioned critical literacy as focal for developing higher intellectual engagement. How do you understand literacy and in what significant ways does it differ from the traditional concept of functional literacy?

The discourses around functional literacy tend to be very reductionist, instrumentalist, focusing on use. They tend to omit the values and ethical issues about use: use in which social fields of exchange, to what ends, with which meaning structures, for whom. An ethic of functional literacy is often learning about how to be an industrial participant or learning to be a good corporate worker as against having an analysis of the structures that are running your life. Critical literacy encourages students to develop an analysis of their relations with the means of production and the new modes of information. People have to have agentive ways of engaging with their labour, so there has to be a functional ethic, but if it forecloses or closes down a critical analysis of fields, we've educated for compliance, not critical citizenship.

We have redefined literacy in the west, I think, generally, and in Australia particularly, again to deal with what we think are the emergent issues around changing economies and cultures. I define literacy as a set of social practices with the communications technologies of print and other media. But we're not just talking about reading and writing – decoding and encoding – we're talking about the array of texts - written, oral, traditional, emergent - and how we actually use them in family life, in work life, in religious life. So first of all we have to expand reading and writing from narrow skill and competence definitions to encompass the broad array of practices in traditional contexts and in emergent economies.

Yet dominant technologies and modes of information are in transition. People working in the finance area or even in retail sales, may be dealing with traditional print literacy in some instances, but as well will be dealing with lots of technological interfaces, with text messaging. We are as likely to engage with mass media and the internet and to read on-line as we are to read a book. Kids are developing competencies at video gaming, and dealing with complex scenarios and multiple representation systems on Xboxes or in web surfing, even before or as they're learning how to read traditional children's tales. We are living in a historical juncture that is probably as significant as Gutenburg's moment of the printing press, or the rise of mass radio and television in the post-war period, or when the manuscripts moved out of the Catholic monasteries and into the public domain via Luther's first Protestant literacy campaigns.

So literacy itself is in transition and what we have developed in Queensland and elsewhere, was based upon our 1996 paper 'A Pedagogy of Multiliteracies' in Harvard Educational Review. We thought the school should begin to shift to engage with new forms of representation as well as some traditional ones, music, dance, aesthetic modes which had become the new culture industries, on-line communications, new forms of digital communications and even oral and speech communication patterns; and not be solely preoccupied with print. When we pushed this agenda we found out right away that the teachers are more resistant than the students. The students take to these new technologies like fish to water, at home, in the video arcades and elsewhere in popular cultures. But the teachers actually are defending print, partly because the kids know more about the technologies than they do. So we've got an unprecedented historical

moment, when the next generation of teachers and learners and workers knows a great deal more about the technologies than the current generation that has power in the classrooms. This is a similar moment as when Plato decried writing, and argued that it was the end of education, the end of dialogue, the end of poetics and the end of oral memory. Even the medieval Catholic monastery was terrified by Luther and the printing press, because they were going to take control of the mode of information out of the church's hands and lay it into people's hands, shifting it to teachers and schools in the German state system. So these new technologies have destabilised the monopoly of print. At the same time we live in a risk-filled society – it's a post-Marxist age – in which modes of information have replaced modes of production, so your command of the modes of information will partly determine your relationship to them. What that means is that in a multi-mediated, multi-semiotic universe, everybody is trying to position you, sell to you, spam you, phish you, virus you, ideologically push you in this direction or not, try to get you to vote for this person, buy that thing. Corporations want us to do everything from conduct political relations to sexual relations through these new modes of information. And there is a sheer volume and redundancy of information that the school child today might have to deal with. The imperatives in this environment for critical literacy are undeniable.

The old argument, the fundamentalist argument, that is 'well you've got to go back to the basics; everyone has to be able to deal with print'. Well that's true, but basic print skill is necessary but not sufficient. And just because you can functionally decode written text, doesn't necessarily mean that you're going to be prepared for a corporate workplace or a civic life where you've got to deal with multimodal texts.

If students do not have the capacity to navigate, weigh, judge, reject, critique, analyse the purposes and the consequences of this universe of texts, they're going to be in trouble. So the point that we make is that the new basics, the new things that are required are not proper spelling and handwriting, as attractive as these may seem as fundamentalist goals. We are dealing with the riches and the crap on the internet, we are wading our way through complex financial forms and taxation returns, we are reading newspapers and watching media reports in which the news is all biased and slanted. These require critical multimodalities and multiliteracies. So the whole notion of literacy opens out. Basic literacy, reading comprehension, decoding, critical literacy are all necessary but they are not sufficient in itself. You have to have the whole package. On top of that you've got to be able to work in oral culture, in print culture and in multimodal digital culture and to be able to skirt and mix and match those different modalities to be effective, to be self-interested but also to be interested in the common good.

So you want to run literacy as an open church. You want to have it as a nodal point around which the key core questions of access to text and discourse, dealing with information, weighing up information, producing information and not just consuming it are focal.

Would you explain how you understand ethical and social responsibility of literacy education in new times?

We can carve up the ethical and political questions about literacy education on two different axes. One axis traditionally has historically been about simple access, since educational systems produce stratified access to different kinds of literacy, different accesses to different textual corpi, different genres of textual practice, different forms of the literate person. The selective production of different literates and illiteracies has served, as Bourdieu has pointed out in Europe, purposes of class stratification, from traditional high literary knowledge for the elite to new functional literacy for the working classes and whatever barebones code literacy you might want for under-classes and marginalised populations. Historically part of the equation is giving people rudimentary access to the code. Its been replicated in relationship to the digital divide with particular populations of students having high levels of digital engagement, access to the new information archive and the capacity to capitalise on this, and other parts of the population relatively cut off from the new economies and the new civic spheres, blogs and new forms of consumptions and leisure. So we are seeing the old inequalities transformed into new stratifications of access, as it was during the post war print period. This is one way of seeing ethics in literacy education. It's about equality, about people getting access to a range of information that they need to be critical, active citizens, to take care of themselves, their families and communities, to identify and look after their interests.

The second question is about the critical, the kind of analytic purchase on the world. This entails the comprehension and the capacity to second guess texts, to critically engage with new systems of information. So we have got one axis of access and one axis of the critical. The model of critical education comes initially from Freire, but could be traced right back to elements of the Socratic tradition, and enlightenment notions that the purpose of the word is to understand the world. You have got this history of the critical, that predates the 60s, predates Marxism and the critique of industrialism. It is about critical analysis of the world, taking the word apart, seeing how it operates, what it does to people in whose interest and to what ends. In Queensland and elsewhere we addressed the complexity of literacy in new times by foregrounding a model that talks about coding and meaning making, pragmatic use and critique and understands literacy as a multifaceted and multipurpose cultural toolkit for dealing with new cultures and new economies. What we have argued for is that the first level of access has to be about people learning the code, the lingua franca of dominant systems, of media, of registers, but also they have got to learn a language, a writing system or system of inscription, whether that's digital or visual language. Simultaneously people need to have the access to archive of meaning and the cultural scripts that are around them. So we argue that there is a place for traditional classicism, for traditional debates around values as many would argue for. We can think of comprehension and engagement as learning the cultural scripts and genres available in your culture. This may

mean studying classical drama, Socratic dialogue or poetry or it may mean dealing with the webpage as new textual form. The learning of those cultural scripts unlocks meaning-making histories and potentials. We also have talked a lot about use, about engaging with social fields of exchange, all of the sites in everyday life, consumption, media participation, civic and governmental, legislative processes, learning the scripts of everyday life where literacy is used. The critical we think of not just as political analysis and ethical analysis, but having a normative evaluation of the social fields where literacy is used. In Freire's terms it's about being able to read a world around you, read patterns and make normative judgements. In this way, it necessarily is an ethical/moral activity, about rectitude and rightness, its consequences for people's lives. Discourse is something in the world that has material effects on people. Some people would read this approach as a political agenda around literacy. But it is ultimately about making sense of the world around you. The problem is that there is a validity in all of the different elements of literacy. The question facing governments is how and whether they choose to balance that approach and the richness of their definitions of literacy. It is a little more complex than saying: 'Out with the old literacy, bring in the new!' Raymond Williams talks about it in terms always of the clash of residual and emergent cultures. And literacy education and its definitions and discontents are the very sites where cultures emerge, recede, clash and struggle.

There are controversial debates and critique over PISA assignments in Europe, as being too pragmatic, which could as such influence the reduction of literacy in education. What is your opinion on PISA assignments?

PISA has real value if you understand its limitations. It gives you comparative data not just on achievement per se, but the real value is the degree to which the PISA team attempted to explore key issues of policy and school reform variables, and the impacts of social class on achievement. They also addressed class reproduction and social inequality, showing which systems were making trade-offs between overall achievement quality and equity of results. Simply, some policy and curriculum/assessment approaches seem to generate larger gaps in top and bottom achievement, and others, notably the Nordic countries and Canada, appear to attain both quality and a flatter distribution spread, that is, more equitable outcomes across the population. What has to be said about PISA right at the onset, is that it is a set of normative, standardised achievement tests in a pencil and paper format done on a large scale, with all the inherent limits in this. The test developers were reasonably imaginative in their specification of domains and their item development and analysis. They were able to open up their assessment models, as well as they could, to deal with, for instance, writing in a more holistic rather than technical orientation. The problem with it is that single day tests do not tell you about many things that are of educational importance; for instance, they tell you little about pedagogical practices, social outcomes and effects, about student social capital, about the quality of artefact

production, about student live performance and aesthetics, about creativity and critical literacy, about new technological engagement, about language development per se, about entrepreneurship. They do not tell you about ethical and moral judgement. Recall, these are amongst our key educational policy goals in the OECD, EU and most nations' »knowledge economy« statements. But simply – they're not in the high stakes evaluation systems that we're using to make efficacy claims. This is a real historical contradiction and policy anomaly: we aren't using our own policy aims and educational goals as a yardstick against which to measure the systems. The interesting PISA findings that we are trying to bring into debate in Australia are the elements that show that some systems appear to be creating conditions for inequality or exacerbating conditions of social inequality. In some countries and their educational systems, certain combinations of socioeconomic policies exacerbate the reproductive effects of schooling and of stratifying the population. We know that one of the effects of globalisation and of the coming of corporate governments and the recession of the state and its services is the increase in the disparity between rich and poor. And a critique of corporatization or globalisation should be a part of educational studies and educational policy making. Education has to prepare people for not just accepting this new world order but critiquing it and picking it apart and seeing their interest. That is my view of political ethics in education. If we are making education for an egalitarian democratic society, we need to understand what educational policies, what definitions of literacy, what forms of pedagogy, what approaches to assessment, what modes of curriculum actually tend to, on standardised testing like PISA, exacerbate the performance gradients between the best and the least well off.

On the other hand we have a crisis in assessment. Present testing and examination systems were geared up to produce a different kind of human subject, they were geared up to assess, define, classify, stream and reproduce a person of another historical and economic era. We have examination systems that are about testing curricular content, about assessing a reproductive engagement with an archive of a particular kind of disciplinary knowledge. We have standardised norm reference achievement tests that had their genesis in the testing of functional literacy, basic skills. The models were developed in the US in 1910 and were meant to reproduce an industrial worker that is able to show replicable skills; and PISA is a species of this model. That is interesting, because new governments are talking of higher order thinking, flexibility, social capital, entrepreneurship - so we have a real problem here whether we agree with or critique the new corporate educational model, since it is obvious that these tests cannot test those goals.

Are we looking at a new global test that teachers will teach up to?

I hope not, because one of the things we do know from socio-cultural psychology theory, is that learning occurs in situ and that it is about tool manipulation and artefact production: learning is contextualised performance.

And as I said, these traditional psychometrics cannot in their present state of the art, evaluate competence, knowledge, values in situ. Trying to pull up test scores by teaching to the test could be a very silly policy because you might be mortgaging a cultural and economic future that you're trying to save. Schools have to do more things than to achieve high standardised achievement scores. You do not want to simply adjust everything to PISA or any other test results. Though they provide useful diagnostic information and formative information on policy and practice - there is a real danger of narrowing pedagogy and curriculum to meet international standards.

We need to understand that there are social and cultural outcomes of education that are being lost in these discussions. Our task as educators and teachers is to come up with alternative types of evidence on whether our system is working or not. For instance, we can look at indicators like attendance, classroom engagement levels, we can longitudinally track life trajectories. There are also happiness, mental health, and belief studies that can tell us a lot about the kind of human subject who moves through educational systems. The questions about social cohesion, social harmony, class mobility, intercultural communication are all the things that are discarded in test driven agenda. It is not in the interest of any nation or educational system to slavishly follow an international testing agenda. If you focus on the basic and functional you lose traditional canonical and critical transformative capacities, or worse yet, those things actually get stratified, so that only certain classes and the elites have them.

How do you see the influence of critical literacy in Queensland reflecting in high PISA scores?

Elements of critical literacy have been in Australian schools for the better part of 10 to 15 years. There has been a recent attack of conservatives and the prime minister, saying that critical is postmodern, Marxist, Maoist (they clearly haven't studied their history or philosophy). These critiques are politically and ideologically motivated. We have introduced critical literacy in two moves. First we worked with teachers in preservice education, way in advance of the gradual curricular change; this set the intellectual sensibility and threshold knowledge of the teachers over a long period of time. The second strategy was to give them no simple formula or script but rather an open space around reading comprehension, composition, to work on critical concepts, to really develop and explore them and play with them. We never said: 'we have this new approach called critical literacy and you just need to do these three steps'. This kind of reform approach – the selling of a magic method - has an effect of polarizing workforces, rising and then fading away, partly because there is little substantive intellectual engagement by teachers with the concepts and ideas. Teachers stubbornly resist curriculum change - sometimes with great justification. We have spent almost a decade in teacher education institutions across the nation teaching different ways of working with text and discourse,

with multimodal texts, and giving teachers curricular space to work on them, as against turning it into reform movement. So it was not named in curriculum until the mid-1990s. When it came in everybody thought that that gives us some licence for the reform, and, best yet, others just thought: 'this is what I've been doing for years'.

Critical literacy is literacy with an attitude, it is a disposition towards text, it is an attitude towards the world, it is an understanding of the things you have to read and write, the tricky, fickle and multi-layered textual world around you, the things you have to decide about. Once teachers grasp the concept, it begins to fly. In terms of test scores, first of all Queensland does not have exams, it has had portfolio based assessment for almost 30 years. We have the assessment space for students to do critical work. What that means is that the students in senior years ensemble different text genres, demonstration of their work, some of them are traditional like poems or essays, some are multimodal, analysing advertising text; and they go to moderation boards. What we had to do was introduce the criteria and the lived experience in a mind-set for teachers who would moderate and judge these texts.

On state reading tests - prior to the reforms, around 20% of Queensland children were struggling with reading at the end of year 3. In 1999 we introduced a multi-code model of literacy, the four resources model: this argued for basics (e.g. phonemic awareness, decoding, spelling, cultural scripts and meaning and how to use them) but also how to read and use texts with critical attitude and disposition. We introduced this model and gave each school two years for them to develop a plan of how they were going to come up with a different approach – and how they were going to link this new digital multiliteracies. But we never told them what to do: we provided a shared vocabulary, asked them to analyse their student and staff resources, come up with a plan and set some targets, and tell us about it. The Queensland approach has worked because we have built the professional expertise and dialogue with teachers. Five years later, on test scores Queensland went from second from the bottom to third from the top; the total number of struggling readers was halved to around 10%. We have got better standardised achievement scores in year three by working with teachers and building from the grassroots up. This is the most powerful lesson here. I believe teaching is intellectual work and the teachers are intellectual activists. Despite policy makers' best efforts, ultimately these systems change in significant ways only because and through the power of the educational ideas. These have to be debated, discussed, embodied by some, critiqued by others. Teaching is still the core business of these systems. And teachers count. And educational ideas can move them in sustainable and profound ways that curriculum changes and policy fixes cannot.

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About the Educational Plan in State Primary Schools – What the Empirical Data Show

Abstract: The paper addresses questions concerning the educational plan in Slovenian state primary schools on theoretical and empirical levels. The first part reflects on theoretical questions of the educational plan and discusses the bases from which the empirical research was derived. We then present our findings on questions of whether an educational plan is necessary in schools at all, what teachers and school principals understand as being included in the educational plan of their school, and what school principals believe should be included in such a plan. The empirical data of the research demonstrate that with regard to both the question of what should be included in the educational plan and what is in fact included in the plan, most schools take fewer factors into consideration than are, in our judgement, necessary for the quality design of an educational plan. Research shows that schools need professional support in the conception of the school plan and that until now the profession has not done enough in this area. In the future, more attention should be devoted to questions of the planned consideration of the scope of the educational activity of schools, the inclusion of formal, prescribed frames of reference in the moral educational activity of a state school, and to the design of the educational plan in relation to the dimension of values.

Keywords: educational plan of the school; state school; states that are essentially by-products; results of empirical research; knowledge, knowing, skills, competencies, values; self-evaluation of the work of the school

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1 Introduction

In the paper, we proceed from the premise that a school as a whole (as an institution) must form an educational plan which it then follows in the realisation of educational goals. In spite of the fact that in Slovenia there are formal value frameworks and various normative frameworks (regulations) which determine the functioning of the state schoo, in no longer defining and no longer defining the 'educational doctrine' at the state level, the state allows pedagogical workers in state schools to design the complete educational plan according to their professional judgement. To the extent that the educational functioning of the state school is not completely regulated, there are demands on the school for an increased reflection on the establishment of its educational operations. In the last decade, questions concerning the design of the educational plan have arisen many times. Until now, however, we have not had empirical data concerning how these questions are viewed by those who actually participate in these processes: teachers, school leaderships, pupils and parents. In research[1] undertaken on a representative sample of compulsory schools (i.e., nine-year comprehensive primary and lower-secondary schools, hereinafter referred to as 'primary schools'), the findings of which are only presented here in part, we have gathered certain information that enables a reflection on these problematic issues.

[1] The research is entitled ' The Social Climate in School – the Educational Concept, the Prevention of Undesired Phenomena (Violence, Drugs) and the Evaluation of Preventative Programmes' (2004-2006), and was financed jointly by the Ministry of Education and Sport of the Republic of Slovenia and the Slovenian Research Agency.

2 The Educational Plan: An Imperative of Every School

2.1 Instruction and its Goals

As a starting point for a discussion of the educational plan of the state school, we take Strmčnik's definition of instruction as '... a synthetic concept which includes and designates three fundamental activities of equal value: teaching, learning and moral education, connected to the functioning of s/he who teaches and s/he who learns...' (Strmčnik 1999, p. 213). Strmčnik also establishes the main tasks through which instruction realises the educational goals as a whole. These tasks cover: 'the physical health area, the intellectual area, the social-moral area, the aesthetic-artistic area' (ibid, p. 214). The goals of the primary school, which include the tasks listed above, are defined in the Slovenian Primary School Act as: '...stimulating the harmonised cognitive, emotional, spiritual and social development of the individual,' 'developing talents and equipping the individual for the experience of artistic works and for artistic expression,' 'forming and stimulating a healthy lifestyle and a responsible attitude towards the natural environment' and so on (Slovenian Primary School Act 1996, p. 109). Further, Strmčnik states that so-called formative education '... is only realisable if instruction and learning are focused on the more demanding deeper cognitive and value dimensions of the learning contents, on the fundamental structure of subjects, phenomena and processes, on basic cause-effect, intentional, functional and other logical relationships and oppositions, on techniques of generalisation, on dialectic development, problem relatedness, transferability, comparability, applicability and usability of knowledge' (Strmčnik 1999, p. 217).

In principle, we thus adopt the premise of so-called moral education instruction and the interpretation that instruction must be designed so that it influences the pupil's character (cf. Jarovnik, Šebart 1991, p. 143; Kovač Šebart 2002, pp. 51-56). As Herbart wrote, with instruction '... a great deal is necessary for even the gradual upgrading of knowledge to learning; even more difficult is to successfully strengthen the character traits of the individual on this basis... In this regard, we can, however, demonstrate how the instruction should be designed in order to maximise the possibility of achieving this kind of effect; but the degree to which we will actually come close to realising this goal is dependent on the individual' (Herbart 1991, p. 572).

Reflecting on this, we also include the thesis about moral education as 'states that are essentially by-products.' States that are essentially by-products are '... states that we necessarily fail to grasp when we posit them as the direct goal of our activity; we can only realise them as unintentional by-products of striving for some other goals' (Salecl 1991, p. 133; cf. Elster 1983). For example, it is desirable for the pupils to respect their teacher as the quality of the teacher's work depends on whether they are respected or not. But the teacher cannot gain the respect of the pupils directly, by saying to them 'respect me' or by calling on them to show respect for their own good etc. Even if the pupil says to him/herself 'yes, it is true, I have to respect the teacher in order to be successful at

school,' they will not experience the desired effects of respect. If, however, the teacher explains a subject in such a way that the pupils are surprised by the new knowledge or by the way it has been presented so that it arouses curiosity in them and a desire to know more about the subject, the teacher does something that awakens respect in them as a teacher (that effect thus produces knowledge, a skill in the way the teacher passes on the material etc.). Similarly, the teacher can earn respect if the pupils judge that their conduct is just. That is, not by simply stating that they are just or saying that they will strive to be just, but rather by behaving in a just fashion in the pupils' eyes.

However, the thesis that states that are essentially by-products cannot be achieved directly, in that we set them as direct goals of behaviour, does not (formally) mean that it is impossible to establish shared values which the teachers follow in their educational work or that it is impossible to plan education and educational goals etc.

Since the problematic issues defined in this way, as advocated by the so-called educational concept of school, were often linked to an absence of moral education or an assertion that what is at stake here is a concept of a school without moral education and values, we would like to emphasise that what is written above in no way means that moral education in school is impossible to conceive of and plan. The problem is not unambiguous: what cannot be overlooked, and what Elster's thesis about states that are essentially by-products points out, is above all the fact that in certain areas it is simply impossible to presuppose universal causal connections. However, this *does not mean* – if we focus on the area of the educational activity of the school – the rejection of reflections on conduct and the foreseen effects at the level of planning principled, systematic solutions, establishing and implementing a desirable selection of values, establishing formal frameworks for activity designed to produce the desired effects etc. It does, however, mean that it is necessary to *take into account* the thesis of moral education as an essential by-product in endeavours at the level of designing and implementing the educational plan of the school. An understanding of moral education as an essential by-product in this sense does not lead away from educational endeavours; quite the opposite, it simply establishes a basis for the planning of productive educational activity that will rely on misguided suppositions about the direct cause-effect connections between particular conduct and the effects which are supposed to be produced by this conduct. The problem is not, of course, that such conduct would not have educational effects but rather that it no doubt *does have* educational effects – only often those that we did not foresee.

We follow the interpretation that clearly states that the position the teacher (at school) should strive for '... must be manifested as a map or, wherever possible, a plan of a well-ordered city' (Herbart 1919, Part 2, pp. 19-20; summarised after: Protner 2001, pp. 38-39).

2.2 Do Schools Have the Appropriate Professional Support for Designing the Educational Plan?

Following the logic outlined above we can point out that even in the second half of the 1990s, when the curriculum for the nine-year primary school came into being, Kroflič wrote that '... the answer to the question as to whether school is possible without an educational concept... is unambiguous: if the concept of the school is not clearly and precisely planned this does not mean that the school as an institution does not follow its own imminent goals which take the place of the conceptual vacuum' (Kroflič 1997, pp. 278-279). The author also noted the fact that the model of school legislation that builds on goal- and process-oriented instruction plans is also a logical consequence of a particular critical period when the concept of the formal educational framework changes due to democratic social changes. It starts being based on shared values that do not exclude anyone because of their beliefs, with a clear aim of demonstrating the pluralism of values in society and establishing a tolerant attitude to that pluralism. The syllabus and instructional plans are determined and these define the general and operative goals and standards of knowledge, as well as the examples of contents through which teachers can attain these instructional goals and standards of knowledge. For today's use, however, what is important is that in the guidelines for preparing instructional plans it was also clearly stated that within these plans general educational goals are defined which concern every component of the individual's development and that the instructional plans are, in fact, composed in this way. Undoubtedly, the formative and moral educational function of the school is already established here.

It is true that in the case of the overall planning, realisation and evaluation of educational goals, the teacher's endeavours have less concrete support than with operative educational goals at the level of attainment (processes and results) which are the basis for assessing the goals attained at a particular level of knowledge (cf. Instructions for the Work of Subject and Programme Curricula Commissions, 10. 12. 1996). Textbooks and workbooks, along with accompanying materials for teachers, also play a large part in easing the planning of the attainment of these goals for teachers on the frontline.

Similarly, the question of whether schools and teachers have appropriate and sufficiently concrete support when it comes to designing the educational plan and attaining educational goals can also be placed in relation to the value context in which the state school functions in a democratic, value-plural arrangement which, nonetheless, has clearly defined shared values (for more on this, see Kovač Šebart 2002; The White Paper... 1995). Schools must locate the question of education and the educational plan in a value context that is itself not simple because built into it is an internal tension between shared values and the question of tolerance to particular values and beliefs. The fact is that each school also functions in a particular concrete environment which, with its specificities, influences the problems that the educational plan must solve. Are schools sufficiently independent when it comes to the question of how

to responsibly, and in an agreed way, include the dimension of values in the educational plan?

Here we must point out that in the empirical research of the educational plan in Slovenian state schools we have assumed that teachers and schools have (and must have) professional autonomy to be able to plan and execute the educational process in a quality way and to realise the educational goals as a whole, and that the selection of the path for their realisation is the domain of the teachers. The question we address is whether the schools and teachers have suitable professional support and whether they are professionally prepared well enough for the changes brought about by instructional plans adjusted to instructional goals.

2.3 The Educational Plan and Need for Self-Evaluation: The Complexity of Goals, the Unavailability of Extra-School Factors

In this regard, we believe that it is impossible to reflect upon, and plan in a quality way, the complete attainment of educational goals if the school as an institution and teachers do not establish and assure the quality of their educational activity (cf. MacBeath 1999). Such self-evaluation must represent an integral part of the establishment of the educational plan. MacBeath, an acknowledged expert on the self-evaluation of the work of schools, draws attention to the fact that the traditional 'input-output black-box approach,' as he calls it, is unsuitable for this kind of work (cf. MacBeath 2003). If we want to measure the influence that work at school has on assuring the established educational goals in their entirety (for the purposes of the analysis we connect these in the broadest sense to the pupil's knowledge, skills and values), where the influence of instructional materials, the lesson, the classroom and school climate, extra-school factors etc., are all interwoven in the realisation of these goals, it is impossible to simply measure the input and output results and calculate the added value contributed by a school. The author, therefore, suggests that in this case it is better to direct the attention and evaluation to the *process* and to the level of *doing* and thus evaluate how the school functions. He proposes that in the planning, realisation and evaluation of the educational goals that must be attained by the school it is necessary to always bear in mind several interconnected levels, namely knowing, feeling and doing. Further, these cannot be understood as discrete entities following one another and hierarchically increasing in significance.

