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Editorial

I would like to present you the 3rd volume of the *Journal of Teacher Education and Training*.

On behalf of establishers of JTET I express a sincere gratitude to our partners from the University of Fecht (Germany) for the conceptual and financial support of this volume.

This is an extraordinary volume continuing the publication of most valuable and original contributions from the participants of the 1st International JTET Conference "Sustainable Development. Culture. Education" (Daugavpils University, May 11-14, 2003).

Similarly to the second volume of JTET, this volume advances with an idea of sustainable development in education. This issue introduces the overview of European Network of the UNESCO/ UNITWIN project by the York University "Reorientation of teacher training to the sustainable development" which was developed during the 1st International JTET Conference in May, 2003, and continue with an article about European project on ESD and teacher education, therefore, making a bridge between the concept of sustainable development and teacher education.

Editorial board for this issue has been the same as for the 2nd volume of JTET including the representatives from thirteen countries. The 3rd volume traditionally contains the articles reflecting the research and practical experience from many countries: Latvia, Estonia, Hungary, Germany, Norway, UK and USA. The content of this edition covers a wide range of issues in teacher education and training. The introduction of this issue of JTET reflects the general questions on the sustainability in education, then the teacher education in multicultural context, environmental and ecological education for teachers, development of integrated curriculum are discussed, proceeding with examination of the human services for educational institutions. The researches on a child as a center of educational context conclude the discourse of this volume.

Since the publication of volume 2, Faculty of Education and Management of DU has established the Institute of Sustainable Education. The website of institute has been created where you can find the information also about the Journal of Teacher Education and Training: www.dau.lv/ise/ It contains the overview of journal, editorial team, notes for contributors, editorials and contents for the JTET volumes already published as well as some sample articles from previous volumes.

Editor-in-chief: **Anita Pipere**

Cultural Lessons about Education for Sustainable Development and Teacher Education from a European Project

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Abstract

This paper focuses on some lessons learned from and embedded in a teacher education programme in education for sustainable development (ESD) in higher education (HE). It traces the history of the Sustainability Education in European Primary Schools (SEEPS) Project, a continuing professional development (CPD) and initial teacher education (ITE) programme in ESD. The paper critiques the role of the HE teacher educator as academic/critic and proposes instead a praxis-based, Thoreauvian view of the 'practitioner' as both theoretician and actor.

The paper outlines: arguments for a cultural shift in conceptions of expertise in ESD to one based on synergetic learning between school based practitioners and academics; a philosophy of ESD based on whole institution approaches; a five-component model of whole institution approaches; a rationale – partly based on research evidence – for a school-focused model of CPD in ESD. It argues that the realisation of ESD requires transformation in ideologies of childhood and young people, the roles of academics, the balance between theory and practice and notions of where the expertise in ESD lies.

Key words: environmental education; education for sustainable development; whole institution approaches; internal barriers to sustainability; teacher education.

Action as the Soul of ESD

Definitions of environmental education (EE) and (ESD) consistently contain commitments to change to more environmentally friendly and sustainable values, attitudes and actions (UNESCO, 1978; UNESCO, 1997). But in designing professional development programmes in ESD for teachers and aspiring teachers, we should not assume that the ethical choices implicit in the selection of new lifestyles necessarily require more knowledge and/or changed values.

Actions and values are not always congruent (Table 1). Posch (1993) describes the failure to behave virtuously (see Table 1) as discordance between espoused values and values in action. Research evidence shows that many students in initial teacher education (ITE) hold pro-environmental values, but their actions are not always consistent with these values, for a variety of reasons (Shallcross & Wilkinson, 1998). Therefore the neglect of sustainable actions may not always re-

sult from inappropriate values, it may indicate the need for education to empower, to develop ‘conscientisation’ (Freire, 1972) and/or action competence (Jensen, 1995). The promotion of such action competence is a crucial but neglected feature of the education of teachers by HE institutions (Inman & Champain, 1996; Shallcross & Wilkinson, 1998); this was a neglect that the SEEPS Project sought to address.

Table 1. Aristotle’s relationships between knowledge, values and actions (modified from Brennan, 1991)

Cognition	Emotion	Action	Relationship
Y	Y	Y	Virtue
Y	Y	N	Inconsistency
Y	N	Y	Control
N	N	N	Vice

In teaching the knowledge, theory and values of ESD while neglecting action competence, schools and teacher education may be socialising hypocrisy (Shallcross, 2003) by appearing to accept inconsistent behaviour as normal. This neglect leads pupils to question the integrity of their teachers (Titman, 1994), constituting a serious caution for the cognitive approach to ESD provision.