We thus present below a scheme (summarised and adapted after MacBeath) according to which the school should plan, implement and attain goals on three levels: 1. knowing, 2. feeling 3. doing. Let us briefly examine the scheme. *Knowing*, for instance, in this matrix implies a complex notion of knowledge which includes the horizontal, the vertical and the connection of elements on both axes, and a similar logic holds for the other two dimensions, *feeling* and *doing*. Knowing thus extends from a familiarisation with facts to understanding; skills and competencies also demand knowledge, and in this regard MacBeath

draws our attention to *knowing* about how competencies are valued; familiarity with values (knowledge about values) also includes evaluation, which means knowing about which values are important, how, to whom etc. We understand the dimension of *feeling* as a caveat that the school and the teacher must try to ensure that the pupil identifies with the acquired knowledge and skills, and that values are internalised. The dimension of *doing* is where knowledge, skills and values achieve realisation and are thus acquired, and where the results are most reliably demonstrated (for instance, through the self-evaluation of the school).

	Understanding	*Competencies*	*Values*
Knowing	*Acquiring* knowledge which is processed in ways that lead to understanding	*Knowing* what skills and competencies are valued in different contexts and by different people (e.g., by employers)	*Recognising* which values are important and which are less important for the welfare of self and others
Feeling	*Feeling* that knowledge acquired is important to you	Having *confidence* in your own skills and a belief that they can be put to use	*Internalising* values and making them your own
Doing	*Using* knowledge to act, to initiate, to make decisions	*Practising* and testing competencies in real-life situations	*Acting on* and *staying faithful to* values, even in challenging social situations

Scheme 1: Attaining goals at three levels: 1. knowing, 2. feeling and 3. doing. John MacBeath (2003)

According to the logic of the vertical, we now examine the acquisition of values. The pupil must understand values, and the scheme points out that the acquisition of values (also) at the level of doing is not value-neutral, as the pupil all but recognises '...which values are important and which are less important for the welfare of self and others' (see the scheme). Further, the school develops the sense of values in such a way that the pupils 'internalise' the known and value-differentiated values 'making them their own' (ibid.). And what is perhaps the most important for the planning, realisation and self-evaluation of the complete attainment of educational goals: the school must educate the pupils in the area of values through doing. The values must be actualised while, at the same time, it is through the very conduct of the pupils that it is possible to determine which of the values have been internalised, taken as their own. The level of doing suggests that the purpose of internalisation lies in the pupils actualising the values so that they '...stay faithful to values, even in challenging social situations' (ibid.).

In addition, it is necessary to take into account forces which lie beyond the classroom and beyond the school – something that is not explicitly visible in the

scheme presented here. To this end, it would be necessary to prepare two linked schemes, one of which would illustrate the goals of the school and the messages that the school conveys to the pupil, while the other would present the context beyond school (family, society, culture...), where the acquisition of knowledge, skills and values also takes place, albeit less intentionally (coincidentally, informally), interpreting, complementing, supporting or thwarting that which the pupil obtains at the state school.

The division into the knowing, feeling and doing of the individual, as shown in the scheme, draws our attention to the fact that in planning the overall realisation of the educational goals it is important to reflect on the gap that can emerge between what we say and what we do. Here we cannot bypass the placement of problematic issues in a concrete social reality. If the reality functions differently than it should according to a particular principle, goal or value, this needs to be reflected and not avoided. The view into the 'duality' of the scheme also prevents the 'ephemerality' of interpretations which totalitarian demands can direct to the school (with the demand that the school 'totally' subjugate those difficulties whose causes lie beyond the school), while at the same time pointing out that in persisting with certain values and behaviours the institution can actually produce a subversive reaction to these demands (albeit indirectly) and open the space for the establishment of the autonomous behaviour of the individual.

Following on from the above, and in an attempt at professional assistance in seeking a solution for the planning, realisation and self-evaluation of the overall realisation of educational goals, we will now deal with a framework for establishing those areas which should (conditionally speaking) be included by the educational plan of the school. We speak of a framework because schools must complete it with their own contents and because we believe that a unified educational doctrine at the state level would limit the professional autonomy of the school and teachers and lead to a situation from which we would wish to withdraw professionally. In saying this, however, we do not concur with the notion that schools do not need assistance in considering the question of what should be included in their educational plan in order to enable the overall realisation of educational goals.

2.4 What Should the Educational Plan Include?

We should not forget that the foundations on which the educational plan is designed are first of all of a formal nature.

What, in brief, does the *formal (prescribed) framework* of the educational operation of public schools, whose status is also defined by the fact that it is determined outside school, consist of? At the time of undertaking the empirical research mentioned above, there was a clearly determined formal framework for the direct educational conduct of pedagogical workers and the educational operation of the school, e.g., *shared values*, written in the Constitution and in school legislation (amongst other principles, those of equal opportunity, of the

absence of indoctrination in instruction, of justice, of values such as tolerance and solidarity etc.). G*eneral goals of instruction* were written for each subject, which should assure overall personal development and thus the formative component of the instruction. The formal framework also prescribed in the regulations defining the *rights and responsibilities of pupils* in primary school and the *common process standards* in the formal process of pronouncing educational measures. Amongst other things, these enabled the *autonomous* formation of *rules of inhabitation* in the institution (house rules) and the formation of a mode of organisation of pupils that enables their *active participation* in solving common problems (class and school committees, school parliament).

In connection with this, we assume that the design of the educational plan of the school, similar to the plan of the teacher's individual instructional preparation, is divided between the directive provisions at the state level and the autonomous jurisdiction of the school and the teacher. The educational activity of teachers in the classroom is thus divided between formal (i.e., normatively prescribed) and informal pedagogical conduct. We have also assumed that the design of the educational plan (of the school and the teacher) is professionally demanding and that in some respects it is even more complicated than the individual instructional preparation, where the emphasis is on how to convey certain material to the pupils (although, of course, the two are not completely separate), and that 'it demands a familiarity with the logic of the functioning of key educational factors in the institution, as well as engagement with some crucial current problems which intrude into everyday school life (violence, truancy)' (Kroflič 2002, p. 71).

Consistent with the above, as a starting point for the design of the educational plan of the school we have broadly defined its framework which, in our judgement, should include the following areas:

1. Formal rules and norms, as determined by:
   a. shared values
   b. principles of education
   c. legally prescribed demands for the absence of indoctrination in the classroom, demands for criticalness, plurality and objectivity
   d. in the code of the prescribed rights and responsibilities, rules, infringements and sanctions which concern the state school
   e. the consequent school rules.
2. The conceptualisation of the teacher as an authority on which the following come to bear:
   a. the power of the personality (which is not independent of knowledge, just conduct, attitude to pupils)
   b. the instruction materials that the teacher must master
   c. applied forms of instruction and methods of work in the classroom.[2]

[2] 'If the models of learning and the methods of instruction and teaching, as well as the methodology, are directed towards finding techniques to enable the next foothold in the wall of the subject, then these are the rights ones; if they are simply the empty favouritism of the approach for the approach's sake, then they have nothing to add and do not benefit anyone' (Gaber 2000, p. 136).

3. The school culture which indirectly establishes relationships in the classroom which influence, for example:

a. the actualisation of the formal framework of norms and rules in the school
b. the manner of leadership of the school
c. happenings during breaks, lunch... at times when lessons are not in progress but the pupils are still at school etc.
d. the range of extracurricular activities offered.

The school is, of course, not isolated. Parents and society in general also have an influence on the weight of pedagogical conduct in school.

4. Co-operation between the school and parents
5. Co-operation with the wider community
6. The hidden curriculum (the difference between the official and actual social order).

It is necessary to bear in mind that in every school we come across pupils who demand special consideration on the education level. Here are included all of the problematic issues surrounding children with special needs. In planning the educational plan, it is very important that we do not overlook such pupils. Therefore, the planning of a specific educational strategy should be viewed as an integral part of the educational plan. These pupils concern the school as a whole and are not just in the domain of the classroom, the school principal and the school counsellors. Therefore, it is impossible to overlook one more area of the plan, which we call:

7. Specific educational strategies.

Due to a lack of space, we have only presented a framework that could serve schools as a guideline for the planning, realisation and self-evaluation of the educational activities in school as a more detailed division of each of these dimensions is impossible here.

We must also emphasise that each of the areas presented requires a fundamental analysis at the school level, as well as the collective agreement of the teachers: regarding the understanding of each area, the consistent respecting of agreements as well as the conduct consequent to this. Such collective agreements on the level of the school, which include all of the teachers, can in no way be forced – neither on the part of the school leadership nor on the part of individual groups of teachers. They must be the result of fundamental and open consideration and should contain that which is able to be achieved by professional consensus. Where a large majority of teachers achieve a professional agreement regarding certain educational conduct but a particular teacher (or teachers) does not agree with the content of the agreement from a professional point of view and would like to retain their own method of pedagogical work (which they can justify professionally), they have the right to do so. Each individual teacher has professional autonomy and this must be safeguarded when the school attempts to achieve a collective agreement on educational conduct. The teacher also retains professional autonomy in the case that the school already has a particular collective agreement on educational conduct.

One of the reasons why the principle of professional autonomy is necessary is that the teacher can function efficiently educationally only in relation to that conduct which they believe is professionally appropriate. In every case, the benefit gained from suitably led professional discussion and the seeking of solutions and collective agreements which define frameworks for educational conduct that is, in the judgement of the majority, professionally sound, also lies in enabling each teacher to more deeply and reflectively think about their own educational conduct.

3 Description of the Empirical Research

Below we present and, on the basis of what has been said so far, analyse data which primarily address the following questions, as stated in the research: whether an educational plan is necessary in schools at all, what teachers and school principals understand as being included in the educational plan of their school, and what school principals believe should be included in such a plan.

3.1 The Basic Research Method and the Approach to Collecting Data

The empirical data is designed on the descriptive and causal/non-experimental method of pedagogical research.

The collection of data took place in May 2006 using the questionnaire 'the educational concept' which was sent to 92 schools. The schools were selected according to the round in which they had entered nine-year schooling, as well as on regional criteria and size. In each school, the research captured no more than four departments (teacher, pupils and parents), with two departments from the 7th grade and two from the 8th grade. The questionnaire was also completed by grade teachers of the 9th grade and the school principal.

Given that in the present article we will only present some of the results collected with the educational concept questionnaire – that is, the answers to the questions given to the teachers and principals – in the continuation we will only present in detail the abovementioned questionnaire and describe the sample of surveyed teachers and principals.

3.2 Description of the Questionnaire on the Educational Plan

The questionnaire for the principals and teachers (as well as that for the parents and pupils, who are not treated in this paper) about the educational concept is made up of two assessment scales (about factors which have an impact on the authority of the teacher and which teachers can directly influence, and assessment scales about the school climate), of scales of viewpoints of the Likert type (concerning which kinds of teacher the pupils tend to respect), and from a set of questions that address the educational plan, or the educational concept, of the school (what is included, or should be included in the educational plan of the school; who participated in

the design of the educational plan; to what extent parents, pupils and teacher are informed about the educational plan of the school; opinions about the Regulations on the Rights and Responsibilities of Students; opinions about the educational measures that are foreseen in the Regulations on the Rights and Responsibilities of Students for specific infringements). The questionnaires for the principals and the teachers differ on certain points, as well as differentiating and including certain other assessment scales or sets of questions.

3.3 Description of Samples for the 'Educational Concept' Questionnaire

The questionnaire about the educational plan was completed by 59 principals, of whom 63% were women and 37% were men. Their average age was 49.58 years (standard deviation of 7.42 years). The average period of work experience of the principals was 26.26 years (standard deviation of 7.6 years), the average length of service as a principal was 10.85 years (standard deviation of 7.43 years). More than half the principals surveyed had a university education (52.5%), and more than a quarter of them (27.1%) had completed high school education. 15.3% of the surveyed principals had completed a specialisation, master's degree or doctorate. Two principals (3.4%) had completed a professional high school and one principal (1.7%) had a secondary school education.

The questionnaire about the educational plan was completed by 175 teachers, of whom 81.7% were women and 18.3% were men. About a third of the surveyed teachers (31.7%) were, in the 2005/06 school year, grade teachers of the 7th grade, almost the same proportion of teachers (31.1%) were grade teachers of the 8th grade and more than a third of the surveyed teachers were grade teachers of the 9th grade of a primary school. The average age of the teachers surveyed was 42.45 years (standard deviation of 7.66 years) and, on average, they had 18.75 years of work experience (standard deviation of 8.73 years). Less than half of the surveyed teachers had completed high school (46.7%), and a slightly lower proportion of the teachers had a university education (41.9%). The questionnaire was returned by four respondents (2.4%) who had completed secondary school and 12 respondents (7.2%) who had completed a professional high school. Three of the surveyed teachers (1.8%) had completed a specialisation, master's degree or doctorate.

3.4 Approach to Treating the Data

The data were statistically treated in line with the purpose and predictions of the research with the aid of the SPSS statistical software package for Windows on a personal computer. The data from the questionnaires were treated at the level of descriptive and inferential statistics. Here we used the frequency distribution (f, f %) of the attributive variables, the basic descriptive statistic of numerical variables (measures of the mean, measures of the distribution), the χ^2-test of hypothesis independence, Kullback's 2Î test (where the condition about the theoretical frequencies for the chi-square test was not fulfilled).

4 The Educational Plan of the School: Opinions of Teachers and Principals

4.1 In the Opinion of Teachers and Principals, Does Each School Need Its Own Educational Plan?

The data show that schools recognise the need to design the educational plan: 81.1% of teachers and 88.1% of principals believe that each school should have to design its own educational plan, which should then be followed by all of the pedagogical workers in the course of their work. Only 5.7% of teachers believe that this is unnecessary, while no principals at all hold this opinion. Approximately one-tenth of the teachers (9.7%) and principals (11.9%) believe that the need to design an educational plan, which should then be followed by all of the pedagogical workers, depends on the individual school.[3] The large majority of teachers and principals believe that the state should draft guidelines on whose basis each school would be able to design its own educational plan: 74.1% of the teachers concur with this idea, and 71% of the principals.[4]

It is also evident from the responses that 68.6% of the teachers and 70.7% of the principals believe that their school already has an educational plan which the pedagogical workers normally follow in their educational work. 29.3% of principals and 23.1% of the teachers answered that they do not have such a plan, while 8.3% of the teachers stated that they did not know whether or not their school had a designed educational plan.

In schools, teachers and principals obviously realise that (their) school as a whole needs an educational plan and that they need professional assistance in the design of such a plan. Is it possible to interpret the high percentage of responses stating that the state should establish guidelines for the design of the educational plan as a consequence of the fact that schools desire formal protection through guidelines which would once again establish a framework for a unified educational doctrine in Slovenia? Or are the majority of the responses a consequence of the fact that schools perceiving a professional deficiency in this area want to compensate for this with professional guidelines on the state level?! Perhaps it is possible to also put forward the thesis that the second leads to the first. If the premise that teachers have too little professional support in this area is true, this could be the basis for 'professional uncertainty' and one of the ways of eliminating this uncertainty lies in the expectation of a ready-made unified doctrine at the state level. The question, however, refers to guidelines 'on the basis of which each school could design its own educational plan,' therefore a positive response to the premise offered does not mean that the expression of a need for guidelines also implies an agreement that such guidelines be set up so as to withdraw professional autonomy in the design

[3] In the responses of the teachers statistically significant differences appeared ($2\hat{I} = 9.746$, g = 3, p = 0.021).

[4] The differences between the responses of the teachers and the principals are not statistically significant ($\chi^2 = 0.799$, g = 2, p = 0.671).

of the educational plan from schools. In principle, such guidelines could be either a professional report which schools elect to observe or not, or they could be binding on the schools. The latter would, of course, further limit the professional autonomy of schools. The current formal rules, which are in the domain of the state and represent a legal framework within which the school can design its own educational plan, would be supplemented by additional binding educational guidelines.[5]

In any case, it should not be forgotten that the educational plan is something which belongs within the realm of the professional autonomy of the school and teachers and that it is necessary to give serious thought to the question of where a return to formal and state determination of the education doctrine leads. It seems that educational uniformity is not a concept that schools relate to. As the research findings (which will not be presented here) show, schools are already quite critical of the formally established rules, which represent an obstacle to what is permitted in educational endeavours. Based on these responses, it can be suggested with some degree of certainty that schools would receive a declarative intervention and prescription of educational doctrine with even more criticism, even though it sometimes seems that they are crying out just for this. Kroflič draws attention to this fact when in the colloquy 'Principals and School Autonomy' he suggested that in schools the Regulations on Rights and Responsibilities promise a kind of replacement for the state educational concept of the public school (cf. Kroflič 2002, p. 72). On a certain level, this is understandable: the tradition of work in schools was familiar with such official educational concepts (another story is the fact that the same questions that are appearing today arose around these concepts in history, although it may not seem to us that this is the case).

4.2 What Is Included in the Educational Plan of the Individual School and What Should Be Included?

With the question 'What is included in the educational plan of the individual school and what should be included?' we tried to gain insights into the opinions of teachers and principals regarding what, in their professional judgement, should be included in the educational plan and what is actually included. The question offers twelve items (presented in the table below) as well as the option of answering 'other' as we accept that with the previously described framework for the extent of the educational plan and the items included in the questionnaire on this basis something important could have been overlooked. The teachers only responded to the question of what the educational plan of their school actually includes, while the principals also first answered what, in their opinion, the educational plan in school should include. In both series of items, the respondents could circle multiple answers.

[5] In the research, we did not ask about which institution would be the most appropriate for assistance in designing the concrete educational plan of the school. The answer to such a question would also indicate whether in the foreground is the desire of the school to have unified professional guidelines which would be prescribed by the state and would establish a unified educational doctrine, or whether it is just a case of legitimate warnings that the profession has perhaps reneged, and that schools should not be left alone in engaging with these demanding problematic issues.

	Principals				*Teachers*	
	what should be included?	R	what is included?	R	what is included?	R
the framework of rights and responsibilities, as well as educational measures which are prescribed by the Regulations	50.9 %	6	84.2 %	2	76.9 %	2
the school rules that are formulated at the school	68.4 %	3	94.7 %	1	99.1 %	1
the joint agreement of the teachers' board about educational operations	78.9 %	1	78.9 %	3	66.7 %	3
the agreement of the teachers board about the consistent pronouncement of educational measures	35.1 %	10	39.5 %	5.5	47.9 %	4,5
the agreement of the department teacher board about unified educational operations in an individual department	21.1 %	12	21.1 %	10.5	14.5 %	10
the agreement between the teachers and pupils about permissible behaviour in each department	40.4 %	8	31.6 %	8	24.8 %	9
areas which are particularly developed in the school and which give it its identity	22.8 %	11	21.1 %	10.5	12.8 %	11
specific educational strategies for special groups of students	38.6 %	9	28.9 %	9	27.4 %	7
the agreement about the unified educational operations between teachers and parents	47.4 %	7	18.4 %	12	9.4 %	12
the agreement about shared values that apply to all students and teachers	64.9 %	4	34.2 %	7	26.5 %	8
an emphasis on tolerance and democratic relations in school	75.4 %	2	52.6 %	4	47.9 %	4.5
agreement about measures which prevent violence, and the consistent response of teachers to violent forms of behaviour	52.6 %	5	39.5 %	5.5	41.0 %	6

Table 1: Responses of principals to the question of what should be included in the educational plan of the school and is included in the educational plan of their own school, as well as the responses of teachers to the question of what the educational plan of their school includes.

4.2.1 The Regulations Are an Important Part of the Educational Plan

More than three-quarters of the teachers (76.9%) and even more principals (84.2%) answered that the educational plan of their school includes *the framework for rights and responsibilities, as well as educational measures prescribed by the Regulations on the Rights and Responsibilities of Students.*

Given that the Regulations determine that the school creates school rules and that the establishment of school rules is an important factor in schools, it is not surprising that almost all of the teachers (99.1%) and 94.7% of the principals responded that *school rules* are part of the educational plan of their school.

Two-thirds of the teachers (66.7%) and almost four-fifths of the principals (78.9%) responded that the educational plan of their schools contains *the joint agreement of the teacher board about educational operations*. This proportion shows that in the majority of schools – according to two-thirds of the teachers and four-fifths of the principals – collective agreements about educational operation are part of the school educational plan.

However, these three items are the only ones of the stated items that at least two-thirds of the teachers and principals stated as already being included in their school's educational plan. What is more, over 50% of positive responses, and these only amongst principals, came from the item: the educational plan of the school includes *an emphasis on tolerance and democratic relations in school* (52.6% of principals and 47.9% of teachers).

In answer to the question of what *should be* included in the educational plan of the school, the principals ranked in the first three places: *the common agreement of the teachers' board about educational operations* (78.9%); *an emphasis on tolerance and democratic relations* (75.4%); and *school rules* (68.4%). Also above 50% are: *agreement about shared values which apply to pupils and teachers* (64.9%); *agreement about measures which prevent violence, and the consistent reaction of teachers to violent forms of behaviour* (52.6%); and *the framework of rights and responsibilities, as well as educational measures which are included in the Regulations on the Rights and Responsibilities of Pupils* (50.9%).

Due to the length of the questionnaires, we did not ask the teachers questions about what in their opinion should be included in the educational plan of the school, which in the interpretation of the data emerged as something of a weakness. The responses of the teachers could have shown either that the teachers agree with the principals about what should be included in the educational plan of the school, or that the teachers place more importance on some items that nonetheless are not included in the educational plan of the school – or perhaps not realised because the teachers regard them as less important than the principals.

4.2.2 Should There Be Agreements about Education in The School As A Whole And in Individual Departments?

85.5% of the teachers and 78.9% of the principals answered that the educational plan of their school does not include an *agreement of the department board about unified educational operations.* Perhaps the key to interpretation lies in a question which would be more correctly formulated: if in the place of 'unified' educational operations it was written 'common' educational operations or agreement about the educational operations of the teachers in the department. Nonetheless, 75.2% of the teachers and 68.4% of the principals answered that the educational plan of their school does not include *the agreement between teachers and pupils about acceptable behaviour in each department* and almost three-fifths of the principals (59.6%) believe that it is not necessary for the educational plan to include this, which highlights the fact that the proportion of answers to the previous item is most likely not just a consequence of how the item was formulated.

If we proceed from the premise that the common agreement on the educational operations of a school is a prerequisite for successful education, and that consistent educational behaviour and measures – including consistency in the pronouncement of sanctions for potential infringements – is the foundation of justice which also has an impact on the authority of the teachers and the institution, then the answers[6] perhaps indicate that either there has been a lack of professional reflection on these problematic issues – which would point to the fact that this is also a path to designing an educational plan in school – or that individual teachers are simply left up to their own devices (whether in the name of professional autonomy or because such agreement is professionally demanding and tiring, and in no way 'takes hold' if it is simply commanded, or the majority of professional workers do not agree with it and therefore do not adopt it as their own way of working).

4.2.3 The Lack of Consensus in Certain Important Parts of The Educational Plan – The Profession Must Offer More.

78.9% of the principals and 87.2% of the teachers state that the educational plan of their school does not include *areas which are particularly developed in the school and which give it its identity* (e.g., foreign languages, sport, music ...). Should this be included? 77.2% of principals believe not. More than two-thirds of the respondents (71.1% of the principals and 72.6% of the teachers) answered that the educational plan of their school does not include *special educational strategies* for pupils. Only 38.6% of the principals believe that these should be

[6] Almost two-thirds of the principals believe that common agreement about consistency in the pronouncement of measures on the school level is unnecessary, and also judge that whether or not such an agreement actually exists in school is essentially all the same both for the teachers and the principals.

included, and the majority of principals (61.4%) responded to the contrary. More than four-fifths (81.6% of the principals and 90.6% of the teachers) said that the educational plan of their school does not include an *agreement about the unified educational operation between teachers and parents*. In answer to the question on whether such an agreement between teachers and parents should be included in the educational plan, the majority of principals (52.6%) gave a negative response. 60.5% of the principals and 59% of the teachers answered that the educational plan of their school does not include an *agreement about measures which prevent violence, and about the consistent response of teachers to violent forms of behaviour*. Here only 39.5% of the principals judge that it is actually included in the educational plan of their school, whereas more than half (52.6%) of them believe that such an agreement should be included.

The fact that more than three-quarters of the principals believe that it is not necessary for the educational plan to include areas that are particularly developed in the school and which give its identity (e.g., foreign languages, sport, music) cannot be explained in the sense that schools do not realise the importance of this component of their work and that they do not provide the pupils with such an offer. In all likelihood, this shows that the additional offers of the school (foreign languages, sport, music) and the identity of the school connected with this are not connected with the conception of the educational plan.

In addition, the finding that the majority of principals[7] and teachers do not understand the special pedagogical strategies in such a way that they would perceive them as part of the overall educational plan primarily reveals a 'theoretical lacking'. We can speculate that neither the study programmes that prepare future pedagogical workers nor the various programmes of constant professional upgrading include this component of educational operation in theory in an appropriate way in the instruction regarding how to design the educational plan of a school. Here, we have to be cautious. These answers do not in themselves state that special educational strategies are not employed in schools, but they perhaps have the status of some kind of 'exceptions' – something that is not included in the educational strategy in a planned way – and that they are understood as educational operation in special conditions, which indicates a serious problem: engagement with these strategies does not concern the school as a whole.

Perhaps a similar logic (although the proportion of inclusion in comparison to the question of specific educational strategies is somewhat higher) partly holds, in respect of responses to the statement *agreement about measures which prevent violence, and the consistent response of teachers to violent forms of behaviour*. Slightly more than half of the principals (52.6%) expressed the opinion this should be included in the education plan (as stated above, we

[7] Amongst principals who answered the question regarding what the educational plan should contain, it is true that they do show somewhat more understanding of the fact that special educational strategies must be included in the educational plan. Nonetheless, the majority (61.4%) still answer that it is not necessary.

do not have data about the opinions of teachers). In as much as we presume that teachers would not wish to be left up to their own devices in solving this problem, it would nonetheless be possible to interpret the data about principals from the questionnaire along the lines of: if there were a firm belief in schools that it is imperative to have an agreement in connection with violent forms of behaviour and that it is necessary to respond to such behaviour consistently, the proportion of principals who believe that the established scope of the educational plan should respect or include this fact would be higher. In our opinion, there is a need for such agreement, even if in certain schools violent behaviour is currently not evident as a problem.

Of all of the responses offered, these answers best demonstrate the conceptual (theoretical) uncertainty in schools about what is and what should be part of the educational plan of the state school. Responsibility for this has to be accepted above all by the profession.

Reaching an agreement between teachers and parents about 'unified' educational operations would, for the state school, be an inappropriate goal. Therefore, it would be possible to claim that such a formulation should not have been included in the questionnaire. The state school includes all children irrespective of their backgrounds and various beliefs of their parents; parents' views on education are also diverse. Thus, the difficulty is not, as may first appear, simply in the fact that teachers do not want to reach such an agreement with parents but rather that they can derive primarily from the understanding of the term 'unified' as something that is impossible, or inadmissible, in the plan for education. Of course, the difficulty also arises from the fact that teachers most likely also realise that differences of opinion about educational approaches exist between parents and teachers – and amongst parents themselves. Nevertheless, the responses of principals, almost half (47.4%) of whom believe that the educational plan must contain an 'agreement about the unified educational operation between teachers and parents' (18.4% of the principals and 9.4% of the teachers stated that such an agreement is already included in the educational plan of their school) show that a significant number of school principals acknowledge that this is an area in which, for the sake of quality education, it is necessary to invest more, and that sooner or later it is a pressing problem that needs a great deal of specialised knowledge and energy in order to reach agreement. Perhaps in this response it is also possible to perceive a certain anxiety amongst teachers and principals that this kind of agreement could open the path to pressure from parents and impose on the professional autonomy of the teachers. The data (in spite of the abovementioned reservations and problems that they open up) nonetheless can be understood as a warning that these problems need to be approached with caution. In as much as the success of the work of teachers and the quality of the educational process is also conditional on the attitude that parents have to school, to teachers and to the work and co-operation of their children in school, this segment cannot be overlooked when planning the educational operations of the school.

4.3.4 Values as 'Pandora's box'?

65.8% of the principals and 73.5% of the teachers responded that the educational plan of their school does not include an *agreement about shared values that hold for all students and teachers*. Almost the same proportion (64.9%) of principals answered that such agreement *must* be included. 47.4% of the principals and 52.1% of the teachers said that the educational plan of their school does not include an emphasis on *tolerance and democratic relationships* in school. Somewhat more (64.9%) of the principals believe that the educational plan *must* include such an emphasis.

In the first place, these answers tell us that in their consideration of educational problems schools do not reflect the *formal (prescribed) framework* for educational operations in state schools – where, of course, *shared values* also belong – written in the Constitution and the school legislation (amongst others, the principle of equal opportunity, the principle of the absence of indoctrination in instruction, justice, values such as tolerance and solidarity etc.).

These values, which derive from the Constitution and legislative and executive acts whose contents are based upon the White Paper on Education in the Republic of Slovenia (1995), are obligatory for schools and thus represent a framework for educational conduct. This is something that does not allow professional autonomy, but is rather explicitly and formally determined. Perhaps it would be possible to soften the above claim with the supposition that principals and teachers understood the question as accomplished consideration about what the broadly stated values mean in terms of the concrete conduct within the educational process, and how teachers should behave in accordance with them. Whatever the case may be, the answers demonstrate that reflection on these problematic issues is not given enough attention. Most likely, the responsibility for this has to be largely ascribed to the profession. Has the profession thus far sufficiently drawn attention to, and in an appropriate manner dealt with, this factor in seeking answers to the question of how to function educationally in school? Or, rather than engaging with the questions, has the profession offered discussion about the thesis that some advocate school without values, while others opt for values? Perhaps it is more a case of teachers in the past not having been equipped to engage with the educational issues which are necessitated by pluralism, criticalness and objectivity, and the demand for the absence of indoctrination in the state school – and that even today we have not entirely rid ourselves of that inheritance, grasped it theoretically and put it behind us. If the historical explanation can perhaps be sought in a model of school legislation that was geared towards a process and which determined both the content and the didactic execution of instruction, as well as in the long dominance of first one then another particular ideology in schools then, today, when the arrangement is again legally-formally different, the responsibility for the possible inappropriate level of engagement with the educational issues necessitated by pluralism, criticalness and objectivity, and the demand for the absence of indoctrination in the state school, as demonstrated by the analysis of the educational plan, must be attributed above all to the profession.

It seems that, at least in a certain sector of schools, there is (justifiably or not) doubt surrounding the success of the abovementioned agreement, or unease with regard to agreements concerning values (albeit shared values) which may be conditioned by an absence of a confirmed cultural tradition promoting dialogue between different thinkers and real tolerance towards difference – something the state school is unable to reverse.

The division of schools on whether or not the educational plan of the school includes an emphasis on *tolerance and democratic relationships in school* partly confirms the above explanation. These data do not, however, address the question of whether, or how, schools educate for tolerance and/or function democratically. They do show that in roughly half of the schools these value dimensions are not included in considerations of the educational plan of the school, which most likely indicates that there is no reflection on what, in concrete terms, the values of tolerance and democracy actually mean in educational situations. The area of actualising values in everyday school life is difficult especially when it comes to those values that are common or universal, and perspectives on those which, due to their particularity (in connection with a lack of pluralism, criticalness and objectivity) or conduct which is not derived from universal values, could exclude, or even unconsciously indoctrinate, someone (it is necessary to be particularly sensitive to this matter). Therefore, schools would need specialist assistance regarding how, in concrete terms, to include the educational dimension of values in their educational plan. This is particularly sensitive when it comes to content and perspectives that concern our deepest feelings and convictions. Although engagement with this problem in tertiary education programmes that educate teachers is not (due to a lack of space) given more attention in this paper (which does not mean that this is not of key importance for the conceptualisation of the problem), we believe there is a need to undertake an exhaustive analysis in a future paper.

5 School and The Educational Plan – Where to Direct Future Endeavours

In response to the question of whether the educational plan of their school includes something that we have not suggested, 97.4% of the principals and 100% of the teachers answered no. If for a large share of schools there existed another important part of their educational plans, this would perhaps have been exposed in answers to this question.

The findings of the empirical research outlined in this paper demonstrate that both in the assessment of what should be included in the educational plan of the school and in what is actually included in this plan, in the majority of schools fewer factors are considered than should, in our opinion, be considered for the quality design of the educational plan.

The data made available by the research will enable an even more detailed treatment of the problematic issues of the educational plan and the functioning

of schools which will, of course, be necessary in the future. The results of the empirical study regarding the inclusion and non-inclusion of factors in the educational plan certainly show that schools need professional support in the conceptualisation of the educational plan, and that the profession has still not done enough in this area and will need to dedicate significantly more attention to it in the future.

The reasons for the difficulties that schools and teachers are dealing with can be combined and dealt with in three different groups. In the first, we can of course see the question of the planned consideration of the scope of the educational functioning of the school, which is closely connected with the question of collective agreement and with the theory of what should be included in the educational plan of a particular school and why. In areas where the functioning of schools is reasonably independent, such as the question of including specific educational strategies and the like, the indicated state could probably be changed relatively quickly.

The second field of questions indicated by the responses is how the educational plan and the operation of schools include (or do not include) values, norms, rules, rights and responsibilities where these are (or in as much as they are) the *formal, prescribed framework* of the functioning of the state school. According to the responses of the principals and teachers, two-thirds or more of schools include in the educational plan only: the rules and responsibilities determined by the Regulations on the Rights and Responsibilities, the school rules, and the collective agreement of the teachers board about educational operations. In connection with this, our research gathered more information than we are able to present here.

The third group that the profession could extract from the data presented concerns planning the educational plan in relation to questions of values. The findings presented here show that not even in the case of values that are generally accepted by society as commonly valid is the question of whether and how to include them in the educational plan unambiguous – this is at least in part due to the fact that they are always formal or prescribed, but probably not just this. It seems that in the contemporary value framework, which is a product of a democratic, plural political arrangement, schools need more exact theoretical as well as concrete answers to the question of how to design the educational plan and include the dimension of shared values and social norms in an agreed way. As already stated, based on the findings it is possible to deduce that schools have difficulties in *planning* the inclusion of these dimensions in the educational plan.

If we ask ourselves why this is necessary at all, already in the first part of the text we indicated that one of the many arguments lies in the fact that it is impossible to imagine the quality planning, execution and self-evaluation of the educational operations if the school first, as Herbart states, does not sketch out a map that can be followed in its educational work.

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The Effect of Preschool on Children's Language Development: A Slovenian Longitudinal Study

Abstract: The purpose of this longitudinal study was to study the effect of preschool on children's language development in connection with the age at which children enrol in preschool and children's family environments. The sample included children who attended a Slovenian preschool and/or a Slovenian primary school at the last assessment. Approximately half of the children in the sample began attending preschool at the age of 1 and the other half at the age of 3. We first assessed the children when they were approximately 3 years old and they were then followed for 3 years. Children's language competence was assessed four times at one-year intervals and the quality of the children's family environment twice (when the children were approximately 4 and 6 years old). The results obtained indicate that the effect of preschool alone, or age at preschool enrolment, is low but increases in combination with the education of the children's mothers. Preschool has a statistically significant effect on the language development of children whose mothers have a low education level and who often have a less stimulating family environment. The results also show that the effect of the mother's education on a child's language development increases with the child's age.

Keywords: effect of preschool, maternal education, quality of the family environment, children's language development.

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Introduction

Studies on the principles and dynamics of development during infancy, toddlerhood and early childhood, as well as studies on children's learning and instruction during these periods (e.g., Bruner 1996; Tomasello 2000; Watson 1996), are having an increasingly recognisable influence on shaping national policies for the starting level of the education system: preschool education. In one of his comparative analyses, Andersson (1994) especially emphasised how important it is for researchers to empirically study the effect of preschool on children's development and learning in their own countries, even though similar professional and academic studies may already exist. That is the only way to obtain valid results that also reflect the broader social context of preschools and their organisation, content and quality.

Children's language development during toddlerhood and early childhood: language structure, content and use

During toddlerhood and early childhood, there is rapid and interdependent language development in grammar (including form and content), pragmatics and comprehension. At the age of 4 or 5 children attain a level at which they can report their feelings, thoughts and perceptions to others in an understandable manner and they can also understand others' verbal messages. Bates and Goodman (2001) cite two important leaps in vocabulary development: the first at the age of 16 to 20 months and the second at the age of 24 to 30 months. Children use words in various functions; for example, to report ownership, changes of location, refusals, demands, assertions and declarations (Reich 1986). When children are approximately 2 years old they connect words into simple sentences and already use certain rules and, later, when they have acquired key grammatical rules they create increasingly more complex sentences that are semantically and linguistically correct (e.g., Karmiloff & Karmiloff-Smith 2001).

Children also develop and shape their language in this way (Halliday 1973). When they learn that various situations require various forms of language they then develop communication skills. It is only in various contexts that children can learn that they must use various responses, including refusals, acceptance, inclinations, special tones of voice and more and less formal structures of language (Karmiloff & Karmiloff-Smith 2001; Marjanovič Umek, Kranjc & Fekonja 2006). Dialogue and conversation among children intensively and gradually develop until they are 5 or 6 years old, at which point it should be emphasised that the developmental level of conversation is to a large degree also connected with the social context. Researchers (e.g., Corsaro & Eder 1990; Marjanovič Umek, Lešnik Musek & Kranjc 2001) have found that preschool children use the fullest form of conversation during play; for example, they make use of linguistic registers appropriate for children's roles during play, social transformation, language in various speaking situations and metalinguistic statements. A special form of communication that develops during early childhood is social referential communication in which the speaker describes an object or person that the listener cannot see and the speaker's message should be sufficiently convincing and relevant for the listener to form an image of the object or person comparable to that of speaker who sees the object or person (Marjanovič Umek, Kranjc & Fekonja 2006). Children's story narration also develops in early childhood as one of their pragmatic use of language. Whereas toddlers' stories are still simple (a simple stringing together of individual elements around a central element) and are generally personal or tied to descriptions of events in which they themselves are included, the stories of 4-, 5- and 6-year-olds are increasingly more structured and conventional, coherent (concerning a logical story with an understandable presentation of events, thoughts, feelings and temporal and causal connections) and cohesive (the text is grammatically connected; e.g., Broström 2002; Karmiloff & Karmiloff- Smith 2001; Marjanovič Umek, Kranjc & Fekonja 2006; Pellegrini & Galda 1982; Wray & Medwell 2002). When children narrate stories or take on various roles in symbolic play connected with representational transformation, they also develop a metalinguistic awareness and metacommunication which enables a departure from the use of language merely for describing concrete objects, persons and activities to a command of linguistic forms for their own sake (e.g., Warren-Leubecker & Carter, 1988; Wood & Attfield, 1996).

The family and preschool environment as contexts for children's language development

Theories of developmental psychology and psycholinguistics (e.g., Caron 1992; Chomsky 1986; Clark & Clark 1977; Tomasello 2000; Vygotsky 1978) and the results of empirical studies have confirmed the important role of genetic and environmental factors for language development.

In a meta-analysis of more than 100 behavioural genetic studies, Stromswold (2001, in Kovos, Hayiou-Thomas, Oliver, Dale, Bishop & Plomin 2005) determined that various areas of language development such as syntax,

semantics, phonology and articulation are partly influenced by genetic factors, but that the results which point to the effect of a shared environment on children's language competence are not so unambiguous. Similar findings were found by a group of researchers (Spinath, Price, Dale & Plomin 2004) in a study of twins aged 2 to 4 years old, showing a consistent and moderate effect of genetic factors on children's language development during this period (genetic differences explained 27% to 34% of the variation in boys' language competence and 18% to 23% for girls) as well as a statistically significant effect of a shared environment (with measures of the environment explaining 69% of the variation in language competence among 2-year-olds and 59% among 4-year-olds). They also determined that non-shared environment factors could only explain a small share of the variation seen in children's language competence: up to 5% among 2-year-olds and up to 12% among 4-year-olds. The authors determined that the effect of a non-shared environment increases with age, which could be connected with an individual's increasingly specific experiences in the environment – for example, with one's peers in the preschool environment and in the playground.

In our study we examine the effect of the family and preschool environments on children's language development and so we are especially interested in the results of certain comparative studies in which researchers determined the effect of individual variables (e.g., maternal education and children's age at preschool enrolment), or multiple variables in interaction (e.g., children's age at preschool enrolment, preschool quality, maternal education), on children's language competence.

Some authors (e.g., Bornstein & Haynes 1998; Marjanovič Umek, Fekonja, Kranjc & Lešnik Musek 2003; Moynihan & Mehrabian 1978; Silven, Athola & Niemi 2003) cite a positive, albeit low or medium-high relationship (correlation coefficients were around 0.20) between the level of maternal education and children's language competence as measured by various language development scales. In one of their studies, a team of Slovenian authors (Marjanovič Umek, Podlesek & Fekonja 2005) determined that maternal education together with measured factors of the family literacy environment explain at most 9% of the variation in the language competence of 3- and 4-year-old children. Maternal education also generally correlates with the family's socioeconomic status, quality of the family environment and the mother's or parents' implicit theories on rearing children. The researchers determined that mothers with a higher education level speak with their children more frequently and use a more extensive and varied vocabulary, form complete and relatively long utterances, including many interrogative statements and frequently make metalinguistic statements (e.g., Butler, McMahon & Ungerer 2003; Fekonja 2002; Hoff 2003). Mothers with higher levels of education read to their children more often, include them in verbal interaction while reading to them and attend various cultural activities for children (Foy & Mann 2003; Marjanovič Umek et al. 2005; Roberts, Jurgens & Burchinal 2005).

In addition to the family environment or in interaction with it, the preschool also has an important effect on children's development, especially the peer groups that the children form part of. Studies in which authors have determined

the effect of preschool on children – whether their social, emotional, language or cognitive development – have generally been quite comprehensive because their results show that not only preschool itself has a positive or negative effect on children's development, but that factors such as preschool quality, age at preschool enrolment and the number of hours per week that children spend at preschool also have such effects (e.g., Melhuish 2001; Sylva & Wiltshire 1993). The results of studies in which the authors more closely examined children's ages at preschool enrolment differ somewhat: some researchers (e.g., Lamb, Sternberg & Prodromidis 1992) found that preschool quality is connected to a positive or neutral effect of preschool on children's development, whereas others (e.g., Caughy, DiPietro & Strobino 1994; Lamb 1997) especially emphasised that early preschool enrolment has a positive effect on infants and toddlers who come from families in which the parents have a lower level of education and/or whose family environment is less stimulating. Based on an extensive longitudinal study, Andersson (1989) reported that 8-year-old children who enrolled in preschool between the ages of 6 and 12 months scored higher on measures of cognitive and socio-emotional development than children who enrolled in preschool after the age of 1. Later, Andersson (1992) also confirmed the long-term positive effect of children's early preschool enrolment with the scores that the same children (included in the sample in his first study) achieved at age 13. They were more successful in school than their peers who had begun attending preschool after the age of 1. The age at which children enrol in preschool also had a statistically significant direct effect on children's social and cognitive skills when children's intelligence was controlled for. The author also critically judged that his study did not assess the quality of preschools, which was not frequently measured at the time when the longitudinal study was being planned and had begun. However, he did determine that researchers from other countries had rated Swedish preschools as being high quality (with regard to their organisation and operation). Similar results are reported by another group of Swedish researchers (Broberg, Wessels, Lamb & Hwang 1997) who found that children who began attending preschool earlier and had spent more months in preschool than their peers before the age of 40 months achieved better results in school on tests of language competence. Preschool quality – especially verbal and social interaction between the children and the teacher and a structural indicator (adult/children relations and the number of children in the group) – was also an important predictor of the success of children who had spent more than three years at preschool. Researchers also determined the effect of preschool on children's cognitive and language development as part of an extensive North American study (NICHD, 2000). This longitudinal study assessed children's language and cognitive development at the ages of 15, 24 and 36 months in relation to the preschool and family environments. The study included preschool quality, preschool type, number of hours the child spent at preschool per week and certain family environment factors (e.g., the mother's vocabulary, responsiveness and stimulation) as independent variables. The results showed that preschool type and quality correlate positively with children's cognitive

and language competence, although preschool quality is only able to explain 1.3% to 3.8% of the variability. The share of variability explained increased with the addition of variables connected to the family environment and children's sex. Families with a higher quality home environment selected higher quality preschools and preschool quality itself had an additional effect on the quality of parent-child relations. Children who did not attend preschool scored higher on measures of cognitive and language skills than their peers who had attended preschools assessed as low quality, but at the same time lower scores than their peers who had attended preschools assessed as high quality. The researchers also determined that teachers' cognitive and language stimulation in preschool and their sensitivity and responsiveness are a good predictor of children's later language and cognitive development.

An initial study of the connection between preschool quality and the language and cognitive skills of 12-month-old infants (Burchinal, Roberts, Nabors & Bryant 1996) was later continued as a four-year longitudinal study by Burchinal, Roberts, Riggins, Zeisel, Neebe and Bryant (2000). The sample included 89 children who had begun attending preschool between the ages of 1 and 10 months. The results obtained in the initial study show that infants who began attending preschool later scored somewhat higher on a language expression scale at the age of 12 months than did infants who began attending preschool at a younger age. Children's age at preschool enrolment did not correlate with the cognitive development scores and other measures of language development at 12 months. In the continuation of the study the authors assessed the language and cognitive skills of children at the ages of 18, 24 and 36 months and children's family environments at the ages of 18 and 30 months. On the basis of the results the authors also found that there are statistically significant positive correlations between preschool quality and all measures of children's cognitive and language development regardless of the children's age (correlations between 0.30 and 0.60). More detailed analyses connected to individual indicators of preschool quality are also interesting. A more favourable proportion between the number of children and adults in a group is expressed in higher communicational skills among 12-month-olds and higher teacher education is expressed in higher scores in language expression among 3-year-olds. The findings also confirm a statistically significant correlation between preschool quality and quality of the family environment. Quality of the family environment correlates statistically significantly with children's language comprehension, expression and communication skills at the ages of 12 and 24 months.

Our study, which was a longitudinal study lasting four years, focused on the effect of preschool on children's language development, specifically in connection with the age at preschool enrolment and in connection with the children's family environment (quality of the family environment with regard to the stimulation of language development and maternal education).

Method

Participants

The longitudinal study included a random sample of children who attended a Slovenian preschool at the time of the first three assessments and the first grade of primary school in various regions of Slovenia at the time of the fourth assessment. The children began attending preschool at the age of 1 (±3 months) or 3 (±3 months). The number of children changed at individual assessment times due to various factors (e.g., absence due to illness, moving, change of preschool). Below we present some of the basic characteristics of the sample at the four consecutive assessments, which took place at one-year intervals.

	1st assessment	*2nd assessment*	*3rd assessment*	*4th assessment*
Sample size	116	106	155	123
Children's age	33–39 months	45–51 months	57–63 months	69–75 months
Time at preschool	0 or 2 years	1 or 3 years	2 or 4 years	3 or 5 years
Measure of language development	*Language Development Scale (LDS); Test of Story Narration with a Picture Book*	*LDS; Test of Story Narration with a Picture Book*	*Scales of General Language Development-LJ (SGLD-LJ)*	*SGLD-LJ*
Measure of quality of the family environment		*Home Literacy Environment Questionnaire (HLEQ): (3–4)*		*HLEQ: 5–6*

Table 1: Sample characteristics for individual assessments

Instruments

We used the *Language Development Scale* (*LDS*) to assess the children's language development at ages 3 and 4. It was developed based on the *RDLS III* (*Reynell Developmental Language Scale*, Edwards et al., 1997) and the *Vane-L* (Vane, 1975). It comprises two subscales: a language comprehension subscale and a language expression subscale (split-half reliability coefficient: 0.68, determined on a sample of 269 Slovenian children 3.1 years old and 0.67, determined on a sample of 298 Slovenian children 4.1 years old). The *Language comprehension subscale* includes 22 tasks used to assess children's understanding of spatial relationships, qualities and participatory roles. The *Language expression*

subscale is composed of 44 tasks used to assess the children's vocabulary, ability to conjugate verbs (third person and past), ability to decline nouns (plural and dual) and ability to repeat statements. The test administrator carried out the tasks on both subscales with the help of various materials; for example, blocks, toy cars and pictorial cues. The points within individual groups of tasks and subscales were added together so that two partial scores were obtained using the language scale representing an assessment of the child's language comprehension (22 points total) and expression (44 points total) as well as a combined score representing the sum of the scores that a child obtained on both subscales (66 points total).

We assessed the children's ability in the pragmatic use of language by using the *Test of Story Narration with a Picture Book*. We used the story *Maruška Potepuška* (Maria the Tramp; Amalieti, 1987), which has no text and has realistic illustrations that are logically connected with one another into a story. Based on the illustrations, children freely narrated the stories which we analysed from the perspective of grammatical structure and coherence. We shaped criteria for analysing the grammatical structure of the stories narrated that applied to the children's use of various parts of language and grammatical rules: the number of noun tokens, noun types, nouns types in the dual, verb tokens, verb types, verbs in the past, verbs in the future, adjective tokens, adjective types, pronoun tokens, pronoun types, multiword statements, subordinate compound statements, coordinate compound statements, interrogative statements, negative statements, imperative statements, statements in direct speech and statements in reported speech.

To analyse the coherence of the stories narrated, we used criteria that we developed for this purpose (Marjanovič Umek, Kranjc & Fekonja, 2003) and that also represented story development levels: 1. story without a structure (1 point); 2. story with a structure that simply describes people, objects or illustrations (2 points); 3. story with a structure that simply strings events together temporally (3 points); 4. story with a structure that describes the thoughts and feelings of the characters and the relations between them (4 points); and 5. story with a structure that describes cause-and-effect relations (5 points).

Because of the need to develop a standardised instrument to assess children's language development in Slovenia, by the time of the third assessment the authors (Marjanovič Umek, Kranjc, Bajc & Fekonja, 2004) had developed the *Scales of General Language Development-LJ* (*SGLD-LJ*), which are being standardised on a sample of Slovenian preschool children. Because the *SGLD-LJ* is a precise, objective and reliable instrument and, in contrast with the *LDS*, also makes it possible to assess the language development of older preschool children, we used it to assess the children's language development at the third and fourth assessments. The *SGLD-LJ* is intended for children aged 2 to 6 years old and includes three scales: the *Language Comprehension Scale*, the *Language Expression Scale* and the *Metalinguistic Awareness Scale*. The *Language Comprehension Scale* (alpha coefficient = 0.72; calculated on a sample of 78 6-year-old children) includes 93 tasks that apply to understanding

instructions, words indicating parts of the body, spatial concepts, quantities, relations between persons and objects, qualities, persons and their property, colours, understanding time sequences, negation, use of objects, actions and results of actions. The *Language Expression Scale* (alpha coefficient = 0.83; calculated on a sample of 78 6-year-old children) includes 94 tasks that apply to children's vocabulary, use of pronouns, use of words expressing qualities, expression of actions and states in the present, past and future, use of the plural and dual, use of words expressing spatial relations and quantity, negation, questions, story narration, use of hypernyms, explanation of words, use of words expressing social relations, coordination and subordination, use of direct and reported speech, declension and verbs of speaking. The *Metalinguistic Awareness Scale* (alpha coefficient = 0.90; calculated on a sample of 78 6-year-old children) includes 22 tasks that apply to children's ability to correct mistakes, differentiate between longer and shorter words and determine the last word in a sentence and the first and last sounds of a word. The entire *SGLD-LJ* includes 209 tasks, although children only solve tasks of appropriate difficulty depending on their age and their language competence. The test administrator carries out the tasks with the help of various play material and pictorial materials. Various numbers of points (1 to 5) are awarded for various tasks for correct responses and the points are added together within individual scales. This creates three partial scores: children's language comprehension (up to 99 points), language expression (up to 102 points) and metalinguistic awareness (up to 22 points), as well as a total score which is the sum of the three partial scores (up to 223 points) and represents an assessment of the children's language competence.

We assessed the quality of the children's family environment by using the *Home Literacy Environment Questionnaire (HLEQ)* which has two forms: one for children 3 to 4 years old (the *HLEQ: 3–4*) and one for children 5 to 6 years old (the *HLEQ: 5–6*). The questionnaires contain items that describe parents' behaviour and the activities that they use to stimulate children's language development. Parents use a six-point scale to mark the frequency of behaviour described that they engage in with their children. The *HLEQ: 3–4* (Marjanovič Umek, Podlesek & Fekonja, 2005) contains 33 items that are combined into five family environment quality factors: *Stimulation to use language, explanation (F1), Reading books to the child, visiting library and puppet theatre (F2), Joint activities and conversation (F3), Interactive reading (F4) and Zone-of-proximal development stimulation (F5)*. The *HLEQ: 5–6* (Marjanovič Umek, Fekonja & Bajc, 2006) contains 32 items that are combined into three family environment quality factors: *Reading and Conversation (F1)*, *Academic Skills (F2)* and *Proper Use of Language (F3)*.

Procedure

Individual test sessions for the children took place at one-year intervals. The parents of all the children gave written permission for their children to participate in the study. Each child was tested individually with the *LDS* and the *Test of Story Narration with a Picture Book* (at the first and second assessments) and with the *SGLD-LJ* (at the third and fourth assessments). Testing took place in the morning when the children were at preschool or school. Each test session lasted 30 to 40 minutes. At the second and fourth assessments we gave the *HLEQ* to the preschool teachers or first-grade teachers and they gave the questionnaires to the children's mothers, who then completed the questionnaires and returned them to the teachers.