Cognitively focused linear models of EE and ESD are deficient in realising action (Kollmuss & Agyeman, 2002) and when EE and ESD address action they often do so from a suspect, conventional ideology of childhood. Much EE has had a dubious ethical base because of this focus on behavioural change models that relegates student decision-making (Uzzell et al., 1994). Its objectives are not life-long, they are too youth- and child- focused and do not consider the socio-political contexts in which attitudes form (Uzzell et al., 1994).

For these and other reasons EE has a poor record in changing values and attitudes (Shallcross & Wilkinson, 1998) and lacks the socio-political and cultural contexts to facilitate changes in action through participation. Behaviourally focused models communicate a simplistic, inaccurate psychological message – that if people are aware of environmental problems they will act for their resolution (Sterling, 2001). If EE lacks authenticity, it is because it is implicitly concerned with educating students to be tomorrow’s change agents, while ignoring immediate geographical and temporal problems (Uzzell et al., 1994). Or, put differently, EE sees students as citizens in waiting rather than present citizens (Alderson, 2000).

Whole Institution Approaches

From the outset the SEEPS team recognised that ought implies can (Des Jardins, 1993); we cannot hold people morally responsible for actions over which they have no control or capability. This led to the team uniting around a strong commitment to ‘whole school/institution’ approaches to ESD as a way of addressing the neglect of action competence by transforming conventional ideologies of children through a strong advocacy of pupil participation (Hart, 1997).

“Many relevant attitudes and values will be expressed in the ethos and daily practices of the school, in the literature that it directs people to, in the versions of life that it holds up as being successful

and the status it accords to different activities and relationships. These will need to be carefully evaluated from the perspective of sustainability if damaging inconsistency of message and pupil cynicism are to be avoided,” (Bonnet, 1999, p.323).

In simple terms ‘whole institution’ approaches mean practising what we teach and promoting action competence by minimising gaps between espoused values and values in action (Posch, 1993), through the integration of formal and non-formal curricula. This is ESD as second nature, as a way of life. Posch (1999) describes whole institution approaches as: ‘... shaping our interaction with the environment in an intellectual, material, spatial, social and emotional sense to achieve a lasting/sustainable quality of life for all’ (pp. 341-2). Whole institution approaches integrate pedagogy, with the social/organisational and technical/ economic aspects of school practice (Posch, 1999). But all these prescriptions omit evaluation and research that are integral to whole institution formulations and when added, (Figure 1) complete a ‘plan, do, review’ cycle in ESD (Rauch, 2000) that is capable of fostering action research in schools.

Many responses to ESD are legitimate in the wide variety of educational and environmental contexts of the UK. But whatever the response, implementing whole institution approaches requires the monitoring of practices. Are these the best solutions within current thinking and within the resources available? Is the curriculum providing the knowledge that pupils need in order to live sustainable lifestyles? Can the institution research environmental justice in its own organisation and its local community, and act appropriately on this knowledge? Whole institution approaches are rooted in the concept of education as process, mediated through locally derived and decided product, rather than vice versa. Schools respond better to the synergy in Figure 1 (Tschapka, 2003), while HE institutions are generally more concerned with greening the curriculum and institutional practice (see International Journal of Sustainability in Higher Education) than the other three strands of whole institution approaches. HE could learn a lot from eco-schools about sustainable learning organisations.