The test administrators had a brief conversation with the children's parents, asking them about the mother's level of education (number of years of formal education completed) and the age at which the child enrolled in preschool. The test administrators were psychology students who had participated in a special training programme to use these instruments.

The use of statistical methods

The effect of maternal education, age at preschool enrolment and quality of the home literacy environment on the children's language competence was established using ANOVA. The differences between the arithmetic means of individual groups were tested using Scheffe's post-hoc test. The correlation between the quality of the home literacy environment and language competence and maternal education was assessed using Pearson's coefficient »*r*«.

Results

The effect of age at preschool enrolment, maternal education and the quality of the family environment on the children's language development was calculated using an ANOVA. Mothers were sorted into three groups depending on their education: a low education level (up to 11 years of formal education); a medium level of education (12 years of formal education); and a high level of education (more than 12 years of formal education). We defined the quality of the family environment as low (the lower third of ranked scores on the *HLEQ*), medium (the middle third of ranked scores on the *HLEQ*) and high (the upper third of ranked scores on the *HLEQ*).

First assessment

	Maternal education	*Age at preschool enrolment*	*M*	*SD*	*Analysis of variance*
LDS score	1	1 year	39.27	9.66	$df_1 = 1$; $F_1 = 0.33$; $p_1 = 0.57$; $\eta^2_1 = 0.00$
		3 years	38.68	2.70	
		Total	39.13	8.51	$df_2 = 2$; $F_2 = 4.37$; $p_2 = 0.01$; $\eta^2_2 = 0.07$
	2	1 year	42.11	6.87	
		3 years	43.28	6.43	$df_3 = 2$; $F_3 = 0.25$; $p_3 = 0.78$; $\eta^2_3 = 0.00$
		Total	42.62	6.60	
	3	1 year	43.31	7.51	$df_4 = 110$; *MSE* = 53.02
		3 years	45.27	5.69	
		Total	44.33	6.63	
Story development level	1	1 year	49.51	17.01	$df_1 = 2$; $F_1 = 0.09$; $p_1 = 0.34$; $\eta^2_1 = 0.01$
		3 years	43.92	17.60	
		Total	48.16	17.05	$df_2 = 2$; $F_2 = 1.36$; $p_2 = 0.26$; $\eta^2_2 = 0.03$
	2	1 year	51.26	21.67	
		3 years	53.73	24.04	$df_3 = 2$; $F_3 = 0.70$; $p_3 = 0.50$; $\eta^2_3 = 0.01$
		Total	52.28	22.29	
	3	1 year	60.05	24.31	$df_4 = 102$; *MSE* = 437.35
		3 years	50.70	19.79	
		Total	55.38	22.42	

Table 2: Differences between the children's scores on the LDS and Test of Story Narration by the children's age at preschool enrolment and maternal education at the first assessment

Note. Maternal education: 1 – low, 2 – medium, 3 – high; F_1... effect of age at preschool enrolment; F_2... effect of maternal education; F_3... interaction effect between maternal education and age at preschool enrolment; *MSE*... mean square error.

The results obtained indicate a statistically significant medium-high effect of maternal education on the scores of 3-year-old children on the *LDS*. Scheffe's post-hoc tests show that the children of mothers with a high education level achieve statistically significantly higher scores on the *LDS* than the children of mothers with a low education level ($MD = 5.20$; $p = 0.01$), whereas the differences between the groups of children of mothers with high and medium levels of education ($MD = 1.70$; $p = 0.59$) and medium and low levels of education ($MD = 3.49$; $p = 0.16$) are not statistically significant.

Further analyses showed that in the group of children who enrolled in preschool at the age of 1 the children of mothers with low, medium and high levels of education achieved comparable scores on the *LDS* ($F = 1.57$; $p = 0.21$) and also narrated stories at comparable developmental levels ($F = 1.66$; $p = 1.20$). In contrast, in the group of children who enrolled in preschool at age 3, the children's scores on the *LDS* differed statistically significantly with respect to maternal education ($F = 4.30$; $p = 0.02$). Specifically, the children of those mothers with a

high education level expressed significantly higher language competence than the children of those mothers with a low education level ($MD = 6.58$; $p = 0.02$).

Second assessment

	Maternal education	*Age at preschool enrolment*	*HLEQ: 3–4*	*M*	*SD*	*Analysis of variance*
LDS score	1	1 year	1	46.65	6.69	$df_1 = 1$; $F_1 = 3.81$; $p_1 = 0.05$; $\eta^2_1 = 0.04$ $df_2 = 2$; $F_2 = 3.54$; $p_2 = 0.03$; $\eta^2_2 = 0.07$ $df_3 = 2$; $F_3 = 0.08$; $p_3 = 0.44$; $\eta^2_3 = 0.02$ $df_4 = 2$; $F_4 = 0.28$; $p_4 = 0.76$; $\eta^2_4 = 0.01$ $df_5 = 2$; $F_5 = 0.69$; $p_5 = 0.50$; $\eta^2_5 = 0.02$ $df_6 = 4$; $F_6 = 0.86$; $p_6 = 0.49$; $\eta^2_6 = 0.04$ $df_7 = 88$; *MSE* = 31.66
			2	48.86	6.26	
			3	47.00	12.17	
			Total	47.71	6.97	
		3 years	1	47.83	3.75	
			2	52.63	6.32	
			3	53.50	0.00	
			Total	50.94	5.27	
	2	1 year	1	47.90	6.39	
			2	49.95	3.44	
			3	48.50	5.68	
			Total	49.14	4.54	
		3 years	1	50.50	4.92	
			2	49.17	11.75	
			3	54.13	5.23	
			Total	51.45	6.92	
	3	1 year	1	50.57	6.02	
			2	55.42	3.43	
			3	51.00	5.63	
			Total	52.02	5.46	
		3 years	1	55.63	3.77	
			2	54.13	2.75	
			3	51.55	3.72	
			Total	53.23	3.64	
Story development level	1	1 year	1	69.42	26.51	$df_1 = 1$; $F_1 = 2.49$; $p_1 = 0.12$; $\eta^2_1 = 0.02$ $df_2 = 2$; $F_2 = 3.20$; $p_2 = 0.05$; $\eta^2_2 = 0.07$ $df_3 = 2$; $F_3 = 1.09$; $p_3 = 0.34$; $\eta^2_3 = 0.02$ $df_4 = 2$; $F_4 = 0.04$; $p_4 = 0.96$; $\eta^2_4 = 0.00$ $df_5 = 2$; $F_5 = 0.01$; $p_5 = 0.99$; $\eta^2_5 = 0.00$ $df_6 = 4$; $F_6 = 0.74$; $p_6 = 0.56$; $\eta^2_6 = 0.03$ $df_7 = 88$; *MSE* = 595.83
			2	69.93	36.24	
			3	58.13	6.88	
			Total	68.24	29.41	
		3 years	1	51.80	15.60	
			2	67.45	19.78	
			3	43.40	0.00	
			Total	58.57	18.29	
	2	1 year	1	62.04	13.12	
			2	77.24	22.07	
			3	82.67	33.05	
			Total	73.92	22.09	
		3 years	1	57.45	26.03	
			2	65.47	1.85	
			3	77.40	16.58	
			Total	66.89	19.15	
	3	1 year	1	76.20	20.44	
			2	89.03	33.65	
			3	80.14	27.12	
			Total	81.26	26.41	
		3 years	1	74.50	25.85	
			2	76.62	16.29	
			3	69.42	16.53	
			Total	72.96	17.68	

Table 3: Differences between children's scores on the LDS and the Test of Story Narration with a Picture Book with regard to the children's age at preschool enrolment, maternal education and the quality of the family environment at the second assessment

Note. Maternal education: 1 – low, 2 – medium, 3 – high; quality of the family environment: 1 – low, 2 – medium, 3 – high; F_1... effect of age at preschool enrolment; F_2... effect of maternal education; F_3... effect of the quality of the family environment; F_4... interaction effect between age at preschool enrolment and maternal education; F_5... interaction effect between age at preschool enrolment and quality of the family environment; F_6... interaction effect between maternal education and quality of the family environment; age at preschool enrolment; *MSE*... mean square error.

The results of the second assessment showed a statistically significant but slight effect of the children's age at preschool enrolment on the 4-year-old children's scores on the *LDS*. Four-year-old children who started preschool at age 3 ($M = 49.63$; $SD = 6.06$) displayed a somewhat higher language competence than those children who started preschool at age 1 ($M = 52.30$; $p = 4.98$). However, the effect of age at preschool enrolment on story narration was not statistically significant. Maternal education had a statistically significant medium-high effect on 4-year-old children's scores on the *LDS* and on the development level of stories that they narrated with a picture book. Scheffe's post-hoc tests show that the children of mothers with a high level of education achieved statistically significantly higher scores on the *LDS* than the children of mothers with a low level of education ($MD = 4.10$; $p = 0.01$), whereas the differences between the groups of children of mothers with high and medium levels of education ($MD = 2.59$; $p = 0.16$) and medium and low levels of education ($MD = 1.50$; $p = 0.58$) were not statistically significant. Further analyses showed that in the group of children who enrolled in preschool at the age of 1 maternal education has a statistically significant effect on the children's scores on the *LDS* ($F = 3.28$; $p = 0.04$). In this group, the children of mothers with a high level of education scored statistically significantly higher than the children of mothers with a medium level of education. However, in the group of children who enrolled in preschool at the age of 3 maternal education did not have a statistically significant effect on the scores obtained on the *LDS* ($F = 0.83$; $p = 0.44$). Maternal education did not have a statistically significant effect on the children's story narration in the group of children who enrolled in preschool at age 1 ($F = 1.42$; $p = 0.25$) or in the group of children who enrolled in preschool at age 3 ($F = 0.90$; $p = 0.16$).

Quality of the family environment did not have a statistically significant effect on the 4-year-old children's language competence. However, the results did show a statistically significant correlation between maternal education and certain individual factors of the quality of the family environment, specifically with *F1: Stimulation to use language, explanation* ($r = 0.23$, $p = 0.02$), *F2*: *Reading books to the child, visiting library and puppet theatre* ($r = 0.34$, $p = 0.00$) and *F4*: *Interactive reading* ($r = 0.25$, $p = 0.01$), as well as with overall scores on the *HLEQ: 3–4 years* ($r = 0.29$, $p = 0.00$). Children's scores on the *LDS* showed a statistically significant positive correlation with *F2*: *Reading books to the child, visiting library and puppet theatre* ($r = 0.22$, $p = 0.02$) and the scores on the test of story narration with *F4*: *Interactive reading* ($r = 0.20$, $p = 0.04$).

Third assessment

	Maternal education	*Age at preschool enrolment*	*M*	*SD*	*Analysis of variance*
SGLD-LJ score	1	1 year	89.43	19.26	$df_1 = 2$; $F_1 = 5.14$; $p_1 = 0.01$; $\eta^2_1 = 0.11$ $df_2 = 1$; $F_2 = 0.04$; $p_2 = 0.85$; $\eta^2_2 = 0.00$ $df_3 = 2$; $F_3 = 1.76$; $p_3 = 0.18$; $\eta^2_3 = 0.04$ $df_4 = 88$; *MSE* = 214.00
		3 years	84.25	8.21	
		Total	87.54	16.08	
	2	1 year	95.56	12.03	
		3 years	94.45	9.57	
		Total	95.13	10.96	
	3	1 year	95.20	17.67	
		3 years	103.42	13.16	
		Total	99.48	15.86	

Table 4: Differences between the children's scores on the SGLD-LJ with regard to the children's age at preschool enrolment and maternal education at the third assessment

Note. See note for Table 2.

The results show a statistically significant medium-high effect of maternal education on the children's scores on the *SGLD-LJ*.. Scheffe's post-hoc tests show that the children of mothers with a high education level displayed statistically significantly higher language competence than the children of mothers with a low education level (*MD* = 11.94; p = 0.02). Although the interaction effect between the children's age at preschool enrolment and maternal education is not statistically significant, the differences between the *SGLD-LJ* scores of 5-year-old children of mothers with various levels of education who had already been in preschool for 4 years were lower than those of children who had been in preschool for 2 years. An analysis of variance conducted separately for both groups of children shows that 5-year-old children of mothers with a high level of education that enrolled in preschool at the age of 3 scored statistically significantly higher on the *SGLD-LJ* than did children from the same group whose mothers had a low education level (*MD* = 19.17; p = 0.00). The scores of children who had attended preschool for four years did not differ statistically significantly with regard to maternal education.

Fourth assessment

	Maternal education	*Age at preschool enrolment*	*HLEQ: 5–6*	*M*	*SD*	*Analysis of variance*
SGLD-LJ score	1	1 year	1	190.23	9.65	$df_1 = 1$; $F_1 = 0.39$; $p_1 = 0.53$; $\eta^2_1 = 0.00$ $df_2 = 2$; $F_2 = 12.61$; $p_2 = 0.00$; $\eta^2_2 = 0.19$ $df_3 = 2$; $F_3 = 0.89$; $p_3 = 0.41$; $\eta^2_3 = 0.02$ $df_4 = 2$; $F_4 = 0.67$; $p_4 = 0.51$; $\eta^2_4 = 0.01$ $df_5 = 2$; $F_5 = 0.27$; $p_5 = 0.78$; $\eta^2_5 = 0.00$ $df_6 = 4$; $F_6 = 0.65$; $p_6 = 0.63$; $\eta^2_6 = 0.02$ $df_7 = 105$; *MSE* = 114.46
			2	194.58	17.54	
			3	194.62	11.80	
			Total	192.31	12.22	
		3 years	1	199.20	10.89	
			2	195.00	18.67	
			3	178.83	9.78	
			Total	192.71	15.14	
	2	1 year	1	191.00	9.77	
			2	191.43	7.89	
			3	190.25	7.41	
			Total	191.00	8.56	
		3 years	1	193.17	11.14	
			2	194.17	11.78	
			3	198.12	11.82	
			Total	194.97	11.03	
	3	1 year	1	205.17	6.43	
			2	202.67	12.31	
			3	198.81	11.07	
			Total	201.87	10.17	
		3 years	1	200.37	8.45	
			2	208.00	4.12	
			3	203.97	10.49	
			Total	203.95	9.02	

Table 5: Differences between the children's scores on the SGLD-LJ with regard to the children's age at preschool enrolment, maternal education and the quality of the family environment at the fourth assessment

Note. See note for Table 3.

The results of the fourth assessment show a statistically significant and high effect of maternal education on 6-year-old children's language competence. Scheffe's post-hoc tests show that the children of mothers with a high education level achieve statistically significant higher scores on the *SGLD-LJ* than the children of mothers with a medium (*MD* = 10.53; $p = 0.00$) or low (*MD* = 10.66; $p = 0.00$) level of education, whereas the differences between groups of children of mothers with medium and low levels of education are not statistically significant (*MD* = 0.13; $p = 0.99$). However, the differences between the groups of children of mothers with high and low levels of education are statistically significant

both in the group of children who enrolled in preschool at age 1 (MD = 9.56; p = 0.02) as well as in the group of children who enrolled in preschool at age 3 (MD = 8.98; p = 0.04). The same is true of the children of mothers with high and medium levels of education, who also differed from one another in the group of children who entered preschool at age 1 (MD = 10.87; p = 0.00) as well as at age 3 (MD = 8.98; p = 0.04).

The effect of the quality of the family environment on the children's language development at age 6 was not statistically significant. The results obtained show that maternal education has a statistically significant positive correlation with *F1: Reading and Conversation* (r = 0.19, p = 0.04).

In all four assessments, maternal education was a more significant indicator of the children's language development than were the children's ages at enrolment in preschool or the quality of the family environment.

Discussion

Similar to the results of a number of foreign studies of the effect of preschool on children's development (e.g., Lamb et al., 1992; Peisner-Feinberg et al., 2001), our results also show that the effect of preschool alone on children's language development is very small or, in other words, insignificant from the perspective of children's language development whether the children enrolled in preschool at the age of 1 or 3. We discovered a negative but low effect of preschool only in the second assessment, when the children were approximately 4 years old, but this only applied to one measure of language development. The results obtained are probably connected less with the effect of preschool than with the instrument (the *LDS*), which turns out not to have been the most sensitive for the given ages of the children or to have contained tasks that were somewhat too easy. With other measures of language development (e.g., children's story narration), the variability of scores was greater and the effect of preschool was no longer negative.

Some researchers (e.g., Lazarus, 1991) have assessed that the early enrolment of infants and toddlers in preschool – especially because of the greater number of children per adult in comparison to the mother-infant dyad – is not the most stimulating for their language development. In contrast, the results of the majority of more recent studies (e.g., Andersson, 1992; Broberg et al., 1997; NICHD, 2000) point to a positive and long-term effect of children's early enrolment in preschool on cognitive and language development, although generally in connection with the quality of the preschool and the family environment. In our study we also expected a positive, rather than a merely neutral, effect of preschool on the children's language development, especially because we assessed the quality of Slovenian preschools as relatively high at the structural level and because the preschool curriculum (*Kurikulum za vrtce*) facilitates a high-quality educational process. As the results of other studies (e.g., NICHD, 2000) show, quality at the process level is just as important as

quality at the structural level. If we wished to directly compare our results with the results of studies (e.g., Broberg et al., 1997; Burchinal et al., 2000; NICHD, 2000) that have found a statistically significant positive effect of preschools on children's language development, we would also need to assess process quality in Slovenian preschools in greater detail. At the same time, the results of our study, similar to those of the studies cited above, indicate that the effect of preschool on children's language development is also connected with other factors, especially with parental education and the quality of the family environment. To a certain extent, preschool contributes to lowering the effect of maternal education on children's language competence and provides the children of mothers with a low education level with a higher quality environment and more stimulation for their language development. Maternal education has a statistically significant effect on the language competence of 3- and 5-year-old children who enrolled in preschool later (at age 3) but not on the group of children who entered preschool early (at age 1). Based on the results we obtained, we can conclude that preschool enrolment primarily stimulates the language development of the children of mothers with a low level of education or can make up for certain deficiencies in language development connected with a lower quality family environment.

In all four assessments of the children's language competence, maternal education was a more significant factor of the children's language development than were the children's age at preschool enrolment or the quality of the family environment as measured with the *HLEQ* at the second and fourth assessments. The results showed a significant, medium-high to high effect of maternal education on the children's language competence that increased with the children's age. The children of mothers with a higher education level expressed higher language competence than the children of mothers with a lower level of education. The results obtained are comparable to the results of a number of other studies (e.g., Bornstein & Haynes, 1998; Marjanovič Umek, Fekonja, Kranjc and Lešnik Musek, 2003; Moynihan & Mehrabian, 1978; Silven et al., 2003) in which the authors determined that maternal education is a significant factor of children's language development. A Slovenian study (Marjanovič Umek et al., 2005) states that maternal education and the quality of the family environment can explain 9% of the variability in language competence among 3- and 4-year-old children.

However, maternal education generally also correlates with the quality of the family environment (e.g., Butler et al. 2003; Fekonja, 2002; Foy & Mann, 2003; Hoff, 2003). This positive correlation is to some extent a consequence of the fact that mothers with a higher education level also have a higher socioeconomic status, which enables them to offer their children more materials and activities (e.g., more children's books and toys, more frequent visits to puppet shows) that support children's language development. Mothers with a higher level of education also have greater knowledge and higher expectations regarding child development (Bee et al., 1982), which influences the characteristics of their verbal interaction with their children and more frequent inclusion in activities that stimulate children's language development. The results support these

findings because they point to a statistically significant positive correlation between maternal education and the quality of the family environment. Specifically, better educated mothers reported that they offered their children more stimulation for language development than mothers with a lower level of education. Mothers with a high education level reported that they more often stimulate their 4-year-old children to use language and explain things (e.g., they complete and expand children's statements, create grammatically correct sentences when speaking with children and discuss how they spent their days with their children), read together and visit the library and puppet shows (e.g., they read to their children whenever asked, talk with their children about puppet shows and movies that they have seen and purchase picture books and other books as gifts for their children) and include their children in the process of reading together (e.g., they allow children to interrupt and ask questions while they are reading and they talk about the content of the book while reading with children). Better educated mothers also reported that they more often included their 6-year-old children in conversation and reading together.

The results are comparable with the findings of several authors whereby various aspects of the quality of the family environment are connected with children's language development (e.g., Harris, 1993; Marjanovič Umek et al., 2005; Snow, Burns & Griffin, 1999). The main effect of the quality of the family environment on children's language development was not statistically significant, but the 4-year-old children of mothers who reported that they read to their children more often, visited the library and puppet shows and more often included them in the process of reading together narrated stories at higher developmental levels. The results indicate that the correlation between maternal education, children's language competence and the quality of the family environment decreases somewhat with age. In comparison with 4-year-old children, maternal education correlates with 6-year-old children in only one factor of the quality of the family environment and children's scores on the *SGLD-LJ* with no factors. Perhaps the characteristics of the family environment have an increasingly smaller effect on children's language and other development with children's age because children are increasingly frequently involved in interaction with their peers and spend ever more time with them. Spinath, Price, Dale and Plomin (2004) have determined that the influence of shared-environment factors on children's development is increasingly connected with factors that are characteristic of an individual (e.g., preschool group). At the time of the second assessment, all children had attended preschool for at least 1 year and at the time of the fourth assessment 3 years; the effect of preschool on children's language development, especially the effect of peer group communication and teacher/child communication, was probably increasingly recognisable (Nelson, 1996; Wray & Medwell, 2002), which contributed to reducing the effect of the quality of the family environment on the children's language development. In the self-assessments that the *HLEQ* is based on, one must bear in mind that these probably include socially conditioned responses, which Sénéchal, LeFevre, Thomas and Daley (1998) drew attention to in particular. For older preschool

children, mothers' assessments are even less objective because mothers believe they ought to already be engaging in the majority of activities included in the items on the *HLEQ*. As a result, the variability in assessments is even smaller and there is also a lower correlation with children's language competence.

Even though (as the results of our study also show) preschool has a statistically significant effect on stimulating the language development of children who come from lower quality family environments, there is too little recognition (at least in our opinion) of the effect of preschool on the language development of children who come from more stimulating family environments. Only additional analyses can reveal the possible weak points that create obstacles and the less effective stimulation of the language development of children who come from more stimulating family environments and whose mothers have a high level of education. If, similar to the results of certain studies from Slovenia and abroad (e.g., Loeb, Fuller, Kagan & Carrol, 2004; Marjanovič Umek, Zupančič, Fekonja & Kavčič, 2003), there is primarily a failure to achieve the highest levels of quality at the process level (e.g., the insufficiently differentiated use of language or the use of language in various situations by professionals, relatively rare use of metalanguage, insufficiently frequent responsive and engaged communication with children, too little stimulation of children's language use in various activities and in various manners, too little emotional involvement in narration etc.), then it is necessary to invest additional effort in conveying current knowledge about child language development and learning and the self-assessment of professional work in preschool groups, as an ongoing process of internal development. It appears that preschools are close to achieving a positive effect in which all children can share, regardless of relatively large differences in language development and regardless of the environment that they come from. In our view, in order to achieve this goal it is still necessary to take some important (albeit, perhaps, small) steps in order to achieve higher quality, especially at the process level.

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The Concept of Competence in Education: Definitions, Approaches, Dilemmas

Abstract: The treatise shows that the term competence has been defined in different ways in the theoretical discourse. We highlight two of them, the understanding of competence as the underlying cognitive-epistemological ability of an individual to produce an infinite number of effects (competent judgements) on the basis of finite epistemological means, which is a definition that is primarily found in the linguistics field in Chomsky's early works and with authors who subsequently developed the concept of competence on that basis. On the other hand, competence has also become established within economics and management, where it is understood as an ability to perform particular operative tasks or to adjust to needs in specific business environments. In this sense, this is a distinctly utilitarian concept, related to the neoliberal economic paradigm. The fact is that, primarily in the last two decades, this utilitarian concept of competence has also entered the field of education where there are tendencies to establish it as a goal of education not only in vocational but also in general education. This is shown by the efforts of many international organisations and interest groups, from the OECD, EU, British RSA, World Bank etc. – which certainly raises a number of questions, particularly about the relationship between competence and knowledge, especially in general education programmes.

Keywords: competencies, skills, linguistics, management, general education, trends in the education field.

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1 Introduction

In the last three decades, the concept of competence has become one of the most influential concepts in educational theory and in implementing curricular models. We are interested in which *definition* of competence prevails here or, in other words, what is the prevailing understanding of competence as the principal concept in the curricular planning, implementation and evaluation of education. The reason is that the way in which competence is understood substantially influences both implementation in curricular processes and the effects produced by competence-oriented curricular planning.

In the theoretical discourse, the concept of competence is burdened by the fact that it is established by a multitude of both explicit and implicit particular definitions. In their contributions, many authors frequently use the term competence quite ambiguously and without a clear definition as to its contents; consequently, some believe we are seeing the inflated use of this term (cf. Weinert 1999; Lum 1999). According to Weinert (1999), this 'notional ambiguity' is also being contributed to by the fact that this is a term that is not only present in the scientific language but in everyday speech: 'Thus, the same term may have both a precise, scientific meaning, embedded within a theoretical context, and a more variable and vague meaning, stemming from everyday use. This can lead to ambiguity when the vocabularies of everyday language and social science terminology are exchanged and assimilated, which, of course, is the usual case!' (ibid., p. 3).

The analysis of discourses, an element of which is use of the term competence, shows that there are at least two specific definitions of this term, differing essentially on certain points. Conditionally, by referring to Witt and Lehman (2001) one could call them the *internal* and *external* definitions of competence although, as we will show below, our delimitation will not go entirely along the lines set by these two authors. They follow the general presumption that in the philosophy of science it is possible to formulate a definition of a term either by

reference to a certain external entity or by explaining a set of characteristics that may be ascribed to the entity the term refers to. The external definition of competence is thus based on the presumption that there is a series of tasks, requirements or results (T) that an individual (or group) must satisfy, with the 'ability to do T' is the (external) definition of competence, while the internal definition of competence is based on theorisation on the *internal structure* and its properties, the activation of which is believed to lead to certain (expected, logical) effects. As they emphasise (ibid., p. 4), this is merely a general, formal distinction between different definitions of competencies, which may be very different in terms of contents.

The differences seen in the definitions of competence as to its contents, along with the dilemmas and questions they raise will be at the forefront of this article.