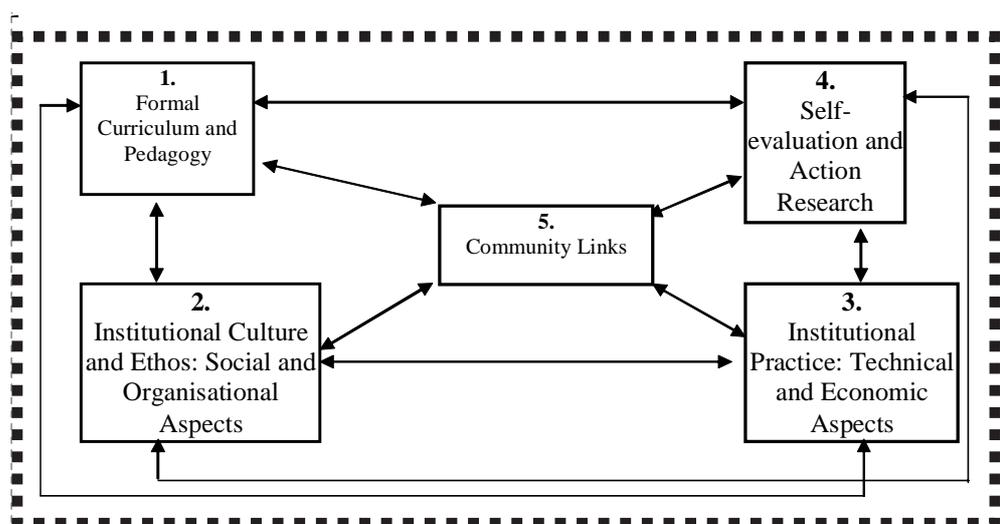


Figure 1. The Five Strands of a Whole School Approach to SE

The Importance of Local Action

Modernist modes of thought are increasingly abstract and universal, while 'place' is specific. The idea of 'the local' in an increasingly interdependent socio-economic world becomes problematic. We know that the natural world is interdependent and modernist socio-economic forces constantly remind us of the inexorable process of globalisation. Yet all we appear to be capable of is adapting to the globalisation or perishing. 'Whole-institution' approaches help counter this modernist tendency of education to become a homogenising force that undermines local knowledge, indigenous languages and the self-confidence of placed people (Orr, 1994).

Given media power, the culturally transforming nature of computers and world population growth, we need to learn about local alternatives to consumerism (Bowers, 2001). Sustainability implies holistic experimentation and appropriate scale in socio-cultural institutions. The radical environmentalist solution is rooted in the concept of bioregionalism (Cheney, 1989) and the social, cultural, spiritual and ecological specificity of place. From this perspective the only generalisations we can make about ESD are its location in process and whole-institution synergy.

While ESD has implications for practice in all five strands of Figure 1, the contribution of the formal curriculum (Beane & Apple, 1999) is essential. It is imperative that what is learned in classrooms, and more importantly, *how* this is learned, become more central concerns of professional development in ESD. The culture of modernism needs to be transformed if sustainable societies are to be realised. A first step is the deconstruction of the values of modernism that underpin environmental degradation, partly by adopting critical pedagogical processes in ESD that address structural, institutional, communal and personal issues. But from the outset formal education needs to address culturally and age sensitive solutions to the environmental crisis.

Many children's first contact with school is significant since it may be the first time that *all* of them experience communal approaches. ESD should be an education rooted in democracy and cooperative relationships between municipality, community, teachers and parents in which moral education commences at an early age (Coles, 1997; Farrer with Hawkes, 2000). Its pedagogy should be rooted in a culturally sensitive constructivism that emphasises talking that enables pupils to formulate their own meanings and develop a sense of identity through social interaction. This is a curriculum that is not prescribed or delivered but managed and negotiated. Pupils learn at a very early age to respect one another, to cooperate with one another, to listen and discuss – all the attributes that are essential to a true working democracy (Brain, 2001).

Incorporating Participation

'Restoring the ideals of civic virtue and responsibility is possible only in face-to-face communities that eliminate hierarchical institutions' (Zimmerman, 1994, p. 154). Whole institution approaches are not just structural or process responses, they need to be founded in values. Capra's (1996) web of life does not just involve changing from a modern to a postmodern epistemology; it has to incorporate connective, holistic approaches to the practical web of integrative experience in schools. What is vital is how whole institution approaches, and the principles and values upon which these are based, are arrived at. Most changes in our educational institutions

occur without the reflection and participation of pupils; they neglect pupil voice a crucial ingredient in the development of active citizens. Thus most educational changes are, from the pupils' perspective either non-participatory (Table 2) or at best examples of assigned but informed participation. If these changes address citizenship, it is usually a passive rather than active formulation of citizenship (Table 2).

Table 2. Ladder of participation (Hart, 1997)

N	Level	Degrees of Participation Non- Participation
1.	Child initiated, shared decisions with adults.	
2.	Child initiated and directed.	
3.	Adult initiated shared decisions with children.	
4.	Consulted and informed.	
5.	Assigned but informed.	
6.	Tokenism.	
7.	Decoration.	
8.	Manipulation.	