The starting points for the detailed analysis are based on three fundamental theses:

1. The theoretical arena of the social sciences developed two substantially different concepts of competence, originating from entirely different theoretical presumptions and, as such, they also have different effects in specific scientific, expert or specialised discourses. Within the first concept, competence is understood as a knowledge-based underlying ability to produce an unlimited number of effects on the basis of limited cognitive-epistemological means, while according to the second concept competence is seen as an ability to perform operative tasks and adjust to any specific requirements of the economic market.
2. Based on the above distinction, the concepts also differ in their understanding and definition of knowledge. While the first concept builds on the presumption that a preliminary split into functional and non-functional knowledge is neither possible nor productive, the second one is based on the immanent presumption that it is sufficient for the establishment of competence to compile specific knowledge which is recognised as functional in advance and is also only legitimate as such.
3. In the field of vocational education, and recently also increasingly evidently in compulsory general education, the understanding of competence is an ability to perform operatively formulated tasks, which is closer to the second concept of competence. This is shown in the systematic reduction of competences to assessable and executable tasks (operative goals of education), connected with the specific requirements and expectations of the labour market.

Grounding the above-mentioned theses via an analysis of different theoretic discourses, in the last part of the article we will point to certain backgrounds and trends in education policies which, in our opinion, have substantially contributed and are importantly maintaining the specific understanding of the concept of competence within education.

2 Competence as the knowledge of language in the field of linguistics

In the 1960s the concept of competence appeared as one of the principal concepts of the theory of transformative-generative grammar, later also becoming part of the sociolinguist discourse. The concept of competence introduced to linguistics by Chomsky (1964a; 1965) was relatively undefined in his first essays and was, as such, subject to different interpretations. In one of Chomsky's first references to competence, he wrote:

'On the basis of a limited experience with the data of speech, each normal human has developed for himself a thorough competence in his native language. This competence can be represented, to an as yet undetermined extent, as a system of rules that we can call the *grammar* of his language. To each phonetically possible utterance /…/, the grammar assigns a certain *structural description* that specifies the linguistic elements of which it is constituted and their structural relations (or, in the case of structural ambiguity, several such structural descriptions).' (Chomsky 1964a, p. 51).

It is impossible to conclude from this quotation how exactly Chomsky defines the notion of competence as regards its contents – after all, it follows from his words that it cannot be clearly defined, although he simultaneously claims it can be understood as a *system of rules* forming the grammar of a language[1]. Nevertheless, it was already clear at that time that Chomsky introduced the concept of competence as part of language theory with an immanent anti-behaviourist position, which among other things means that competence itself was grounded on mentalist and not behaviourist presumptions.[2]

In his work *Aspects of the Theory of Syntax*, Chomsky further developed the concept of competence (Chomsky 1965). He called it *linguistic competence* and defined it as the knowledge of language, placed in relation to empirical linguistic performance:

'We thus make a fundamental distinction between *competence* (the speaker-hearer's knowledge of his language) and *performance* (the actual use of language in concrete situations). Only under the idealization set forth in the preceding paragraph[3] is performance a direct reflection of competence. In actual fact, it obviously could not directly reflect competence' (ibid., p. 4).

[1] It should be stressed that one must distinguish between the so-called universal grammar and grammars of particular languages. The relationship between the two is relatively complex and an explanation in this direction would require a long excursion into linguistics, which we cannot afford here. To the extent needed to explain the linguistic concept of competence, we will indicate the basic features of this relation below.

[2] One of the influential texts on whose basis cognitivism in psychology became one of the leading paradigms is Chomsky's polemics with Skinner and his behaviourist explanation of language learning. With this text, first published in 1959, Chomsky clearly showed his rejection of behaviourism, which had previously also been the prevailing theoretical position within linguistics (cf. Chomsky 1964b).

[3] The reference to the preceding paragraph concerns one of the basic presumptions about the subject of the research of linguistic theory. Chomsky believes that the linguistic theory should primarily be concerned with 'ideal speaker-listener, in a completely homogeneous speech-community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance' (Chomsky 1965, p. 3).

Chomsky thus established a clear distinction between competence and performance, while insisting that competence as an *underlying ability* to creatively use a language without limits cannot be reduced to the level of external manifestations of individual performances. In other words, this is a presumption embedding a thesis that any objectification of competence, appearing as an empirical performance, is necessarily particular and can as such only be its *incomplete reflection*. This fact, that *competence cannot be captured in its own objectification*, is one of the major characteristics of the definition of this term produced within (psycho)linguistics and it seems that it could – appropriately taken out of the specific context of linguistic theory – also play a productive role in the processes of implementing competence in curricular theory and practice.

It is important to mention that, particularly in his initial definitions, Chomsky largely built on linguistic presumptions already developed by Humboldt; and the latter also left records showing that he did not think linguistic performance was the same as the concept he called *linguistic power*, being the basis of the formation of words and thus for the conceptualisation of a person's internal thoughts. According to Humboldt, the essential feature of linguistic performance itself is its creative potential leading to, as we have already mentioned, the conclusion that it cannot be descriptively objectified in a definite way. Humboldt thus also noted: 'Language cannot be viewed as a substance existing here and being entirely manifest or somewhat transferable, but must be seen as a substance producing itself continuously, *where that laws of production are determined, but the volume and to a certain extent the nature of the product remain totally indefinite*' (Humboldt 1988, p. 118, emphasis added). This is closely connected with one of Humboldt's fundamental linguistic positions, claiming that language is not a final product [*Ergon*] but an activity [*Energeia*], i.e. an *organ that produces thoughts*, therefore its true definition can only be genetic or developmental: '… (language, author's note) is a continuous repetition of mental work enabling an articulated sound to express thoughts' (Humboldt 1988, p. 109). The basic distinction between underlying ability and the external manifestation of this ability has therefore been present at least since Humboldt, and Chomsky again made an issue of the theses prevailed over by the so-called descriptive paradigm in linguistics in the 19th century and the first half of the 20th century, and developed this further in the direction of his universal grammar theory.

The distinction Chomsky establishes between *underlying* linguistic competence understood as part of the cognitive-epistemological structure of an individual and the *external* linguistic performance manifested as linguistic behaviour does not constitute a delineation between what is biological and what is social: within the universal grammar theory, competence should be interpreted as an *internalized* (and as such *socially transmitted*) *ability* of the creative use of a particular language. Certainly, one should not deny that the linguistic theory developed by Chomsky is nativist in its essence; after all, its basic presumption is that the ontogenesis of language is essentially determined by the cognitive structure of an individual determined by the genetic dispositions for language

development. Therefore, although it is true that, in its essence, language is not something that can exist without innate disposition structures, it is also true that the knowledge of a specific language only gets established through meanings communicated to the child since their birth by important Others. Or to put it differently, only by entering the socially formed and maintained 'network of symbols' does the child activate biologically-given dispositions by acquiring the meanings communicated by important Others. Of course, this is not terminology Chomsky would use, but the possibility of such interpretation is based on his subsequent works, when he explained and analysed his presumptions in more detail; he developed concepts such as initial and final states (S_0 and S_s) and I-language and E-language. Using this terminology he explained the relationship between biologically and socially communicated language structure, as follows from the quotation below:

'The language faculty is a distinct system of the mind/brain, with an initial state S_0 common to the species /…/ and apparently unique to it in essential respects. Given appropriate experience, this faculty passes from the state S_0 to some relatively stable state S_s, which then undergoes only peripheral modification /…/. The attained state incorporates an I-language (it is the state of having or knowing a particular I-language). UG is the theory of S_0; particular grammars are theories of various I-languages. The I-languages that can be attained with S_0 fixed and experience varying are the attainable human languages /…/. The steady state has two components that can be distinguished analytically, however, they may be merged and intertwined: a component that is specific to the language in question and the contribution of the initial state. The former constitutes what is »learned« – if this is the appropriate concept to employ in accounting for the transition from the initial to the mature state of the language faculty; it may well not be.[4] (Chomsky 1986, p. 25–26).

The difference between competence and performance can therefore not be uniformly interpreted as a difference between what is biological (innate) and social (learned, acquired), as it follows from the above explanation that linguistic competence[5] is not *fixed* in itself, but passes from an initial state (indicated by

[4] In his texts, Chomsky several times expresses his scepticism of the presumption that language is learned (although he does not seem to be entirely consistent, as he nevertheless uses this term himself). However, it should be stressed that this scepticism implies the thesis that knowledge of a language (i.e. I-language) is innate, but that it is acquired. There is therefore the terminological pair learning vs. acquisition. The difference between the two is explained by Y. R. Sole: 'Acquisition is a subconscious process, similar to the one operant among first language learners. Learning, on the other hand, refers to conscious attention to what is presented.' (Sole 1994, p. 100).

[5] 'Language faculty' in the above quotation. It is correct to point out that here 'linguistic competence' is our interpretation of Chomsky's 'language faculty'. The thing is that when Chomsky develops the concepts of I- and E-languages, and defines the relations between different above-described 'language states' and universal grammar, he starts to increasingly abandon linguistic competence as a concept on which he based his earlier works (Chomsky 1964a, 1965); in the index of the book 'Knowledge of language' there is no entry under 'linguistic competence' at all (cf. Chomsky 1986). It seems that what used to appear as 'linguistic competence' in Chomsky's early papers later becomes part of the wider concept of 'language faculty'.

S_0) to the final, steady state (S_s), which means that an individual has learned the I-language, i.e. its grammar.

Instead of the initial division into linguistic competence as language knowledge and linguistic performance as the use of language in specific circumstances, Chomsky now distinguishes between at least three stages at the theoretical level: S_0 (biologically-given principles and parameters of universal grammar), S_s (S_0-derived and simultaneously socially transmitted knowledge of rules and principles of a specific I-language) and, in the final instance, specific linguistic performance manifested as E-language. Instead of the dyad linguistic competence – linguistic performance, we are now dealing with the triad *universal grammar – linguistic competence – linguistic performance*; and in the words of Chomsky: 'What we 'know innately', are the principles of the various subsystems of S_0 and the manner of their interaction, and the parameters associated with these principles. What we learn are the values of the parameters and the elements of the periphery (along with the lexicon, to which similar considerations apply).' (Chomsky 1986, p. 150).

Linguistic competence in Chomsky's theory is also interpreted in this sense by Cook and Newson, who wrote: 'Grammatical competence is a mixture of universal principles, values for parameters, and lexical information, with an additional component of peripheral knowledge.' (Cook and Newson 1998, p. 87).

The criticism Chomsky faced concerning the concept of linguistic competence highlighted the thesis – which could in fact be the subject of polemical debate – that his concept of linguistic competence is *too narrow as to the contents*, only referring to the syntactical aspect of language.[6] This criticism led to the formation of the concept of *communicative competence* within sociolinguistics, developed by Dell Hymes (cf. Hymes 1972; 1992, also see Cazden 1996) at the end of the 1960s. One of the basic points Hymes (1972) brought up in a treatise introducing the concept of communicative competence is that the linguistic competence of an individual in a linguistic community cannot be limited to the production and understanding of grammatically correct sentences. 'Such a theory of competence posits ideal objects in abstraction from sociocultural features that might enter into their description,' stated Hymes (ibid., p. 271) among others. Besides the *knowledge of grammar* or grammatical rules of a language, it is essential for an individual to have *knowledge of communication*, where it is also necessary to distinguish between the *underlying (communicative) competence*,

[6] This characteristics of the concept of linguistic competence is also pointed out by Cook and Newson (1998). According to Chomsky, the subject of linguistic research is in fact grammatical rules and not 'language' in general. He himself emphasises that the notion 'language' itself 'is derivative and relatively unimportant. We might even dispense with it with little loss /…/ the fundamental concepts are grammar and knowing a grammar…' (Chomsky 1980, p. 126). On this basis Cook and Newson (1998) in their interpretation of Chomsky emphasise that 'what the speaker knows is a grammar, not a language /…/ Hence UG theory tends to use the term 'grammatical' competence rather than 'linguistic' competence.' (ibid., p. 74). The reason that we nevertheless use the term linguistic competence results from the fact that this term was also used by Chomsky himself (cf. 1965), and subsequently a number of authors using and interpreting his theses.

which is essentially determined by the social context in which the individual is placed, and *communicative performance*, which means the objectification of this competence in specific, empirical circumstances.

With a similar intention, although analysed slightly differently, the issue of linguistic competence was raised by O. Kunst Gnamuš (1987) in Slovenia. In principal, she also used the basic definition of linguistic competence as developed by Chomsky but expanded it in terms of its contents and pointed to its more complex structure. She built on the fundamental sociolinguistic presumption that linguistic form and speech production do not exist for their own sake, but are learned by an individual as a means of communication and for the transmission of data and information. The consequences of this thesis are clear: if the communication and transmission functions of language are put at the forefront, this implies the existence of inter-personal relations in which communication and transmission are implemented. But since inter-personal relations are always socially determined and can therefore also be interpreted as social relations, they are subject to the laws of these relations. One of these laws is their hierarchical structure which, according to Kunst Gnamuš, is also a component of linguistic competence. As it appears as an entity in the *function* of the production and understanding of language, i.e. in the function of inter-personal communication and transmission, this among other things means that it is itself substantially determined by the laws governing the relations it enters. She thus understood linguistic competence as being 'multidimensional', composed of five competence elements: grammatical, semantic or cognitive, social or pragmatic, normative, and creative or metaphoric element (ibid., p. 159ff). She emphasised that linguistic competence composed in this way is not a simple sum but a synthesis of all the competence elements listed, which are *in a mutual dialectical and hierarchical relationship*, reflecting social reality. The author believed that the top hierarchic position is taken by the *social or pragmatic* competence element which overdetermines the other four, emphasising particularly that the cognitive relation (constituted by the semantic competence element) is subordinated to the social one: "The relation between social and cognitive is instrumental: the first is the goal and the latter the means' (ibid., p. 163). Certainly, it should not be interpreted that the 'content' or semantic competence element is of marginal importance, however, it means 'that the social and cognitive development are inseparably connected, and that the development of the semantic competence depends on social relations' (ibid.).

In short, the above leads to the conclusion that linguistic competence is in essence established by *knowledge of language* (as far as Chomsky is concerned, it would be more accurate to say knowledge of *grammatical rules*, but also knowledge of language in a wider sense), which is to a large extent acquired, i.e. socially transmitted and socially determined knowledge. This epistemological component is essential to the understanding of competence and here, in fact, lies the core of the paradigmatic turn that Chomsky carried out in the field of linguistics. The surplus of psycholinguistics over behaviourist-oriented descriptive linguistics lies in the fact that it introduces the theory

of competence which, in the words of Pylyshyn, 'does not describe how people go about doing things (e.g. solving problems)', but 'is being addressed to the epistemological side of cognition rather than to its execution' (Pylyshyn 1973, p. 36). The author transferred the theory of competence understood in this way to the case of understanding and resolving of algebraic problems and showed that, if that is to be a productive concept, competence is only actually established by *transmitted knowledge* which is entirely the knowledge of contents and related understanding of concepts and not direct learning of how to perform processes which is logically only possible on the basis of the knowledge gained. If you show pupils a set of signs like '(x –) (y + z) = w' and ask them if this is an appropriate form of a mathematical equation, they will know that the answer is negative on the basis of 'intuitive judgement'. But *what* is such a judgement *based on*? Let us suppose, said Pylyshyn, that a series of increasingly complex sets are shown to the pupils who for each of them must assess whether they represent an algebraically sensible unit or not – when is their *judgement competent*? 'If the student has learned the concept correctly (by whatever method of teaching that was used) he can surely keep coming up with more principles which describe the critical characteristics on which he based his decision in each particular instance' wrote Pylyshyn (ibid., p 37). Or, in other terms, the difference in this sense between a *competent* student who makes the judgement and a student who has not yet developed the competence is not in the correctness or incorrectness of their answers. An incompetent student may, like a competent one, also answer the question correctly but that does not mean that his answer results from a competent judgment – the latter can only take place (and in this competent judgement differs from correct answer) when it is grounded on the conceptual knowledge gained which considerably exceeds the range of any particular problem. Such knowledge is also an indispensable condition for its *creative application* as only this enables an 'infinite use of finite means'. Or, again in the words of Pylyshyn:

'What makes it possible for him (the student, author's note) to be creative in developing such (heuristic, author's note) procedures must be that he has mastered a concept of well-formedness (e.g. of a mathematical equation, author's note) quite independent of all these procedures. What the student knows is *what enables him to creatively generate appropriate heuristics* as these are needed. And, if he has learned his algebra correctly, 'what he knows' is described precisely by the recursive definition, which may then be taken as defining his underlying competence' (ibid., p. 38).

This is an emphasis that should also be part of any treatise on competencies in the field of education if they are to hold a productive position in curricular solutions.

However, it seems that in the current tendencies in this field a view of competence based on different presumptions is prevailing. As we will see below, this is partly explicable by the fact that competence was not introduced in the field of education as a cognitive-epistemological concept but rather as an *antithesis of this concept,* with a predominant behaviourist connotation. This is

actually not surprising if we consider that, first, it became established as part of the solution to the problem of *providing (economic) efficiency* of education in the Anglo-Saxon and, particularly, in the American system and that, second, it has become an important conceptual tool for the provision of this efficiency, particularly in the field of vocational and professional education where a close connectedness with the labour market is immanent and which is to a large extent (co)created by the interests and expectations of this market.

3 Competence somewhat differently defined or concept under the pressure of requirements for economic efficiency

According to L. Carrell (1992), at the beginning of the 1970s the USA faced quite a critical situation in the field of education in public secondary schools. It happened increasingly frequently that secondary school students were unable to finish their education as they did not achieve even the basic knowledge standards which, understandably, led to critical responses from the public: 'Pressure from outside the educational arena mounted as parents and legislators asked: What are students learning? What are we getting for our invested tax dollars?' (ibid., p. 2).

Certainly, the two questions imply the requirement for a more detailed public insight into the efficiency of the education system or the actual educational output produced by individual publicly-financed schools. It should be stressed that establishing the efficiency of the education system is itself all but problematic, as the quality of education (not only, but nevertheless also) depends on such control mechanisms. However, this also means that the philosophy embedded in the supervision of education efficiency significantly reversely influences the curricular concept and implementation of the teaching process. And, as Wise put down in one of his treatises, at the time a need for the establishment of accountability appeared there was no suitable conceptual framework and it seemed that competence-oriented education indicated a good solution: 'The generalized notion of accountability evolved into competency-based education because accountability did not have a sufficient technology to be usable. Competency-based education seems to provide the needed technological base and purports to accommodate all the goals of education – all the goals, not just reading, writing, and arithmetic' (Wise 1979, pp. 546–547).

In the same period, a short article by David McClelland entitled 'Testing for Competence Rather Than for »Intelligence«' (McClelland 1973) was published in America, with the author listing several critical arguments against the then strongly established measurement of intelligence and its consequences, and alternatively proposing the testing of competencies or an individual's competency. As we have already published a comprehensive analysis of this article (cf. Štefanc 2005), we will not repeat it here. However, it is worth highlighting that McClelland emphasised so-called criterion sampling as one of the essential principles in the testing of competence or, in other words, the tasks

set in tests should reflect the actual tasks that students will supposedly perform in 'real' life situations. Or as he graphically illustrated it himself: 'If you want to know how well a person can drive a car (the criterion), sample his ability to do so by giving him a driver's test' (McClelland 1973, p. 7). Besides, the checking of competences should be designed so that it enables the detection of any changes in an individual's behaviour, experience and abilities to perform a certain task emerging through the education process (ibid.). McClelland's definition of competence, *which could be summarised as the ability to efficiently perform specific tasks*, encountered a favourable response within economic theory and management. At the beginning of the 1980s, Richard Boyatzis, one of the most frequently quoted authors in the field of competence in management, published the results of an extensive study with which he showed that top managers differ from average ones at the very level of competencies shown (cf. Boyatzis 1982). Rather than the empirical, the theoretical part of this study is interesting to our treatise, with the author conceptually defining competencies as the characteristics and abilities of an individual that can be expressed as motives, values, individual aspects of self-image or social roles, different skills, or the body of knowledge that the individual uses (ibid., p.23). This term thus covers a relatively wide area, reaching from an individual's value orientation to general and vocation-specific know-how, which implicitly leads to the conclusion that an individual's competence is manifested through all of their personality. In other words, with some imagination all the individual's personal characteristics may be part of the description of his competence (or, more precisely, of his different types and levels of competencies).

3.1 Competence as a condition for effective performance at work and its relation to knowledge

Two characteristics of the understanding of competence in economics and management are of the essence[7]: the first is shown in the *reduction of competence to the level of specific operative activities*, which blurs the delineation between competence and performance that Chomsky established in linguistics, while the second is the *instrumental relation between knowledge and competence*, leading to the marginalisation of theoretical knowledge and to a retroactive legitimisation of knowledge only on the basis of its recognised usefulness in the process of performing specific tasks. Let us take a closer look at both characteristics.

Although it is true that at the level of principle Boyatzis wrote that the set of an individual's competencies reflects his *capability* and that they thus describe 'what he or she *can do*, not necessarily what he or she does' (ibid.), in

[7] It is necessary to emphasise that the understanding of competence in this segment (like in any other segment where this concept has a significant role) is not uniform. According to Civelli (1997, p. 227), there are at least three approaches to the definition of competence, namely the French, American and British approaches. We will primarily focus on the American and British understandings; these two do not differ significantly in the point we highlight in our treatise, and are also predominant in the theoretical arena.

practically the same paragraph he also defined competencies as characteristics '*causally related to effective or superior performance* in a job' (ibid.). Kohont arrives at a similar conclusion, saying: 'Only when an individual successfully uses his capability (combination of knowledge, skills and motives) in a certain situation, can we speak of competences' (Kohont 2005, pp. 35-36). Or, to put it differently, competence exists and an individual is only competent to the extent this is objectively manifested; there is no longer a *de facto* difference between the underlying capability of an individual and objectification of this capability. In one of the bulletins of the UN Industrial Development Organisation (UNIDO) dedicated to competencies, we find the same definition: competence is 'a set of skills, related knowledge and attributes that allow an individual to perform a task or an activity within a specific function or job' and is 'demonstrated or mastered in a job and could be easily transferred to another job' (UNIDO Competencies 2002, p. 8). Actually, the presumption about the existence of a causal relation between competence and effective performance of a job (and expectations about the achievement of superior results) is not erroneous in principle to the extent it is understood as a claim that a successfully performed job is an *indicator* of an individual possessing a certain body of abilities, knowledge, motivation, skills and similar characteristics which we can cover with the term of competence(s). Besides, this claim by itself does not necessarily lead to the reduction of competence to a set of operative tasks, the latter is only a consequence of the further development of the thesis of causal relation. The thing is that the definition of competence as being causally related to the effective performance of an activity led to the conclusion that it can be measured through observations of the execution of tasks and the implementation of test situations in which employees prove their ability to effectively respond to the requirements of their jobs. According to our understanding of McClelland and Boyatzis (1980), here lies the major strength of the concept of competence in the theory and practice of management. Compared to the 'traditional' assessment of 'academic abilities', the implementation of this concept is supposed to have the advantage that it enables an assessment of the functionality of an individual at a specific workplace and provides the basis for considering in what way the employees can improve their performance if it is below expectations. The two authors thus developed five steps that, in their view, enable the assessment of competences (ibid., pp. 368–370):

(1) locate some outstanding and average performers in the position;
(2) conduct behavioural-event interviews of a small sample of outstanding and average performers;
(3) conceptualise the competencies that differentiate superior from average performers;
(4) find or develop measures for the competencies that differentiate superior from average performers; and
(5) administer tests that supposedly measure the competencies to a new group of individuals rated for job success to see if the tests differentiate the more from the less successful.

These steps show the logics according to which a carefully implemented process of identifying a set of activities and characteristics is supposed to enable the 'assessment of competence'. Of course, the problem lies in the fact that the relation between competence and performance is simply not reversible: even if it is true that the competence of the subject is embedded in individual activities, the sum of these activities never leads to an objectively measurable competence. This is also the presumption of the linguistic concept described in the first part: if competence means the *ability of an infinite use of finite means* then, by definition, it is not possible to compose a *finite set of possible uses* or, in other words, competence cannot be captured in the sum of individual activities. Certainly, the assessment of a set of specific activities or set of personal characteristics cannot be equated with the 'assessment of competences', unless to the extent competence is removed the basic dimension establishing it as competence: the fact that it is an uncatchable surplus, i.e. always *something more* than the mere sum of empirical activities. It seems that, in the desire to establish control over competence, this is exactly what happened: competence (to the extent we speak of an individual and not an organisation[8]) has *de facto* become a synonym for skill. Or in the words of Kohont: 'work-specific competence enables' a baker 'to estimate when to take bread out of the oven so that it is baked in the best way' (Kohont 2005, p. 39).

The above-described is closely connected to the second characteristic property of competence in this discourse, namely the understanding of the role of (theoretic) knowledge as a mere *instrument* for the implementation of specific tasks. When McClelland (1973) spoke about the role of criterion sampling as the basis for the assessment of competence, he emphasised that this also includes the assessment of the theoretical knowledge needed. But it is more than obvious that he primarily thought about the 'theoretical' knowledge that an individual needs to perform the envisaged vocational tasks:

'Some of the job sampling will have to be based on theory as well as practice. If policemen generally discriminate against blacks, that is clearly not part of the criterion because the law says that they must not. So include a test which shows the applicant does not discriminate. Also sample the vocabulary he must use to communicate with the people he serves /…/ *and not the vocabulary that men who have never been on a police beat think it is proper to know*' (McClelland 1973, pp. 7–8, emphasis added).

It is only the theoretical knowledge that is directly relevant for the job performance that is taken into account and which is as such considerably limited, even more, it is desirable that it does not exceed the limits of the envisaged vocational operability. The thoughts of Boyatzis (1982) do not differ

[8] With competence being understood as an attribute of an individual, the use of this term as the characteristics of an organisation also became established in the theory of management. Both can thus be competent: an individual and an organisation in which the former is employed (cf. Bergenhenegouwen et al. 1996). It is clear that the synergy of both is desired, also providing optimal business results.

much from the above, although he referred to managerial competencies, i.e. the competencies of highly educated managerial staff:

'Through the competency assessment approach, specialized knowledge has been further refined to mean *usable* facts and concepts. /…/ The specific information of concern in assessing competence in certain jobs must be practical; if it is not usable, the possession of information is not related to performance' (Boyatzis 1982, p. 183).

At first sight, one can agree with both authors, with their arguments being at least apparently logical: if you test an individual's 'competence' to drive a car, you will not require that he knows Dante's Divine Comedy in the theoretical part of the test. However, the problem of this logic lies elsewhere, i.e. in the general question of *what is derived from what*, knowledge from operatively understood competence or competence from wide conceptual knowledge. The first derivation seems to be becoming more and more predominant: the only relevant knowledge is the knowledge that can be directly derived from the needs dictated by an individual task, all other knowledge is 'useless' and as such unnecessary. Or to put it differently, *it is not that knowledge is the criteria for competence, competence is the criteria for the selection of knowledge*. To the extent that this is the logic applied by individual companies in their efforts to achieve the best business results and competitiveness possible, it could be totally acceptable. However, it becomes much less acceptable at the moment it transits from a particular entrepreneurial context into the field of vocational and, above all, general education and starts to overdetermine curricular planning and implementation of the teaching process. There are quite a few indications that events are developing in this direction.