In schools without significant levels of participation, for example a formal school council, few pupils have any idea that things could be any different, that there could be learning actions that encapsulate citizenship (Davies, 1999) and thereby promote the development of the pupil to as school and community, national and eventually global citizen 'With action competence environmental education must have a goal related to citizenship. As such it must be carried out with the simultaneous training of children as future citizens' (Uzzell, 1999, p.402). It is process that matters here. Schools councils may contribute to the socialisation of hypocrisy and the dilution of children's rights as present citizens if they are restricted by a prescribed 'big brother' remit that constitutes a managerialist device for damage limitation by channelling pupils' criticisms in a reactive, for example by restricting the context of their discussions to relatively trivial areas of institutional practice:

"These are areas that school management teams feel are safe for pupils to debate, while wider issues such as teacher-pupil relationships, curriculum content and delivery or issues of sexual or racial harassment are rarely discussed," (Holden, 1998, p.56).

Councils work best if they are part of 'whole institution' participatory practices that are embedded at the classroom and institutional level and through community involvement at the interface between local, national and international communities (Holden, 1998). Participation should extend to all facets of Figure 1 by giving pupils voice and influence in the content and pedagogy of the curriculum and their school's institutional practices. This could be done, for example, by pupils interviewing prospective teachers, mediating playground disputes, recommending and implementing energy conservation, and by becoming researchers in evaluating whole school approaches to ESD in their own schools.

Part of a 'whole institution' approach is to educate pupils and teachers in participation at the higher levels shown in Table 2. Participation is a right endorsed in the 1989 UN Convention on the Rights of the Child (Holden & Clough, 1998; Osler, 1998). However the UN Convention only requires that adults establish what

children's views are, it does not require that children are actually involved in decision-making (Spier, 2001). Thus children's participation is a problematic concept. For example children are concerned about social and ecological justice in the future and wish to act to promote positive change, but lack a clear vision of their own part in this process (Hicks & Holden, 1995).

Spier (2001), while arguing for a five-stage model of children's participation, each with three levels of involvement, does not identify an independent decision-making stage (see Table 2). His model is only concerned with stages of participation that occur as a result of interactions between adults and children. A more serious omission is a fourth level of action within each stage, which fails to address the fact that policies, as espoused values, are frequently not reflected in institutional action.

What is clear is that some schools are well ahead of HE in practising participative, holistic, process-based views of ESD (Tschapka, 2003). For example, where universities address the institutional practice agenda, this is often through committees that only represent the employees of the organisation. HE has much to learn about learning from its students, about making connections with local communities about social and organisational practices and developing synergistic approaches that will see them become sustainable learning as well as teaching organisations.

Promoting Participatory Whole School Approaches: The Evolution of SEEPS and School Focused CPD

The critical question is how we get this message about a cultural transformation to whole school approaches involving high levels of pupil participation and democratic education across to practising and pre-service teachers?

In 1996 a consortium of educational organisations from eight European countries secured European Commission funding to develop SEEPS, a CPD programme in ESD. The Project started with a contextual analysis of CPD provision and EE in each participating country or region. (The term EE was used at this stage because it was felt that teachers and SEEPS team members would find this term less problematic than ESD). From this analysis an integrated philosophy and action plan for SEEPS was developed. Philosophically, the SEEPS team was committed to developing 'whole school' approaches that were planned, implemented and reviewed at a school level. The team's action plan for disseminating the whole school message to practising teachers was founded on a school-focused rather than centralised or school-based model of CPD in which the school rather than the individual teacher is seen as the target of CPD. School-focused CPD educates staff developers and supplies support materials that can be customised to meet the CPD needs of individual schools.

A school-focused CPD model was adopted because for most people, and especially children, the local is their most significant action field in acting sustainably and local actions are a microcosm of global actions (Vognsen, 1995). Therefore CPD in ESD should promote school development (Evans, 1993). For ESD to be at its most effective, schools need to integrate with their local communities (see Figure 1) and make appropriate global connections from these local links.

A centralised model of CPD was not adopted because it is associated with externally rather than internally driven change that neglects how institutional factors influence change neither does it develop teachers' change management skills for use in their own schools (Fullan, 1991). Centralised models are appropriate when the

individual teacher is the focus of CPD, for example the teaching of reading. But when the whole school is the focus for change, centralised models have severe limitations.

School-focused CPD resolves many of these limitations, especially if the school development creates a learning organisation in which individual and institutional practices and structures make continuous learning actions valued, endemic and second nature in the institutional culture of the school. The school focus should promote locally derived actions that address school level curriculum needs and plans and also address individual teacher's CPD needs.