4 Competencies in the educational arena as a reflection of the interweaving of education and the labour market, and the neoliberal understanding of education and knowledge

One of the goals set in the European Union's White Paper on Education and Training (White Paper… 1995) in 1995 is, as put by the authors, 'to bring closer the school and the business sector' (ibid., p. I). Of course, it is not meant that the 'business sector' should adjust to the school system, but the other way round, which also involves the presumption that such 'bringing together' is part of the solution to the problem of employment and improving equal employment opportunities. The authors of the document thus believe that '[b]uilding or reinforcing bridges between schools and businesses can do nothing but good, for both sides, and helps underpin equal employment opportunities' (ibid., p. 38). As they say afterwards, three elements are needed for that: first, education must be opened up to the world of work; second, companies must be involved in the training drive and, thirdly, co-operation must be developed between schools and firms (ibid.).

Just a few years earlier, another initiative with similar intentions emerged in the US, where the Secretary's Commission on Achieving Necessary Skills (SCANS) within the Labour Department prepared a document entitled What Work Requires of Schools (1991). Its basic message is that employers expect employees finishing education programmes to have five competencies that 'efficient performers' can productively use: (1) *resources* (allocating time, money, materials, space, and staff); (2) *interpersonal skills* (working in teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds); (3) *information* (acquiring and evaluating data, organising and maintaining files, interpreting and communicating, and using computers to process information); (4) *systems* (understanding social, organisational, and technological systems, monitoring and correcting performance, and designing or improving systems); and (5) *technology* (selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies) (ibid., p. III). These competencies must be based on (a) *basic skills*, such as reading, writing, arithmetic and mathematics, speaking, and listening; (b) *thinking skills*, i.e. thinking creatively, making decisions, solving problems, seeing things in the mind's eye, knowing how to learn, and reasoning; and (c) *personal qualities*, like individual responsibility, self-esteem, sociability, self-management, and integrity (ibid.).

Understandably, the school should operate in line with these competencies if it wishes to successfully adjust to the new paradigm:

'If all of tomorrow's students are to master the full repertoire of SCANS competencies and their foundation, schools must change. /…/ Today's schools must determine new standards, curricula, teaching methods, and materials. /…/ Learning should be reoriented away from mere mastery of information and toward encouraging students to recognize and solve problems. /…/ In sum, learning in order 'to know' must never be separated from learning in order 'to do'. Knowledge and its uses belong together' (ibid., pp. 16-17).

In other words, teaching and learning should follow the competence standard in their entirety, with a clearly established relation between 'useful' and 'useless' knowledge. As put by the authors of the document, the whole curriculum should be formulated according to these requirements: 'The SCANS competencies and skills are not intended for special tracks labelled 'general' or 'career' or 'vocational' education. All teachers, in all disciplines, are expected to incorporate them into their classwork' (ibid., p. 18).

This is a discourse with an inherent tendency towards a revision of the school function: its basic task is no longer to transmit knowledge (which is otherwise considered unstable and becoming outdated and useless with an increasing speed), but to prepare for work. Competencies seem to be one of the more productive concepts supporting such tendencies. Laval thus finds that strategic uses of competencies 'cannot be separated from new 'human resources management' in which school plays the initial role. The purpose of this use is rather to question the traditional task of the school, the transmission of knowledge, and intellectual and cultural education in the widest meaning of

the term' (Laval 2005, p. 73). That this is not far from the truth is also shown by the efforts of the British Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA). Through projects like *Opening Minds* and *Curriculum Network* (cf. Bayliss 2001; Education for the 21st Century… 1999; Opening minds… 2003), this Society is trying to influence the curricular planning of education programmes in order to make them better adjusted to the needs of the labour market. According to V. Bayliss, head of the Opening Minds project, we still use curricular models similar to those preparing students for life in the much more stable and less insecure society of the 1950s, 'where we knew what a 'subject' was and what you 'ought' to know about it' (Bayliss 2001, p. 2). The times of today require something completely different: 'Things are much less straightforward now. We need a strategy for developing, over time, a different sort of curriculum that will respond better than anything we have now to the challenges of 21st century life' (ibid.). It is therefore necessary to re-conceptualise the curriculum, with the essence lying in the movement from the transmission of the knowledge of contents to the development of competencies. The new curriculum therefore:

'…sets out explicitly what they [students] should be able to do, and understand, when they've worked through it; not in terms of the amount of subject information committed to memory, but whether they have developed the competences they will need to survive and succeed /…/ Competences, like those for learning throughout life, including an understanding of how they, as individuals, learn; competences for managing information and situations; for citizenship and for relating to people' (ibid.).

Basically the same rhetoric can be traced in many other documents and treatise, for instance in those about reading, mathematical and scientific literacy produced by the OECD (this topic is more extensively discussed in Štefanc 2005). Of course, this involves a concept that does not have much in common with the ideas of Chomsky and can also not be entirely understood without a wider reflection on the neoliberal economic and political ideology in which it is embedded.

4.1 From the neoliberal understanding of education to the utilitarian understanding of knowledge

Although neoliberalism cannot be defined in a single clear way, it is essentially determined by the thesis that a free market is the best mechanism for the efficient distribution of limited means, thus providing welfare and protecting the interests of both individuals and the community in the best possible way. The condition for this is that the state withdraws everywhere where market mechanisms are supposed to take over system regulation and where, in addition to the economy, the fields that did not use to be *a priori* subordinated to the neoliberal logics, for instance the health and education systems, increasingly belong. Clearly, this ideology is closely connected with the structure of the political space within which decisions are being made that concern the wider interests of the community, both public and

private. DeMartino found that the influence of powerful international actors (in the form of multinational companies with large capital power, international economic stakeholders etc.) is the very reason why states have less and less autonomy in adopting and implementing political and systemic decisions at the national level. As he said, 'global neoliberalism undermines policy autonomy and thereby threatens the ability of domestic social democratic regimes to ensure economic security and equality' (DeMartino 1999, p. 344). The structure of neoliberal ideology is too complex for a detailed analysis here, which would also not be sensible in the context of our treatise. However, its major features should be outlined. P. Harris highlighted three core elements: competition, individualisation and authoritarianism[9] (Harris 2006, p. 9). According to the author, with neoliberalism prevailing, competition took the position held by security in the early 20th century, which was the logical consequence of globalisation of the economy; the presumption inherent to keynesianism that the national economy can be managed within 'was replaced by a view of the economy as protagonist in a competitive web of international relations. /…/ In parallel, any assumption that the health of the economy and the wellbeing of the population are mutually reinforcing faltered and gave way to the primacy of the market.' (ibid.). This is closely connected with individualisation: the interest of the community, i.e. public interest, is no longer at the forefront; it has been replaced by the private interest of the individual. Of course, this does not mean that the importance of public interest is ignored but that there is logic according to which the public interest will be best satisfied if it is ensured that each individual can first take care of his own interests himself (and which seems erroneous due to the implicit presumption that the public interest can be defined as the sum of private interests). The logic of individualisation applies both to companies and individuals: in the same way that a company must compete in the global market and take care of its competitiveness, this is also expected from an individual who must take care that he is worth as much as possible as 'human capital' in the labour market. He must therefore gain knowledge, abilities, skills and personal characteristics with which he can satisfy the demands of employers. And this is how neoliberal logics enters education: in this context, education becomes a service providing an individual with competitiveness in the labour market, and being as such put in the function of employability, so much more and so much earlier as it itself becomes part of offer and demand through privatisation. This subordination of education to the rule of the market, is what Laval (2005) makes an issue of in his criticism of neoliberalism. Or, according to Kodelja, 'the more neoliberal views of education are being established, the more

[9] Below we will not speak of authoritarianism as an element of neoliberal ideology as it does not directly concern the issues treated in this paper. Surely, this does not mean that this is a marginal feature of neoliberalism. On the contrary, it is an essential element, and a more profound analysis should uncover the interesting duality that can be detected and which relates to it: on the one hand, neoliberal ideology develops an appearance that it advocates the establishment of autonomous individuals who will be able to act with sovereignty on the labour market, self-confidently 'sell' their personality qualities, smartly choose among products, and the like, while on the other hand it is equally obvious that it does not need such individuals, but needs employees and consumers with an adjustable personality structure, subordinating to constantly new and different demands of the market and being without a solid value basis.

there are doubts about the previously prevailing understanding of education as public good and simultaneously as a fundamental human right leading to the state's obligation to provide all its citizens with equal education opportunities' (Kodelja 2005, p. 323). The changing of education from a fundamental human right to a marketable product, and schools into organisations providing services and goods required by the labour market, also means a revision of the knowledge which is legitimately transmitted in such a school. It is not surprising, as shown by Laval (2005), that the predominant position within neoliberally-oriented education is taken by the utilitarian understanding of knowledge: if it is to be legitimate, it must be useful first. Which, of course, is unacceptable to the extent this becomes the criterion for general education, which must not be a direct function of individual interests. It must be liberal in this sense, and according to Kodelja:

'Liberal education is liberal because is expands human mental horizons, thus freeing them from the limitations brought by a particular way of thinking, captured within narrow specialised or doctrinarian borders. Liberal education in this sense is a means enabling people to become free individuals to the greatest possible extent regardless of their vocation. Therefore, general education is understood as a value by itself and is not, like vocational and career education, in the function of certain external, utilitarian goals, although it may also contribute to their achievement' (Kodelja 2005, p. 317).

The analysis of understanding competence as it has become established in economic discourse shows that it includes utilitarian logics: it is always defined as an *ability to use a specific* knowledge in combination with an appropriate personality structure (expressed through values, motivation, self-image etc.). Although at the level of curricular planning of general education, at least in Slovenia, one cannot say that competencies (understood in this way or another) have already taken the place held by knowledge in curricular documents, international tendencies show that this is not impossible in the future. Certainly, it is not possible to say in advance that this would lead to the deconstruction of general education and of its position and significance in the school system. Nevertheless, one cannot be too careful at this point; perhaps, in Slovenia we will face the first such test when the results of the PISA survey are published. The latter is a project of the OECD which is one of the main actors in the promotion of the neoliberal understanding of education. In this survey, it measures the 'competencies' of 15 year olds, with which it *de facto* measures the effects of general education, and this very segment of the school system is the most exposed when the results of PISA are published.

5 Conclusion

That a concept of competence as developed within economics and management has become established in the field of education is more than evident in the last part of the article. The term competence has been frequently defined in different ways as to its contents. Chomsky (1964a; 1964b; 1965) introduced competence to the theory of universal grammar as a *mentalist* concept with which

he opposed the then prevailing descriptive paradigm in linguistics, considerably based on behaviourist psychology. He insisted on the fundamental distinction between competence as an underlying knowledge of a language enabling an individual the infinite, creative use of finite linguistic means, and specific linguistic performance, only meaning a partial reflection of competence.

Competence as later established in the theory of management is based on an opposite presumption that the empirical performance is its objective reflection, which among other things is shown in the belief that an individual's competence can be directly measured and handled on the basis of testing and observing his behaviour or conduct when resolving specific tasks. A problem appearing in this is shown in the reduction of competence to abilities and skills, with the content, conceptual knowledge only having an instrumental value, being desired to the extent it is recognised as directly functional in the process of performing specific tasks at work. We surely do not need to highlight that this means a serious revision of the concept and function of both vocational and even more general education, where competencies understood in this way are taking an increasingly important position. Without doubt, the findings made via a critical analysis of documents of the EU, OECD and other similar interest groups lead to the conclusion that a serious reflection on this topic is unavoidable.

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Methodological Problems Concerning the Criteria for Selecting *Gimnazija* Candidates

Abstract: The article addresses certain methodological problems and procedures of determining (assessing) the predictive validity of *gimnazija* candidate-selection criteria, i.e. criteria that are combinations of primary school results (overall achievement and achievement in individual subjects) and the results of other, one-off knowledge examinations (external examinations, entrance examinations). The author also points to reservations/limitations of using the results of knowledge assessment in schools as predictors (independent variables) and dependent variables in correlation and regression procedures. He also indicates the problem of how, in candidate-selection criteria, to appropriately balance the weight of primary school achievements (overall achievement and grades in individual subjects) and the weight of the results of one-off external examinations. He points to some possible models of resolving this problems and the problem of the *gimnazija* candidate-selection criteria in general. He also touches on the criterion that would only include primary school achievements.

Key words: (*gimnazija*) candidate-selection criteria, school achievement, achievement/grade in an individual subject, external examination, entrance examination, predictive validity, independent variable, dependent variable, correlation, regression.

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1 Introduction

Issues concerning the transition of students from primary school to *gimnazija* (the Slovenian general upper secondary school intended for students who later wish to continue their education in higher education) and to secondary schools in general have a methodological, school system, didactical and other nature but in a way they are always topical; in recent years issues concerning the selection of *gimnazija* candidates when enrolment is limited have been particularly in the centre of attention of expert and wider publics, with polemics also appearing concerning the criteria used in the selection of candidates.

This article briefly discusses certain methodological problems (including solutions, reservations/limitations) encountered in connection with the criteria for the selection of *gimnazija* candidates in Slovenia, including and in particular the problems related to the *predictive validity* of such criteria (hereinafter: candidate-selection criteria).

2 Problems, solutions, reservations and limitations

2.1 Scruples and limitations concerning knowledge assessment

In connection with the use of primary school grades (in individual subjects and overall achievement) as a candidate-selection criterion and in the determination (assessment) of the predictive validity of this criterion, certain methodological scruples and problems are encountered. The scale of school results has *five grades* (from 'unsatisfactory' or 1 to 'excellent' or 5), but the knowledge matching individual grades is not defined/standardised precisely enough which is, of course, also true of the lowest positive grade such that the scale does not even have a clear lower *anchor* of the range of positive grades. In such circumstances, it is the nature of the matter itself that necessarily causes differences between teachers concerning

the criteria of student assessment and an oscillation in criteria as applied by the same teacher. This is not a favourable basis for using the results of assessment according to the abovementioned scale in the role of *independent*[1] and *dependent variables* within statistical procedures of determining the predictive validity of variables, with these procedures requiring the variables used to achieve the level of *intervality* and that their *measurement is burdened by as few errors as possible and reliable to the greatest possible extent*.

Regarding the requirement for intervality, we face a dilemma of whether to opt for the questionable assumption that school grades are true numerical and equidistant values and that the abovementioned statistical procedures fit them in intervality terms. The dilemma is particularly hard in connection with overall achievement when its categories are expressed numerically (from 1 to 5) and when it is assumed that this is an interval variable. Unfortunately, despite such dilemmas it is not always possible to give up the assumption of the intervality of variables such as grades in individual school subjects and the overall achievement as there are simply no 'by-passes' on the way to certain empirical findings. This is also the case when determining the predictive validity of primary school grades for the achievement in *gimnazija*. The use of *Pearson's coefficient of correlation*[2] for this purpose already involves the above assumption of the intervality of variables and of their measurement with as few errors as possible and with the greatest possible reliability. Here, a 'by-pass' is *Pearson's coefficient of contingency*, but a correlation coefficient is more appropriate for various comparisons of the predictive validity of different independent variables and for the comparison of the results of different researches. Further, in a *regression analysis* of the predictive validity of independent variables the coefficient of contingency is not really useful. (Let us, by the way, note that in a *simple linear regression*, i.e. a regression with one independent variable, the correlation coefficient is the same as a *standardised regression coefficient*).

The abovementioned five-grade scale (in an individual subject consisting of five grades, and in the overall achievement of five categories), which is itself short for its use in regression analysis, is in general additional shrunk to practically only the three highest grades for new *gimnazija* students and to just the two highest grades in certain *gimnazije*; even the reduction to (almost) just the highest grade is not entirely excluded. This shrinking of results in the *lowering of correlations* between independent and dependent variables which is, even more than for the whole population of new students, true of *gimnazije*, which are in the lead as far as such shrinking is concerned as was shown in a survey of the generation of new *gimnazija* students in 1966/1967[3], although

[1] Within the procedures of predicting (anticipating, estimating) the value of dependent variables on the basis of the values of independent variables, the term predictor is also generally used for independent variables and the term criterion for dependent variables (as a dependent variable is the criterion for the predictive validity of a predictor).

[2] When we later mention a correlation or correlation coefficient, we always refer to this coefficient unless it is discernible that we are speaking of the coefficient of a multiple linear correlation.

[3] See Sagadin 1968. All other findings from this research that we mention below also come from this source. The two Italian gimnaziji were not included in the research.

there had not yet been such a concentration of new students with top primary school results as seen in some *gimnazije* today. We have no control over such influences and their extent as the shrunken scale with new students cannot be extended – the primary school achievements that they bring are what they are, despite everything.

Along with these deficiencies, the school assessment of knowledge must also be recognised for its advantages compared to various one-off tests of the same knowledge. For instance, the final annual grade of a student's knowledge in an individual subject is the result of the process of assessing their knowledge throughout the school year; in this process, the pool of the student's knowledge can (if the assessment is appropriately placed in the education process and implemented) be examined in much greater detail than by means of a one-off test at the end of the year. Therefore, such a final grade has an advantage over one-off tests in terms of examining and diagnosing the student's knowledge. This is true of both primary and secondary schools in a similar way. Consequently, one should not be surprised if research shows that the primary school achievement in correlation with the achievement at a *gimnazija* or other secondary school surpasses the achievements of one-off other tests of primary school knowledge.[4] In fact, one should be more surprised if this were not the case. When that happens, one should invest an even greater effort in investigating the reasons for the situation and should also not forget the abovementioned shrinking of primary school achievement to the highest grades with new students and the potential advantage of the results of other knowledge tests with regard to variability; both may increase the difference between primary school achievement and results of other knowledge tests concerning the correlation with *gimnazija* achievements.

Regarding the scale of school grades, we have mentioned that the knowledge matching individual grades is not sufficiently defined. Let us add that this problem is also not resolved by any external knowledge test by itself, no matter how elaborate it is it may only be avoided, as with an external test for the selection of candidates the results in points do not have to be changed into school grades.

2.2 Selection/definition of independent and dependent variables, and the related choice of procedures for data analysis and for determining the predictive validity of independent variables

The findings about the predictive validity of certain candidate-selection criteria also depend on the method of choosing or defining the dependent variable. If the criteria are not defined precisely enough, both independent and

[4] This does not refer to an individual gimnazija or other secondary school but to the population of gimnazije or other secondary schools, although such findings must also make individual schools ask themselves about the reasons for such a situation. In doing so, one should first look at the shrinking of primary school achievements to the upper end of the assessment scale.

dependent variables must be defined in the investigation of their predictive validity. The findings then depend on our decision concerning the variables of both types.

For instance, at the time of the survey mentioned (involving the generation of new *gimnazija* students in 1966/1967), the two criteria for selecting candidates were *achievement in the entrance examinations in the Slovenian language, mathematics and foreign language, and the achievement in primary school. Gimnazije* were not harmonised as to the use of these criteria, with each of them having a free hand in this regard. As the procedure for the selection of candidates did not take place according to uniform criteria, which might be the independent variables in the survey, independent variables had to be appropriately defined. It was reasonable to opt for achievements (grades) in mathematics, Slovenian language and foreign language (mostly English and to a lower extent German) achieved in entrance examinations, and for overall achievement[5] and grades in mathematics, Slovenian language, English and German attained in the 8th grade of the then eight-year primary school. Each of these independent variables had to be matched with an appropriate dependent variable. Thus, the dependent variable for the overall achievement in the 8th grade of primary school was the overall achievement in the 1st year of *gimnazija*, and the dependent variable for the achievement in each subject (both for the achievement in the 8th grade and in the entrance examination) was the achievement in the subject concerned in the 1st year of *gimnazija*. The overall achievement showed the highest predictive validity. The sample assessment of correlation between the overall achievement in the 8th grade and the overall achievement in the 1st year was r=0.653 and the determination coefficient was r^2 = 0.43, which means that 43% of the variance in overall achievement in the 1st year was explained by the overall achievement in the 8th grade or its variance. The overall achievement was followed by grades in mathematics, Slovenian language and foreign language attained in the 8th grade, the predictive validity of which surpassed the grades attained in entrance examinations, which was mostly true of mathematics.[6] Schools also differed from each other regarding these prognostic values so that it was hard to determine which criterion for the selection of a candidate would be appropriate for all *gimnazije*. Nevertheless, all the established findings pointed to a possible solution, whose essence was that *in the selection procedure gimnazije should prioritise candidates with better overall primary school achievement and, within an individual category of overall achievement, candidates with better grades in*

[5] In the survey, the overall achievement was used in the following form: for an 'excellent' achievement, the student must have a higher number of 'excellent' grades than 'very good' grades and no grade lower than 'very good'; for a 'very good' achievement, the student must have a higher total of 'excellent' and 'very good' grades than 'good' grades and no 'satisfactory' grade; for a 'good' achievement, the student must have a higher total of the three highest grades than 'satisfactory' grades; and a 'satisfactory' achievement results from a higher number of 'satisfactory' grades than higher grades.

[6] Regarding the lead of primary school achievement over other predictors, the results were similar to the results (then accessible to the author) from other surveys in the then Yugoslavia and abroad (see Sagadin 1968, pp. 67-69).

mathematics, Slovenian language and foreign language. Within this model of selection procedure, at gimnazije that preserve entrance examinations, primary school grades in mathematics, Slovenian language and foreign language would be decisive for acceptance to at least the same extent as the grades attained in entrance examinations. (The definition of overall achievement in this model was already given in note 5.) The results of a survey conducted on one generation of new students cannot be mechanically generalised to the following generations. It was necessary to take account of the possibility of results varying from generation to generation and the related need for the entrance criteria to be re-investigated from time to time.

In a survey conducted by Boris Kožuh on generations of new secondary school students in 1992/1993, 1993/1994 and 1994/1995,[7] the highest predictive validity was recorded for the overall achievement and it was similar regarding the lead of primary school grades in individual subjects over the results of other, one-off examinations of primary school knowledge, only that then external tests in mathematics and Slovenian language replaced entrance examinations. The results of this survey clearly show how the predictive validity of different predictors may vary from generation to generation (see Kožuh 1997).

Both surveys mentioned were conducted on appropriate representative samples. To demonstrate how the prognostic value of a candidate-selection criterion also depends on the definition of the criterion as well as on the definition of the dependent variable used for the determination or estimation of the predictive validity of the criterion, we can also use a smaller, non-representative group of new students. Certainly, one cannot generalise in the sense to transfer the values of correlation coefficients and other amounts obtained for such a group to the entire generation containing the group. *One can only generalise the finding that the prognostic value of an acceptance criterion also depends on the definition of this criterion and on the definition of the dependent variable.* This will also be the case below. The group will encompass the 2002/2003 generation.[8]

In our case (with non-representative data), the correlation between the achievement in mathematics attained in the 8th grade of *eight-year* primary school and the achievement in mathematics in the 1st year of *gimnazija* was r = 0.472 and the determination coefficient was r^2 = 0.223, which means that 22.3%

[7] These generations were already subject to the then introduced criterion for the selection of candidates (with a limited enrolment) in the form of a sum of points, namely the following three types of points: a) points achieved in external examinations in mathematics and Slovenian language (a maximum of 40 points was possible for each subject); b) points achieved through adding the overall achievements and grades in mathematics, Slovenian language and foreign language from the 5th to 8th grade of primary school (in total, a maximum of 80 points was possible); and c) Vega and Cankar Awards brought 5 points each.

[8] Then the candidate-selection criterion was somewhat changed compared to the criterion at the time of Kožuh's survey; the 5th grade was not included and the maximum total number of points for overall achievements and grades in mathematics, Slovenian language and foreign language for the 6th to 8th grade of the eight-year primary school was 60, with the same number of points for the external examinations in mathematics and Slovenian language (30 points for each subject).

of variance in the achievement in mathematics in the 1st year was explained by the variance in the achievement in mathematics in the 8th grade.[9]

The correlation between the achievement in the external test in mathematics (a maximum of 30 points was possible) and the achievement in mathematics in the 1st year was $r = 0.313$ and the determination coefficient was $r^2 = 0.098$, which means that 9.8% of variance in the achievement in mathematics in the 1st year was explained by the variance of the achievement in the external test of knowledge.

And what if the independent variable (predictor) is defined as the sum of the achievement in mathematics in the 8th grade and the achievement in the external test in this subject? The correlation between this sum and the achievement in mathematics in the 1st year was $r = 0.364$ and the determination coefficient was $r^2 = 0.132$, which means that 13.2% of the variance in achievement in mathematics in the 1st year was explained by the variance of this sum, which was 9.1 percentage points less than when the independent variable was only the achievement in mathematics attained in the 8th grade, and 3.4 percentage points more than when the independent variable was only the achievement in the external test.

In this case, the sum of independent variables brings poorer results concerning the predictive validity than if the achievement in mathematics attained in the 8th grade were only to be used as the independent variable (predictor).

The thing is that in the addition of independent variables, in the correlation between the sum and the dependent variable, *each independent variable is weighted in proportion to its standard deviation*. It is favourable for this correlation when there is a higher correlation between the dependent variable and the independent variable that has a larger standard deviation than this other independent variable, and when the correlation between the two independent variables is as low as possible.[10] In our case, there were no such advantages. After the correlation with the dependent variable, the achievement in mathematics in the 8th grade (0.472) was ahead of the achievement in the external test (0.313), while after the standard deviation the achievement in the 8th grade (0.70506) lagged largely behind the achievement in the external examination (3.60312).[11]

It is appropriate to add that (similarly to the sum of two independent variables) also in the sum of several independent variables each independent variable is weighted in proportion to its standard deviation, and that it is

[9] The share of explained variance is small, however, in this case this is not of our interest as we do not intend to generalise this result.

[10] This conclusion was reached on the basis of a formula for the correlation between the sum of two variables and a third variable. For such a formula and the way to it, see Guilford 1968, p. 475, formula (A.49). Formula (A.50) for the correlation between the sum of several variables and a variable is given on page 476.

[11] Here, we used computer results without rounding them off.

favourable for the correlation of the sum with the dependent variable when there is a higher correlation between the dependent variable and independent variables with larger standard deviations, and when the correlations of each independent variable with each other independent variable are as low as possible.[12]

Due to greater variability, the achievement in the external examination is in a better position compared to the achievement attained in the 8th grade concerning the possibility of it being established in the correlation with the achievement in the 1st year both when it is on its own as an independent variable and when it is in an ordinary sum together with the achievement in the 8th grade, regardless of whether this sum contributes to the share of explained variance of the dependent variable or not. In terms of the selection procedure, it is essential that the achievement in the external examination, if the acceptance criterion is the ordinary sum of the achievement (grade) attained in the 8th grade and the former achievement, has a relatively excessive weight in the selection of candidates. The problem or the inappropriate approach here is that knowledge is measured in two *different units of measurement*, and the results of measurement achieved are simply added into an ordinary sum as if the same unit of measurement were used in both measurements.

As opposed to the acceptance criterion in the form of an ordinary sum of independent variables, in the use of *multiple linear regression*, independent variables obtain appropriate weightings in the form of *partial regression coefficients*.

Let us see the result in our case if we use multiple linear regression. Here, independent variables will not be added into an ordinary sum, each of them remaining autonomous. In our case, the *coefficient of multiple linear correlation* between the achievement in mathematics in the 8th grade and the achievement in the external examination as two independent variables, and the achievement in mathematics in the 1st year as a dependent variable is $R = 0.492$, and the relevant determination coefficient is $R^2 = 0.242$, which means that 24.2% of the variance in the achievement in mathematics in the 1st year is explained by the achievement in mathematics in the 8th grade and by the achievement in the external examination, i.e. by their combined linear influence on this dependent variable.[13] The share of explained variance increased by 1.9 percentage points compared to the share of explained variance when only the achievement in the

[12] This conclusion was reached on the basis of a formula for the correlation between the sum of several variables and a variable.

[13] In sample surveys, it is taken into account that the sample value of the coefficient of a multiple linear correlation is not an unbiased assessment of the population value. There is a similar situation concerning the square of this correlation coefficient, i.e. the determination coefficient. Consequently, we (or the computer) use a formula with which we obtain an appropriate adjusted assessment of the determination coefficient. E.g. see an appropriate formula in Sagadin 2003, p. 291, formula (319). The bias mentioned decreases with the growth in the size of the sample and increases with the growth in the number of independent variables. In large samples and with only two independent variables, the difference between the adjusted and ordinary value R2 is not large.

8th grade was used as the predictor, by 11 percentage points compared to the share of explained variance when we used the sum of the achievement in the 8th grade and the achievement in the external examination as the predictor, and by 14.4 percentage points compared to the achievement in the external examination alone as the predictor. If the data of a large sample, representative for a certain generation or population of new *gimnazija* students, were to result in such findings and if we had to opt for the most appropriate predictor in mathematics we could conclude that it would actually be best to only take the achievement attained in the 8th grade as a predictor, as with an ordinary sum of the 8th grade achievement and the achievement in the external examination the share of explained variance in the achievement in the 1st year is even lower compared to the achievement in the 8th grade as a predictor on its own, and multiple linear regression also does not contribute so much that it would be worth the trouble. Of course, this is not always the case.

Let us add that in cases like the above it is also possible in sample surveys to test the statistical significance of the difference between the share of explained variance when multiple linear regression is used and the share when only the 8th grade achievement is used as the predictor.

By restricting ourselves to mathematics, we wished to demonstrate the data analysis on the way to selecting the appropriate independent variable (predictor). Now we are moving on to combinations of achievement (overall achievement and achievement in individual subjects) attained in primary school, and achievement in external examinations which, from the point of view of the Slovenian practice concerning the candidate-selection criteria, are even of greater interest.[14]

Let us take (to make our considerations more transparent) the sum of the overall achievements and grades in Slovenian language, mathematics and foreign language from the 6th to 8th grade as an independent variable, and the sum of the achievements in external examinations in Slovenian language and mathematics as a second independent variable.[15] The overall achievement from the 1st year of secondary school will first be taken as the dependent variable. The correlation between the first independent variable and the dependent variable is 0.274, the correlation between the second independent variable and the dependent variable is 0.306, and the correlation between the sum of independent variables and the dependent variable is 0.363 (and the determination coefficient is 0.132). All these correlations are relatively low, but this does not interest us here, with the essential finding being that in this case the sum of independent variables increased the correlation with the dependent variable compared to the case when a single independent variable was used, which means that it is better to take the sum of both independent variables as the *gimnazija* candidate-selection

[14] We have already mentioned in note 8 how the primary school achievement and achievement in external examinations were included in the candidate-selection criteria at the time the (non-representative) data we use come from.

[15] This fits the candidate-selection criterion at the time our data come from.

criterion than to only take the first or the second variable. For this increase in the correlation with the dependent variable, the quite low correlation (0.255) between the independent variables was favourable.

With the use of multiple linear regression, in this case the coefficient of multiple linear correlation would be $R = 0.367$ and the determination coefficient would be $R^2 = 0.135$, which means that the share of explained variance in the dependent variable would only rise by 0.3 of a percentage point compared to the use of the ordinary sum of independent variables. If such a small increase in the share of explained variance in the dependent variable were determined for the large representative sample, that would mean it is better to take as the candidate-selection criterion the sum of independent variables, the use of which is technically simple, and that it is not worth bothering with the procedure involving multiple regression.

However, the outcome will not always be like this. For instance, in Kožuh's abovementioned research on the generations of new secondary school students in l992/1993, 1993/1994 and 1994/1995, the sample estimate of correlation between the *sum of points* covering the overall achievements and grades in the Slovenian language, mathematics and foreign language attained from the 5th to 8th grade of (eight-year) primary school and the points attained in the external examinations in mathematics and Slovenian language *as an independent variable*, and the *overall achievement in the 1st year as a dependent variable*, did not, for any of the generations, exceed the correlation *between the sum of points from primary school (alone)* (the sum of overall achievements and grades in Slovenian language, mathematics and foreign languages from the 5th to 8th grade) *as the independent variable* and *the overall achievement in the 1st year of the secondary school as the dependent variable*.[16] (Points for the Vega and Cankar Awards were not included).

Now, our data will be used to conduct an analysis as described above, only that this time the dependent variables will be the sum of the overall achievement and the grades in Slovenian language, mathematics and foreign language in the 1st year of secondary school (above, the dependent variables were only limited to the overall achievement in the 1st year). With the dependent variable defined in this way, the outcome of data analysis is the following: the correlation between the first independent variable (the sum of overall achievements and grades in Slovenian language, mathematics and foreign language from the 6th to 8th grade) and the new dependent variable is 0.243; the correlation between the second independent variable (the sum of points attained in external examinations in mathematics and Slovenian language) and the dependent variable is 0.454; the correlation between the sum of independent variables and the dependent variable is 0.426; the coefficient of multiple linear correlation between the independent variables and the dependent variable is 0.476. All these correlations differ from those determined when the dependent variable

[16] In this case, the two predictors are also actually sums of several variables, but that does not disable this demonstration.

was limited to the overall achievement in the 1st year alone. Thus, also all the predictive validities changed: the predictive validity of individual independent variables, the predictive validity of the sum of independent variables, and the predictive validity of independent variables determined with the use of multiple regression. Thus, we also demonstrated the fact that the predictive validity of the candidate-selection criterion also depends on the definition of the dependent variable (response variable), not only on the definition of the criterion itself.

As far as predictive validity is concerned, the independent variable in the form of the sum of overall achievements and grades in Slovenian language, mathematics and foreign language attained in the 6th to 8th grade did not turn out to be successful when compared to the second independent variable, in connection with the dependent variable in the form of overall achievement in the 1st year, nor in the second case when the dependent variable had the form of the sum of the overall achievement and the grades in Slovenian language, mathematics and foreign language in the 1st year of secondary school. This finding is connected with our non-representative data and must not be generalised. At the same time, it has to be emphasised that the outcome for the primary school achievement is not always so unfavourable.[17]

One should know that an independent variable in the form of the sum of overall achievements and grades in Slovenian language, mathematics and foreign language attained from the 6th to 8th grade is also the sum of as many independent variables as it contains elements added together, and that the *ordinary addition of independent variables does not always contribute to the predictive validity*, as we found above. For instance, if the independent variable were only defined as the sum of the overall achievement and grades in Slovenian language, mathematics and foreign language in the 8th grade, with our data the correlation of this variable with the overall achievement in the 1st year would be 0.497, and the correlation with the sum of the overall achievement and grades in Slovenian language, mathematics and foreign language in the 1st year would be 0.495, which means that concerning these correlations the independent variable defined in this way would overtake the sum of points attained in the two external examinations, while the correlation of the independent variable in the form of the sum of overall achievement and grades in Slovenian language, mathematics and foreign language from the 6th to 8th grade with the achievement in the 1st grade is 0.274, and the correlation with the overall achievement and

[17] For instance, as we have seen, in Kožuh's research on representative samples of the generations of new secondary school students involved, a similar independent variable – in the form of the sum of overall achievements and grades in Slovenian, language, mathematics and foreign language attained from the 5th to the 8th grade – proved more successful than the independent variable in the form of the sum that, in addition to these overall achievements and grades from the 5th to 8th grade, also included the points attained in the external examinations in mathematics and Slovenian language. However, also in this case the correlations between the sum of overall achievement and grades from the 5th and 8th grade and the overall achievement in the 1st year were not high (0.40 for the generation 1992/1993, 0.45 for 1993/1994 and 0.45 for the generation 1994/1995). (See Kožuh 1997, p. 389.)

grades in Slovenian language, mathematics and foreign language in the 1st year is 0.243, which is less than the relevant correlations in external examinations. However, if the *gimnazija* candidate-selection criterion were only to take into account the sum of overall achievement and grades in Slovenian language, mathematics and foreign language in the 8th grade of primary school, the sum of points attained in the external examinations in mathematics and Slovenian language would (could) have an excessive weight in the acceptance criterion compared to primary school achievement, and there could also be problems in the classification of enrolment candidates. It would be different if the candidate selection criterion were to include the sum of overall achievement and all numerical grades in the 8th grade. Then, (with our data) the correlation between the 8th grade achievement included in this way and the overall achievement in the 1st year would be 0.600, while the correlation with the sum of the overall achievement and numerical grade in the 1st year would even be 0.652.

In the addition of overall achievement and the grades in Slovenian language, mathematics and foreign language, we may ask ourselves whether it is appropriate to change the categories of overall achievement into numerical values from 1 to 5 (of course, with enrolment candidates and the accepted candidates there is no value 1) and place it, according to its weight in the sum, at an equal level as a grade in an individual subject. Such a weighting of the categories of overall achievement is less disputable if the overall achievement is not only added to the grades in the three subjects mentioned, but with all numerical grades (as we have already done above) as in this case the weight of the overall achievement in the sum only represents some kind of an 'addition value' to that expressed by the sum of all numerical grades.

3 Conclusion

The problem of what to use in the current situation as the candidate-selection criterion must be resolved through research, with the results of surveys conducted in the past possibly being of aid although they cannot be mechanically transferred to the present time. The predictive validity of school results (overall achievement and achievement in individual subjects) varies from generation to generation of new students, as well as within the same generation from school to school. Consequently, the predictive validity must be rechecked through research from time to time. Similar is true of the predictive validity of the results of other examinations. The predictive validity of school results as a predictor (independent variable) also depends on what is included in such a predictor and on the definition of the dependent variable. Again, similar is true of other knowledge examinations.

It is not the same how we combine primary school results and achievements in other examinations in the candidate-selection criterion; this decision must be justified with an analysis of the predictive validity of school results, achievements in other examinations and possible combinations of both types

of achievement. In principle, it is reasonable to include in the criterion, in addition to the independent variable in the form of appropriately covered primary school achievement (overall achievement and grades in individual subjects), an independent variable in the form of the achievement in some other examinations of primary school knowledge, like well-prepared and performed external examinations or entrance examinations. However, the advantage of such a combination is always realised, as we have said, only when a model of multiple regression is used, with the independent variables obtaining appropriate weights in the form of partial regression coefficients and thus each given an adequate weight in the selection procedure. (We also pointed out reservations concerning the use of this model.) We also emphasised and demonstrated that the ordinary addition of independent variables does not always lead to an increased predictive validity of the candidate-selection criterion. This must be taken into account in the search for solutions in this way.

Regarding the survey conducted on the generation of new *gimnazija* students in 1966/1967, we also indicated a possibility of a different solution, adjusted to the circumstances concerning the then entrance examinations. Perhaps, in connection with external examinations the solution should also be searched for in similar directions.

The fact that the ordinary addition of independent variables does not always result in an increase in the predictive validity must also be taken into account in the candidate-selection criterion if only primary school achievement is included. From the point of view of predictive validity, it is not the same which elements of primary school achievement are included in the criterion or which elements are added together, for instance, whether the sum only includes the overall achievement and grades attained in the last year or those attained over several years. Mere care that the criterion enables the classification of candidates by achievement and thus their selection does not guarantee that the selection is also made adequately in terms of the predictive validity.

Our contribution has concerned the methodological problems regarding candidate-selection criteria when enrolment is limited from the point of view of entire enrolment generations. However, we also implicitly pointed out that it is difficult to form criteria fitting all *gimnazije* equally and adequately. In this sense, a special problem is selection situations in those *gimnazije* for which there are many candidates whose top primary school results are so similar and whose results in the present external examinations are also so similar that these two criteria may become insufficiently sensitive to the differences between the candidates and that it will therefore be difficult to make a selection by using these criteria alone (and even more difficult by only using primary school results). In such potential situations, it will be necessary to seek a way out via an additional criterion or criteria appropriately differentiating the candidates according to their knowledge.

In all of this, one should not forget the *possible backwash effect of the candidate-selection criteria* on the primary school, including favourable and unfavourable ones.

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From Monomethods towards Combined Research Approaches

Summary: In the previous issue of Contemporary Pedagogy (SP 4/2006) we wrote about epistemological, ontological and methodological presumptions on which so called paradigmatic relativism is based, the latter representing contemporary paradigm in the development of sociological and humanistic research, hence also in the field of education. The following contribution will show models which have emerged as a result of this development. Focus of interest which led to this article are combined research approaches, forms and possibilities of research execution, including quantitative and qualitative methodological starting-points.

Keywords: monomethods, combined methods, combined research models.

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Introduction

Researching in the field of social and humanistic studies tends towards more integrated methodological approach, which should be focused on the needs of a particular researcher and research group regarding combining methods during the research process. Tashakkori and Teddlie point out that a part of this methodological integration encompasses greater accuracy of the language, which is used for denoting multiple methods. A beginner in such researching faces amazing multitude of terms in the field of social research: monomethods (quantitative, as well as quantitative, with all variant forms), multiple methods, mixed methods, multi-methodological researching, triangulation of methods, methodological mixes etc. (Tashakkori and Teddlie 1998, p. 14). This paper will predominantly use the terms monomethods and combined methods, which are more precisely discussed by the authors in their book, the latter being the basis of our summarisation as well as presentation of majority of models of combined studies. We shall at the same time try to present applicability of multi-methodological approaches in the case of action researches.

1 Evolutionary development from monomethods towards combined methods

The development went from application of one basic research method towards application of various methods. Transition took place after the end of 'war of paradigms era', which was followed by the period of 'compatibility thesis' and paradigmatic relativism (the matter was presented in greater detail in the previous issue of SP).

The path of development from combined methods towards combined research models encompassed the consideration of differences in the method itself as well as consideration of differences in all phases of the research

process. The question of linking epistemology and methodology during the debate on paradigm was essential for understanding of the way of influence of paradigmatic orientation on other phases of a research process (forming a problem, study models, analysis and interpretation of the data…) due to the fact that the emerging of multiple methods was considered solely as a matter of methodology.

The basic question relating the application of linking paradigm with method and its influence on other phases of a research process was raised by Creswell (1994): 'The most efficient use of both paradigms (qualitative as well as quantitative – added by J. M.) would suggest another step toward combining designs: Can aspects of the design process other than methods – such as the introduction to a study, the literature and theory, the purpose statement, and research questions – also be drawn from different paradigms in a single study?' (Ibid.p.176). The answer to that question has, by all means, to be affirmative if one wishes to discuss the connection of two paradigms. In the opposite case one of the paradigms (qualitative or quantitative) is bound to prevail leaving the other one just enough space to 'intrude' only in the field of data collecting methods and thus leaving all the other segments of a research going on by the principles of the prevailing paradigm. This fact was also supported by Creswell, who mentioned several cases in his book to present ways of using different paradigms and scientist's views in order to fruitfully employ them in all phases of research process.

Similar view has also been developed by Brewer and Hunter (2006), who see the application of multi-methodological approach in all phases of a research, not merely in the phase of measuring and data collection. They state that: 'the decision to adopt a multimethod approach to measurement affects not only measurement but all stages of research. Indeed, multiple measurement is often introduced explicitly to solve problems at other stages of the research process… These wider effects...of…multimethod tactics need to be examined in detail, including the new challenges that the use of multiple methods poses for data analysis, for writing and evaluating research articles for publication, and for doing research in an ethical manner' (Ibid. p. 9). The methods of measuring and data collecting in the first place have indirectly led to the evolutionary move from emergence of combined methods towards introduction of combined studies. This leap has actually been the hardest, considering the fact that a researcher is always committed to value one of the paradigms and that the greatest differences reveal themselves in a series of beliefs and convictions on the nature of reality and human cognizance. This question will undoubtedly be easier to solve where a research is undertaken by a group of scientists, who, per se, belong to different groups according to their orientation (more qualitative or quantitative and positivistic or constructivist), but will nevertheless search for the solution of the problem by reaching mutual consensus and thus paving the way for greater plurality of proceedings and results. In the case of a research which is undertaken by a single researcher, the problem of applying both paradigmatic approaches is probably more complicated due to exact reasons, which have been mentioned, although it is not completely excluded, especially in the phases of measurement and data processing.

Evolution process leading towards more frequent applications of combined methods and combined researches has even sped up in the last thirty years due to introduction of numerous new methodological tools, fast development of new technologies, which all enable easier and faster access and application of these methodological tools. Important source of fast development of combined methods and researches with combined models is also advanced communication within sociological and humanistic sciences which leads toward greater amount of interdisciplinary connection.

2 Taxonomy of researches with different methodological approaches

Three major types of researches, which were summarized on the basis of evolution review from mono-methods to combined study methods by Tashakkory and Teddlie (Tashakkory and Teddlie 1998, pp. 17–19), will be presented in the following.

Monomethod Studies

Mono-methodological researches are carried out by so called 'purists', who operate exclusively within one of the prevailing paradigms. Most of the recent researches lead us to the conclusion that the 'Era of the Purists' has been surpassed and that such researches are fading out.

Mixed Method Studies

Such researches incorporate qualitative as well as quantitative approaches in research methodology of a particular research or a research with multiple phases.

Creswell (1994) defined four models of combined methods:

– Sequential studies: a researcher firstly performs a qualitative phase of a research and after that a quantitative one or vice versa. Both phases are separated.
– Parallel/simultaneous: A researcher carries out a qualitative and a quantitative phase at the same time.
– Equivalent status design: a researcher uses qualitative and quantitative approach approximately equally in relation to the understanding of a phenomenon which is being researched.
– Dominant/ less dominant studies: a researcher executes a research 'within a single dominant paradigm with a small component of the overall study drawn from an alternative design' (Ibid. p. 177–183).

Tashakkori in Teddlie added to those four types of combined models a fifth one:

– Designs with multilevel use of approaches: researchers use different types of methods on different levels of data analysis. The data can be analyzed, for example quantitatively on the level of a particular student, qualitatively on the level of a class, qualitatively on the level of a school and qualitatively on the level of a county (Tashakkori and Teddlie 1998, p. 18).

Mixed Model Studies

Researches, which can be found under the term 'combined methodological models' were defined by Creswell, who described them as follows: 'This design represents the highest degree of mixing paradigms… The researcher would mix aspects of the qualitative and quantitative paradigm at all or many… steps'(Creswell, p. 177–178). The definition of mixed model studies set by Tashakkori and Teddlie is a bit different. They claim that 'these are studies that are products of the pragmatist paradigm and that combine the qualitative and quantitative approaches within different phases of the research process' (Tashakkori and Teddlie 1998, p. 19).

Compared to models of combined methods, which are directed more to the application of different methods of measuring and gathering the data, giving less attention on other phases of a research process, combined models give more attention on other phases, such as a formulation of the researched problem, forming and verifying a theory, sampling, analysis and interpretation of the data. It is essential that in the researches, where combined methods are involved, under the term method one should understand the method of data collecting and not the research method in the sense of reaching different cognitive levels of the researched field. When we discuss the combined research models we should have in mind the methodological combination of research methods in all phases of a research process.

P. Mayring has also tried to support a request for connecting quantitative and qualitative research by a survey of concrete models, denying at the same time the possibility of describing them as a contrariety (Mayring 2001, 9.§). Namely:

Technical level of integration is represented by pieces of software, which have been recommended for the last twenty years for use as a support for qualitative research. The point is that qualitative research often involves enormous amount of materials. The decisive factor regarding these pieces of software is that a computer does not evaluate (analyze) but only supports analytical steps, which are eased and documented.

Regarding *the data level*, it is mainly the case of forming categories with the help of qualitative content analysis. It is important to know that these categories, after being founded, can also be statistically processed. One can determine the frequency of emergence of the categories within a material, add simple ordinal level systems (high, medium, low), calculate a measure of central tendency … When dealing with a system of categories the first step consists of qualitative analysis, the second of quantitative procedures, which are in the third step qualitatively interpreted.

On the level of *participants in a research* qualitative researches mostly deal with analyses of particular cases. Such analyses are regarded as the ideal of qualitative researching as they give us comprehensive view of a subject and enable us to describe complex relationship between an individual and their environment. The problem, which emerges at this stage, is the question of generalization of the results of such analyses. Mayring (Ibid., 20.§) sees the solution in gradual widening of the basis of a problem during our study of comparable cases. Different

strategies are possible here: inclusion of especially frequently appearing cases, confronting extreme cases or precise analysis of theoretical cases. The level of a particular case is thus surpassed and for the purpose of generalization the base of studied cases expanded. Such a way enables integration of qualitative and quantitative procedure on the level of participants – researchees.

On the *level of models* Mayring's typology is the closest to the one by Tashakkory and Teddlie, since it deals with combinational models. He claims that even stronger integration of qualitative and quantitative procedures lies in understanding of both types of analysis as procedural steps in a superior research model. Such combination of qualitative and quantitative analysis can lead to thinking of different models (Mayring 2001):

The first possibility of integration is represented by *models of previous studies* which are, in continuation, actually a case of classical variation of quantitatively oriented research procedure although in a phase of previous study with qualitative steps of analysis hypotheses are being reached. During further phases these hypotheses are evaluated by quantitative procedures.

The second possibility of combining quantitative and qualitative procedures is represented by *a model of generalization*, where qualitative elements have greater role and significance. Firstly, the whole qualitative research is carried out, which is also analyzed and evaluated and then not earlier than in the second step quantitative techniques which enable generalization of the results take place.

The third possibility of integration is seen in so called *model of absorbing*. The procedure is reverse here. Concluded quantitative research is continued by quantitative analyses. The results are therefore better interpreted and lead to explaining of found causal connections.

The fourth model of connecting qualitative and quantitative procedures is *a triangulation model*. This is the most complex intertwining of qualitative and quantitative procedures in a research process. A particular problem is being dealt with from different positions and views with different methods at the same time being not important to determine which approach is providing the best results. The results should be mutually supported, a cross-section of particular results representing the final result (Mayring 2002, p. 147–148). Within a frame of qualitative researching, the triangulation model is used as a central criterion for quality, where one does not expect to derive the truth from searching within a cross-section of analytical perspectives, but to gradually expand cognizance by mutual comparison of different approaches.

If we return to the fifth level of possibility of combining the quantitative and the qualitative, we shall see that Mayring founds it on *the level of common research logic* (Mayring 2001, 26.§). Overcoming frequently criticized contradiction will only be successful if common research logic is formed for both traditions. Mayring does not explicitly put a claim for paradigmatic relativism here, but he can be understood in the sense of digressing from dichotomy logic of both approaches to nearing. It is not a case of new research logic or paradigm but rather a quest for common grounds for executing a research, which will provide the best results.

The quest for common research path is often obstructed because classical methodological manuals of empirical researching require formulating hypotheses at the beginning of a research as well as application of large, even better representative samples, which are rejected by supporters of qualitative approach. As a consequence qualitatively directed projects do not follow regulated and directed scheme of procedure.

Textbooks and guidelines of empirical sociological researching, as a rule, decompose research process into ideally typical separate steps, such as forming the research questions, description of a sample, methods, presentation of results and interpretation. Mayring supports a presumption that such ideally typical model can be at some points expanded and thus giving space also for qualitative projects. Such common research logic for qualitative and quantitative approach would integrate both at some higher level (Mayring 2001, 27.§):

1. Explanation and specification of research questions
Relevancy,
problem related connection of research questions,
hypotheses *or formulating open questions*.

↓

2. Interpretation of a current theory
State of so far existing researches,
theoretical draft *prior / advanced comprehending.*

↓

3. Empirical basis
Selection and description of a sample *of a particular case.*

↓

4. Methodological concept
Collection, data processing, *or testing by a pilot study in case of new instruments for data collecting.*

↓

5. Results
Presentation, summaries, analyses,
return to hypotheses *or forming questions.*

↓

6. Conclusions
Criteria of quality, *generalization*
relevancy of results (on what?).

Extensions and alternatives have been implanted into the presented model in particular places, regarding in the first step a demand for explicit formation of hypotheses. If in this phase we accept preformed questions, which do not yet anticipate possible results, we also offer a possibility of incorporation to qualitative projects. On the other side, according to Mayring's opinion, such mode represents a possibility for qualitative projects to gain scientific credibility, a lack of which is often a cause of reproach by quantitatively oriented researchers. It so happens that some researchers start working on an interesting case within so far not researched field of practice commencing collecting data without previous development of clear research questions. Research results can be logically understood only in relation to concrete questions – also in qualitative projects. On the contrary the second step precisely in interpretatively directed approaches often represents a special force of qualitative analysis. Interpretative procedure (hermeneutic cycle) namely demands forming previous cognizance from an interpreter.

The third step demands expanding the cognizance of empirical basis. Qualitative projects in social sciences are nowadays entirely understood as empirical containing frequently small samples most often just one case as starting-point material. Even one case represents empirical basis and can be described and proved in its selection. Omission of representative sampling represents for qualitative projects a need for special argumentation and analysis of generalized results.

The fourth step, which is represented by exact definition of methods used for data collection, processing and evaluation, is an important issue for qualitative researching. This step is a central precondition for assurance of criteria of quality. According to Mayring's opinion it is necessary to abandon a claim for exclusive application of standardized instruments. Qualitative projects as a rule construct instruments anew, on a concrete case. Instruments in qualitative should therefore be beforehand tested on a small sample (Ibid, 28. §).

Regarding the next step of presentation of results for qualitative as well as quantitative projects, it should be obvious that they relate to in the first phase formulated questions and hypotheses. As for a qualitative research, it does not exclude the possibility of finding new views on the observed object, which were not comprised during the forming of questions. Regarding new angles in a research, it should be necessary to reshape research questions, define theoretical background according to new findings and thus shape new project framework. That would significantly raise and improve scientific credibility of a particular qualitative research.