School-based (SBI) CPD is delivered by an internal trainer who is sometimes supported by externally written materials and research indicates that it may be the most common form of CPD England and Scotland (Shallcross et al., 2001). School based CPD can be founded on 'the pooling of ignorance' (Blenkin et al., 1992) especially if it is led by trainers who have no formal education in staff development and/or limited expertise in the area on which the CPD is focused. The common assumption that good teachers are axiomatically good staff developers is suspect (Evans, 1993). Schools can also be parochial in finding it difficult to learn from the CPD experiences of others (Hewton, 1988). School-based CPD can also be myopic by neglecting external and longer term needs as a result of concentrating on the school's internal and short term needs, for example how the latest curriculum or inspection initiative from central government should be addressed in the school. Who is CPD for... the school and/or the teachers? Unless the answer to this question is clear, the model of CPD deployed may override the interests of the latter or vice versa.

But school focused professional development is more difficult in ITE. In the project, ITE has been addressed through the development of a website (www.education.edac.uk/esf) which contains the same commitment to whole-institution approaches as the SEEPS Project. It encourages praxis by requiring students to reflect on theory, case studies and their own experience of schools. The website also aims to promote whole-institution approaches in HE as well as greening the ITE curriculum.

What do Whole Institution Approaches Mean for the Teacher Educator?

But what does this focus on action competence and participation through whole institution approaches mean for the culture of HE teacher education faculties and their staff? Gough (2002) argues, quite correctly, for the university academic to act as theoretical critic in relation to the sustainable development debate, while asserting that classroom practitioners have to grapple with the substantive meaning of sustainable development. But if this role of critic is seen as the academic teacher educator's main and defining contribution to ESD there is a danger of invoking the modernist separation of professional and private roles (MacIntyre, 1996). There is the further danger of classifying philosophy as an intellectual rather than a practical activity and simultaneously failing to acknowledge that education for academics and teachers alike is an applied discipline.

"To be a philosopher is not merely to have subtle thoughts, nor even to found a school, but so to love wisdom as to live according

to its dictates, a life of simplicity, independence, magnanimity, and trust. It is to solve some of the problems of life, not only theoretically but practically,” (Thoreau, 1996, p.17).

While academics should not be placed under pressure to settle the meaning of sustainable development in essentialist terms (Gough, 2002) this does not preclude them from searching for tentative meanings, nor from the ethical responsibility, as citizens, to act with some coherence in relation to these meanings, both within and outside of their ivory towers. This is not to deny the importance of deconstruction and critical analysis, but to recognise that critical activity is not the exclusive territory of academics and promoting sustainable actions is not the sole preserve of schools. In the quest for ESD we have to assert the unity of human life, ‘reconstructively’ (Foster, 2002) by elevating the importance of praxis. Educational theory should regard the *praxitioner* as the real innovator in ESD, who by integrating theory and practice reveals praxis, rather than the academic who indulges mainly in arcane, oppositional, and often decontextualised, debate (Paden, 1994).

The problematic role of the academic as theoretical critic has other manifestations in the ESD debate. Much writing about ESD gets drawn into a debate about language, which is often more about labelling than conceptualisation and more about ‘problematising’ than deconstruction (Stables & Scott, 2002). For example education for sustainability (EfS) has been criticised for its unrealistic and behaviouristic focus on product (Jickling, 1999, 2001). While Jickling is right to alert us to the disempowering, undemocratic traits of such ‘big brother sustainability’ (Wals & Jickling, 2001) such criticisms evaporate if the label of EfS is attached to an education for ‘process’. By focusing on labels we may miss agreement about a fundamentally process-based concept of ESD. Viewed from an adversarial perspective, the term ESD may be problematic; viewed from an inclusive perspective, different terms may be employed to describe a similar concept. Does it really matter if I call ESD EfS and others call it EE, as long as we have a similar process-focused concept in mind? Focusing on terminology may lead to missed opportunities to explore interactive overlapping linguistic spaces, and also alienate teachers from theoretical debate in ESD and as Wilson (2002) argues the urgency of the environmental crisis suggests that we do not have the time to bicker, we need to act and act quickly. To paraphrase Schumacher we need to stop asking whether we will get there or not, or which is the correct route, and get down to work (Orr, 1996).

Such modernist academic ‘adversariality’ is a self-defeating, internecine, uncivil warfare (Greig et al., 1989; Zimmerman, 1994; Paden, 1994) that renders discussions of ethical stances counterproductive in an applied discipline such as ESD. The consequences of this formulaic negativity (Bowers, 2002) are either the progressive alienation of teachers by the adversarial rhetoric of environmental philosophers, or their unwavering ideological dependence (Argyris & Schon, 1996). Fien (1995) describes this language of critique as having had a paralysing impact on many environmental educators. Others find these debates spurious, unintelligible and consequently irrelevant. Consequently there is little praxis in EE/ESD. It is a field in which there is much activity, but not enough theoretically derived action.