The sixth step represents a special requirement for qualitative projects as they must define under which circumstances and with which aims should the results be generalized. It should be noted that, regarding case analyses, it is necessary to cite comparable cases, describe comparable projects and present arguments, where characteristics of a researched sample are similar to characteristics of a population, which is to be an object of generalisation.

3 Applicability of methodological approaches on an example of action researches

When comparing both presentations of combined methodological approaches (Tashakkori and Teddlie's 1998 in Mayring's 2001), we will see that both presentations regard simultaneous application of both approaches in all phases of a research process – from forming a research problem and questions, through collecting and processing data to final analysis and interpretation – as the highest achievement in combining qualitative and quantitative research. Going through the contents of research logic, one can't really separate qualitative and quantitative approach to research. Quantitative researches are more precise, explicit and predetermined, supposing that adequate variables can be identified in advance and are validly measured. Immediate orientation towards variables reduces possible disturbance, enables distinction and speeds up dense analysis. Qualitative researches are aimed at more open, temporary questions, on gathering data, which is above all aimed at open interviews and observation. There are less beforehand suppositions, including (non)determining relevant variables, which makes qualitative research more open, directed towards the context of action and aim as well as describing and judging by all participants.

Regardless of a fact that it is a matter of two different methodologies, their cognitions amalgamate. As seen in presented models, quantitative data for example come out as components of qualitative interpretations although they are frequently hidden behind a wide data processing. On the other side, qualitative cognitions tied to a local context are essential for reaching authentic alternative interpretations. Furthermore, on the level of conclusions and resolutions each conceptual theory or hypothesis supposes some »qualitative« conviction, which has an inevitable role in forming conclusions. The latter depend on actual relations which means that all research approaches are based on common sense, previous experience and logic of researched situation.

It may happen that both approaches are used in a research, quantitative as well as qualitative, but in a final analysis the results are significantly different. Using, for example, two different instruments for data gathering, we may find out that results of a questionnaire are different (or even diametrallly opposite) from results of open interview. It is up to a researcher to determine the cause of discrepancy. Was the first instrument precise enough in measuring? Was an interview perhaps biased due to our presentation, analysis or interpretation of answers? Combination of both approaches frequently shows complexity and diversity of researched field and it is the possibility of conflict between partial results and the search for causes which provides a basis for more integrated and deeper final analyses.

Methodology of action research does not contain rigidly directed methodological rules and is actually quite loose in its basis. It runs in spiral circles between action and reflexion, offering enough space for application of quantitative procedures on all levels. With such connection, action research projects gain in transparency and methodological sharpness. Instrumental/

technical character of research strategies is more strongly underlined, although it can lead to new dangers, if strict quantitative methodological principles are exceedingly followed (especially when interaction between a researcher and a researchee is involved). Action research gains by incorporating quantitative steps on intersubjectivity and authenticability and, above all, in generalization of results. All this provides arguments against objections of insufficient scientific character, which are still present among supporters of quantitative paradigm.

Conclusion

In contemporary expert and scientific literature one could hardly find prescribed models and precisely defined procedures of carrying out phases of a research for combining quantitative and qualitative approach. Presented and described models represent possibilities which are offered by such type of research, although a choice of a measure, quality and mode of research with combined approaches is left to a researcher's or a research team's decision. Regarding combining research models clear presentation of which phases, mode of application of different procedures as well as reached level is required, especially in a plan of a research. Without such precise definition results of a research can be diluted and lack in transparency and methodological sharpness.

Empirical researches, which in our country deal with problems in the field of education, are mainly quantitative, follow strict research phases from forming research questions and hypotheses to application of standardized instruments or instruments, which encompass variables stated in questions and hypotheses. Data are statistically processed with exacting procedures, which enable generalization; gathered samples possess great level of representativity. Application of quantitative and qualitative research approach, which are equally represented in all phases of research process, is rarely met. Most combined researches are limited on applying qualitative techniques and data gathering methods, which represent additional source in a database. Fast development of qualitative methodology has even influenced our researchers to find researches, which are defined as qualitative studies of a case, action researches etc., but they are rarely executed in a form of combined studies, i.e. supplemented with a quantitative approach.

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Kristín Dýrfjörð

Comparing Practices and Democracy in Early Childhood Education

Abstract: In the paper I compare two mainstream frameworks or approaches in early childhood education today, starting from John Dewey's and David Held's democratic perspectives. The early childhood approaches come from Reggio Emilia, Italy and the Developmentally Appropriate Practice (DAP) from the US. Both approaches (DAP and Reggio) have greatly influenced the pedagogy of early childhood around the world. Both have supporters all over the world who are dedicated to spreading the 'word' of the 'new utopia' coming true or the 'right' way of doing things. But at the same time one can hardly imagine a bigger gap in the end 'product' in the form of early childhood education. In my view, one runs towards uncertainty, a space were everything is changeable but is simultaneously rooted in political values as well as developmental theories (Reggio). The other (DAP) is rooted in values and confidence in the sciences but at the same time has a determined view of the child and its abilities, a view manifested in the word appropriate.

Key words: early childhood education, democracy, Reggio Emilia approach, developmentally appropriate practice.

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»A democracy is more than a form of government; it is primarily a mode of associated living, of conjoint communicated experience.«

(John Dewey 1916, p. 87)

So wrote John Dewey at the beginning of the last century, concerned about democracy in an ever-changing world. The purpose of this article is to look at two very well-known internationally educational trends or frameworks in early childhood education from a democratic perspective. These frameworks are a Developmentally Appropriate Practice (DAP) and the philosophy of Reggio Emilia (Reggio) both of which acknowledge Dewey as a source of their democratic views. It might also be of some interest to Slovenian readers to have the philosophy of, for example, the International Step by Step Association (ISSA)[1] in mind when reading this article and make some comparisons with it. The ISSA brings a powerful philosophy of early childhood, it was developed to meet the needs of countries that were at a certain time striving with new ideas on education, ideas based on democracy rather than collectivity, uniformity and obedience to given norms (Olmore, Franova, Sneberger and Vonta 2004). Step by Step (SbS) has been developed in newly independent countries, primarily in Central and Eastern Europe and the former Soviet Union. The SbS teacher training part was mainly developed by early childhood professionals from the USA (Surbeck, Klein and Moyer 2003). It is therefore no surprise how affected by and in some ways similar the SbS philosophy appears to be to a DAP. At the ISSA website a mission statement is found where, among other things, it is stated that the mission is both to be democratic and developmentally appropriate. By reading the statement it is apparent that ISSA can be philosophically placed somewhere between Reggio and a DAP but in my view closer to a DAP. That is not surprising if the origins of SbS are considered. Reading the ISSA website makes it is clear that the organisation promotes a certain recipe for education in

[1] See ISSA website www.issa.nl for more information.

the form of standards and how to prepare books. The ISSA has even developed its own standards and evaluates work in schools according to those standards. In my view, the idea of standards is far away from the concept of Reggio but very close to the DAP concept. The ideas behind standards are usually to unify and promote certain norms. In a way it can be concluded that, by standardising, the ISSA is in a way working against its own ideas of democracy and critical and creative thinking. I have no way of determining if that is completely or even practically true but it could be of some interest in further studies to use Held's and my own analysing points for comparison.

To give the reader a little contextualised background information on democratic education, part of this paper is dedicated to Dewey's ideas on democracy and education. Negri and Hardt (2004) point out that in our modern world there seem to be two strands of globalisation, one that is in the form of global networks with hierarchies and divisions while the other strand is the creation of new circuits of co-operation and collaboration that stretch across nations and continents and allow an unlimited number of encounters. Ideas and most organisations in early childhood education can be regarded as belonging to the second strand and not for the first time in history. Dewey was, for example, influenced by European thinkers and educators. He had unlimited number of encounters with ideas as well as people from all over the world, encounters that must have defined and transformed him and his works. I will discuss Reggio and DAP in the light of Held's (2004) cosmopolitan principles on what constitutes a just democratic society. According to Held, there are global basic values that provide standards or boundaries that no one should be able to violate. The principals that Held outlined are: equal worth and dignity; active agency; personal responsibility and accountability; consent; collective decision-making about public matters through voting; inclusiveness and subsidiarity and, lastly, the avoidance of serious harm and sustainability (2004, p. 171). Held claims that to be able to build up a global social democratic commitment three main factors have to be attended to; those of law, democratic politics and effective economics. Further, he specially points out the importance of social solidarity and integration.

Democratic Schools – John Dewey's Legacy

Dewey (1916; 1902/1973) has influenced Western education through his philosophy. He wrote substantially on education and democracy from a wide perspective. One of his key concepts is education *through action*. In schools for young children this can be translated into children participating in shaping their world, having a voice and by being looked upon *not* as children or citizens in waiting or as citizens of an undefined future but as becoming citizens or citizens in the making. This view is based on the notion that childhood is a socially constructed idea. Where children are 'contributors to the making and re-making of the social order' (Mayall 2003, p. 14).

Dewey (1916) believed in the importance of connectedness and context in education and considered these things to hold greater meaning for children than subject learning. Learning through action is a way to connect children with the world at large and a way to learn about things in context. Dewey (1902/1973, 469) warned against a fragmented view of the child. He said it was easier to look at certain conditions in separateness. For example, to look at something in the nature of the child as a problem and then insist on this finding as the key to the whole problem. According to him, this will lead to conflicting terms, the child vs. the curriculum, the individual vs. the social. Dewey (1916) emphasised the importance of the shared values that society has built up and the value of free associations between groups, ideas and individuals. He also claimed that 'the conception of education as social process and function has no definite meaning until we define the kind of society we have in mind' (1916, p. 97). In his own words, an idea of democratic society is:

»A society which makes provision for participation in it goods of all its members on equal terms and which secure flexible readjustments of its institutions through interaction of the different forms of associated life is in so far democratic. Such a society must have a type of education which gives individuals a personal interest in social relationship and control.«

(Dewey 1916, p. 99)

In today's literature the manifestation of democracy in education appears in writing on citizenship and citizenship education. According to Osler and Starkey (2005), a democratic school provides opportunities for a wide range of communication and collaboration. It is a school where human rights are woven into the fabric of everyday life, where people are responsible to and for others as well as oneself.

A way to describe a democratic school is that it is a school that is becoming, it is a school that is ready to define itself again and again. It is ready to reinvent itself according to new ideas, the culture and the society that it is situated in, on the basis of human rights and human equality. A school that is ready to look at children, parents, teachers and society as a whole, not as fragmented pieces. Schools that in the spirit of the UN Children Rights Act want children to be involved in shaping their life, that acknowledge children's participation in forming the curriculum and are sensitive to children's own culture and perspectives.[2] This is in line with Held's views on the need for global social democracy instead of national social democracy. He emphasises, among other principles of commitment to social justice, the protection and reinvention of community (2004, p. 163).

[2] See, for example, OECD 2001 on, Starting strong in early childhood.

Reggio Emilia

The pedagogics of Reggio have developed over four decades in the red triangle of Italy, in the city Reggio Emilia. It is based on the image of the child as a whole being, as part of society, as being interdependent. The OECD chose Reggio to be presented as one of five outstanding approaches to early childhood education for an international conference in Stockholm in 2003 (OECD 2004).

The roots of Reggio Emila are partly found in the desire of the people of Reggio Emilia to never again have to face fascism and partly in the older socialistic traditions of Northern Italy (Rinaldi 2006). After the Second World War the first early childhood centre[3] was opened with the aim to raise children to be critical thinkers and the guardians of democracy (Malaguzzi 1998). The method took on a new life in 1963 when the municipality of Reggio asked Loris Malaguzzi[4] to lead educational work and be a protagonist for their dream. Malaguzzi was influenced by many thinkers, among them Dewey, Piaget,[5] Makarenko and Vygotsky (Malaguzzi 1998; Soler and Miller 2003). The core of the Reggio's pedagogics is described by Rinaldi'[6] (2006); 'we have committed ourselves to building a present which is aware of the past and responsible for the future' (p. 170), on the image of the child as a citizen of life and a 'bearer here and now, of rights, of values, of culture: the culture of childhood' (p.171). A strong point of the Reggio philosophy is to regard childhood as a socially constructed concept and, accordingly, children and teachers as the co-constructors of knowledge and society. Rinaldi (2006) believes that schools should be public and for everybody, she worries over schools based on segregation, such as faith or gender. She says, 'it is a big risk if children grow up reflecting only on themselves, with only particular group. My idea of school is a pluralistic concept' (p. 208).

In Reggio, the concept of *pedagogics of listening* has been developed through *pedagogical documentation* (PD). PD is a tool developed for the purpose of studying children's learning and thinking. PD is built on documenting and interpreting children's actions. It is used to enable pedagogues, to reflect on experiences with children, parents and others from wider society and to put them in context. It is the vehicle Reggio uses to maintain democracy. The importance of the democratic aspect is highlighted by Dahlberg and Moss (2005), when they say:

Pedagogical documentation is a vital tool for the creation of a reflective and democratic practice. It also contributes to the democratic projects of early childhood institutions by providing means for pedagogues and other to engage in dialogue and negotiation about pedagogical work (pp. 155–6).

Reggio has been willing to cross borders while being open to dialogue between and with the world at large. There is no certainty as to where the crossing of

[3] In Italy these centres or schools are for children aged 1–6.

[4] A teacher and psychologist, later considered one of the greatest educational philosophers of the century.

[5] Malaguzzi visited the Piaget Foundation in Geneva. He frequently cited both Dewey and Piaget in interviews.

[6] Carlina Rinaldi took over Malaguzzi's position as a pedagogical leader of Reggio after his death in 1994.

the border can lead and that is part of its attractiveness. I compare the idea of crossing borders with Dewey's ideas on free associations, but taken further. The explanation is that societies of today are more elastic and the borders are blurrier. He cross bordering in Reggio is the legacy of Malaguzzi. He said:

Talk about education …cannot be confined to its literature. Such talk, which is also political, must continuously address major social changes and transformations in economy, sciences, art and human relationship and customs (Malaguzzi 1998, p. 60).

It is clear that Malaguzzi wanted Reggio to reach out to different worlds, to be in a living dialogue with both the micro and macro worlds, with scientists from different paths.

Rinaldi (2006) declares that the values people treasure in Reggio are distant from the values that seem to be going around the world today, those based on individualism, egoism, money and so on. But because these values are so highly held it is even more important that places for young children educate about human values. Rinaldi states, 'that if school is a place of education *all* the places within schools, *all* the people there are educational, they are »educating«' (p. 150). If this perspective is transferred to democracy, in a democratic school, *all* places and *all* experiences should support and promote democracy. This is a view that is actually based on a deep democratic belief; on the certainty that in democratic societies everybody is committed to the mutual welfare of all humans. There is a relationship between Held's principles on a just society and the core concepts in Reggio. Both define dignity, equal worth, activity as a base for their view on democracy.

Not much criticism on Reggio is found in the literature. One critic is Browne, who has criticised Reggio for theoretically not acknowledging 'gender issues and the concept of gender equity' (2004, p. 50). In other words, being struck by gender-blindness. Others, like Johnson (1999), worry over Reggio becoming the new early childhood education *regime of truth*.[7]

Developmentally appropriate practice

What is perfectly acceptable for one age group is inappropriate for another because it does not match the child's developmental level (Bredekamp, 1987).

DAP as a framework was developed from the fear that American children were falling behind (Western societies) in academic terms. This was during the 1980s. As a result, many wanted to push a curriculum that emphasised formal instructions and academic skills down to programmes for younger children. DAP appeared as a defence against that trend from NAEYC, a very powerful organisation in the US and the biggest association for early childhood education in the world (Bredekamp 1987; Edwards 2005). When the above quote, from the first DAP, is read in this light it leaves the reader with a contextualised

[7] As described by Foucault, see for example Mac Naughton (2005) for a discussion in the early childhood context.

understanding of the contents. DAP is founded on the idea that the curriculum is supposed to evolve around the child, that it should be integrated and look at the child as a whole but at the same time underscore independence (Bredekamp, 1987). From the beginning, two key concepts were dominant, that of *age* and *individual appropriateness*. Later, after much criticism a third dimension was added: *cultural appropriateness.* DAP is written as sketches of what each age *is like* and what is *appropriate* and *inappropriate* for that age (Bredekamp and Copple, 1997). It presents a fragmented view of the child.

DAP is occupied with working with children's individuality, self-assertiveness and choices, namely highly held values in Anglo-American societies (Penn 2005). The importance of the right classroom setting and the role of the teacher in making sure that the child has appropriate choices are stressed (Bredekamp 1987). DAP initially met a lot of criticism and in response a new version was published in 1997. In the newer version, cultural awareness is promoted and, according to New (2000), it has taken notice of and is filled with examples from Reggio.

The following statement from NAECY about DAP is telling. It illuminates a strong belief in psychological sciences and a universalistic view of humans. It offers certainty about which way to proceed and does not leave the reader in much doubt.

Developmentally appropriate practice is based on knowledge about how children develop and learn. To guide their decisions about practice, all early childhood teachers need to understand the developmental changes that typically occur in the years from birth through age 8 and beyond, variations in development that may occur, and how best to support children's learning and development during these years (NAECY 1996, p. 5).

Dunn and Kontos (1997) are strong defenders of DAP and point out that children in DAP classrooms are likely to have a higher level of cognitive function than children coming from academic classrooms. They state that DAP creates a positive classroom climate conducive to children's healthy emotional development. Henniger (cited in Mac Naughton 2003) explains the role of the teacher in DAP as, instead of first determining what children should learn, the first duty of the teacher is to understand the class developmental abilities and from there form the curriculum. Mac Naughton (2003), on the other hand, argues that DAP regulates and governs parents and teachers views on early childhood. They get the picture that DAP is based on a set of facts about the child. It feeds into people's previous faith in science. Mac Naughton also maintains that DAP 'can reinforce conservative social ideas and knowledge because educators often act as cultural gatekeepers of what children should know' (p. 177). In other words, teachers do not touch on issues that are uncomfortable for them; issues that maybe form part of minorities children's experiences, but instead favour their own ideas of a 'right childhood'. Others point out that DAP reinforces stereotyping, does not acknowledge the unique capabilities of individual children and lets the teacher be the owner or definer of children's cultural worlds (see, for example, Jipson 1998; Canella 1997; Dahlberg et al. 1999).

According to Penn (2005), DAP is much quoted by large international organisations like the World Bank[7]. The problem Penn perceives with DAP is that it is only interested in micro-level intervention. It proclaims to be context-free and universal but is based on science and research almost exclusively carried out in the US. She wonders why a programme like DAP that looks past children's social and economical situations, that looks past children's accesses to early childhood education should be promoted. Other worldwide programmes in early childhood education such as for example Step by Step acknowledge DAP as a basis for their educational ideas.

A comparison between pedagogical frameworks

I have provided a short overview of two different paths to early childhood education. It maybe the case that both share some starting points (Dewey, Piaget) but, as is known from chaos theory, you only have to alter little bits at some point to change the whole system. The choices people make are, in a way, such alternatives. In Reggio people chose to cross borders between professions, between systems. With that choice they altered the equation. The people who created DAP made other choices and got another equation. The main difference between the equations is found in the images of the child the two theories present: one promotes interdependence the other independence, one promotes possibilities while the other is determined.

Both DAP and Reggio have greatly influenced the pedagogy of early childhood all over the world, both have supporters dedicated to spread the 'word' of the 'new utopia' coming true or the 'right' way of doing things (Dahlberg et al. 1999; McMullen et al. 2005; Walsh 2005). But, at the same time, one can hardly imagine a bigger gap in the end 'product' in the form of early childhood education. In my view, one runs toward uncertainty, a space where everything is changeable but at the same time is rooted in political values as well as developmental theories (Reggio). The other (DAP) is rooted in values and confidence in the sciences, but has at the same time a determined view of the child and its abilities, a view that is manifested in the word *appropriate*. Dewey said that education cannot be free of context and has to have a vision of society. As DAP is presented it seems to have missed out on that lecture in the first round – in the second round, cultural awareness was adopted but it remains to be seen if it will be followed through with a vision of societies. In parts of the world DAP is considered to be the *regime of truth*. It has therefore been sheltered by organisations like NAEYC and because of the need of governments for accountability in education. The same faith seems to be in the waiting for Reggio as it is also in danger of becoming the *regime of truth*. It seems to be a strange destiny for a philosophy that denies the reality of any single truth.

In Table 1 I compare Reggio, DAP and Dewey with key democratic concepts that I deem important to be able to understand the similarities and differences between the two approaches and how far or close they are from Dewey. The table is mostly self-explainable.

Concepts	*Dewey*	*Reggio Emilia*	*DAP*
Image of the child:	The child is a constructer of own meaning – individual. As a whole being.	The child is capable and prognostic in own life – is part of society. As a whole being.	The child is vulnerable – is individual. As fragments that make up the whole.
Gender:		Gender blind	Gender blind
Roots	Social democracy.	Rooted in socialism.	Rooted in psychology.
Role of the teacher:	Defining the environment and organising learning opportunities.	Be a co-constructer of knowledge and the curriculum. The environment is considered to be the third teacher.	Get to know the child and to organise the environment according to their appropriate developmental needs.
The curriculum:	Is open and constructed in context with experiences and activities.	Chaotic, emerging and open – not planned. Emerges from children's issues and experiences (PD).	Organised, planned from the key experiences and developmental needs of each child.
Socio-cultural concept:	Important.	Important.	Important.
Society's role:	Important.	Children are part of communities. Interdependency is valued.	Children are part of their cultural background. Independency is valued.
Children's own culture:		Important.	Unimportant
Controversial issues to be addressed:	Likely	Partly likely - within a certain framework (gender blindness)	Unlikely
Citizenship:	The child is a citizen in the making.	The child is a citizen in the making.	The child is a citizen of the future.
Accountability:		Evaluation in the form of documentation, not an official evaluation system.	National evaluation system in the form of accreditation.
Access:		The role of society to open access for all partly paid for through taxes.	The role of non-profit and profit organisation. For low-income families partly (even fully) paid for with tax money.

Table 1: Comparing Dewey, Reggio and DAP

Another way of comparing the two trends is to use Held's (2004) framework for a just global society for all and to examine how these two early childhood educational trends measure up to his principles.

– *Equal worth and dignity* – it can be concluded that both DAP and Reggio emphasise equal worth and dignity. Both acknowledge individual needs, Reggio uses PD as a tool to find out those needs and from there to design the curriculum. Simultaneously, the need of each individual is strongly related to their community. On the other hand, gender blindness can point to certain indifferences vis-à-vis the individual. Reggio seems to view the child first and foremost as a member of a community. DAP is stronger on the individual's right and it seems to be separate from the right of the community. A child has the right to an appropriate environment and education; it is up to society to provide for that. However, at same time one must realise that DAP is developed in a country that does not recognise early childhood education as part of the official school system. To be able to enjoy their rights, the child has to be part of a system (see Table 1 'Access').
– *Active agency* – is the ability of one person not just to accept but to shape human community. To influence and change the social as well as emotional and physical environment. DAP is unlikely to meet these criteria. The emphasis is almost completely on the individual and the appropriateness of actions. Following up on controversial issues such as poverty, war, homelessness, violence, gender, alternative families and so on is therefore unlikely. To be able to change societies, controversial issues must be addressed and analysed. Reggio is more likely to do that, one indication of this is that childhood is viewed as a socially constructed concept that is continually changing. The importance of crossing boundaries is another indication. However, the gender blindness that can for example be found in the literature and practice is worrying and is a certain contradiction.
– *Personal responsibility and accountability* – meaning that one is both responsible and accountable for one's own actions. Both trends acknowledge this point and try to strengthen it through their working methods. For both, the right of each individual to be and choose different paths is strong. For DAP, developing the individual and their abilities is a powerful point. Part of the Reggio identity in the early childhood world is the slogan 'children are born with one hundred languages and ninety nine are taken away from them'. The purpose of Reggio is to develop and give a voice to all one hundred languages. The importance of personal accountability is strongly advocated by both and can be related to the emphasis on moral and emotional growth.
– *Consent – Collective decision-making – Inclusiveness and subsidiarity* – The commitment to equality, interdependency and non-coercive decision-making are part of Reggio's view. In Reggio, the word conversation means conversation between different players in the public arena. Everybody has the right to voice their opinion. That is different from the requirement

that everybody has to agree. Major decisions are therefore everybody's business and have to be reached by collective means but not necessarily unanimously. This principle is perhaps DAP's weakest part. There seems to be little attention paid to this side of the pedagogics, especially as part of the system. It can be found in pedagogical work within the programme but, according to Held, one must look outside the programme at the big playing field as well. On the other hand, what could be more the subsidiarity of politics than making programmes the site of minor politics?

– *Avoidance of serious harm* – refers to the moral obligation of all to secure vital needs for those who are in need. The need for food, housing and emotional and physical security. In early childhood it means being focused on preventing methods that are harmful for children.

It is clear that Held's principle holds some merit when looking at early childhood education in a wide perspective. His points are useful for validating democratic aspects of early childhood philosophy. They can be helpful to point towards the future. Held points out that to build a just society, economics, politics and the law must all be in place. Democratic early childhood education is built on similar goals. To be able to build up democratic education for all children societies at large must be involved. The role of lawmakers is to change the legal environment so that all children have the right to education based on basic human values and rights. The economic world has to secure resources to build and run educational programmes. When the benefits of such systems become clear to the economic world, they will provide the resources. But to see the light, so to speak, politicians must make the case. Here I am not talking about politicians in a narrow party-political way. I am talking about the politics of professionals, NGOs as well as global organisations. In the beginning, I mentioned the SbS early childhood philosophy; in a way it has been developed by many different people and organisations. People who have had a clear vision of democratic future for all children and tried to find a way to accomplish it, a way that has included governments, educators, parents as well as the community at whole. In some ways it follows Held's criteria but in others it differs. SbS seems to be developing toward more standards and therefore unification. On the other hand, I believe in philosophical diversity in education.

From a democratic perspective, which programme should be promoted? From the description of democratic schools as well as Held's theories, I think DAP has had a tremendous influence on the early childhood world. It had an important impact at the time it was first developed as a defence tool against ideas that could be seen as child-hostile. At the same time, I do not think DAP is enough anymore. It needs to be developed *from* the word appropriate. The concept is stalling pedagogical possibilities. I believe the standardisation of early childhood education is not the road towards democracy but is the opposition of democracy. I believe the answer to what kind of education to promote is partly to be found within a philosophy like Reggio which has a strong vision of *their* society, where the 'right' image of the child is contested, where the emphasis is on the interplay between different aspects of experiences and ethics and the

socio-cultural environment. I believe we need schools where the philosophy is the common property of the children, teachers, parents, politicians and society as whole. Where the identity is not *either/or*; (Roma or Slovenian, European or Icelandic, minority or majority) but rather a hybrid where *both* are key concepts. I believe that the shield of democracy lies in pluralistic schools where philosophy in the spirit of Dewey means living a good life.

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