The concern with adversariality, partly through its elitism (Quigley, 1992) has degraded the intellectual high ground of academic debate into swamps for many teachers. The search should be more for pluralist inclusive theories of the middle

ground (Paden, 1994) than the preoccupation with ideologically pure grand theory that has dominated much academic discourse in EE and ESD. Theory is important linguistically as it provides a new language, not tainted by the prescription of policy makers or caught up with urgencies of practice (Ball, 1997). By elevating praxis above theory, *praxitioners*, be they in schools or HE, should be seen as the real innovators in ESD rather than theoretically focused academics.

Conclusion: Who Learns from Whom in ESD?

If teacher education is to make a significant contribution to ESD it has to consider:

- recognising the need to practise what it teaches through synergistic whole-institution approaches;
- transforming its view of the academic to that of ‘praxitioner’, a Thoreauvian view of the philosopher as both theoretician and practitioner;
- recognising that praxitioners may be located in schools as well as HE institutions;
- transforming its view of children to one of present citizens rather than citizens in waiting;
- appreciating that learning in ESD can come synergistically from a variety of sources, including children.

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Professional Education of Teachers – Problems and Perspectives. The Estonian Case

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Abstract

This article will give an overview of teacher education in Estonia. A more detailed look will be given to teacher professional development in Tallinn Pedagogical University (TPU). Tallinn Pedagogical University offers teacher education programs for teachers for all subjects and all school levels as well as pre-school level. Since 2001, teacher education curricula have been launched following from the directives settled by the Bologna Convention. These curricula follow the general guidelines for teacher education established by the Ministry of Education (Framework Guidelines for Teacher Education, 2000) and the National Standard of Higher Education (Standard of Higher Education, 2002). Teacher education curriculum for all school levels consists of three parts: general education, professional major, and educational studies. There are currently two teacher education models in Estonian universities: a) the monophasic integrated model for a pre-school and a class teacher in which professional and educational studies take place concurrently, and b) the two-phase or consecutive model for subject teachers in which a 2-year course on teacher education is taken by students after the completion of their professional studies. In the two-phase teacher education model, educational studies, including pre-service school practice, must extend for at least 40 study weeks.

Key words: teacher; education; curriculum; development.

Knowledge in the post-modern world is expanding and includes diverse ideas and opinions. Being able to free oneself from a rigid dependence on a traditional collection of facts is becoming an extremely important factor. In this sense, the teaching profession is losing its traditional ground. Students who choose the teaching profession are aware that they will have to teach; however, they will not know exactly what they are going to teach. During their professional studies at universities, textbooks and curricula are changing as new knowledge is developing in the field. In a rapidly changing world, professional teachers need to adapt and learn continually in order to act effectively as team members and lifelong learners.

Teacher professional development begins with pre-service teacher education. Currently in Estonia, two universities, Tallinn Pedagogical University and University of Tartu, including their colleges (institutions of higher education) provide curricula leading to the awarding of a teacher licence. These curricula follow the

general guidelines for teacher education established by the Ministry of Education (Framework Guidelines for Teacher Education, 2000) and the National Standard of Higher Education (Standard of Higher Education, 2002). Teacher education curriculum for all school levels consists of three parts: general education, professional major, and educational studies. There are currently two teacher pre-service education models in Estonian universities: a) the monophasic integrated model for a pre-school and a class teacher in which professional and educational studies take place concurrently, and b) the two-phase or consecutive model for subject teachers in which a 2-year course of teacher education is taken by students after the completion of their professional studies. In the two-phase teacher education model, educational studies, including pre-service school practice, must extend for at least 40 study weeks.

Differing from the practices in many countries of the world, in Estonia the graduates of teacher education programs acquire teacher certificates almost without any “real” period of teaching (existing 8 weeks of school practice during the studies at university is not enough experience to start the job as a novice teacher). Insufficient teaching practice and lack of adaptation to the school environment might prevent the adequate formation of professional identity; which in its turn, will lead to the situation that only a minority of newly qualified teachers will enter work as teachers. This situation will, hopefully, change as new general guidelines for teacher education (Framework Guidelines for Teacher Education, 2000) will include the introduction of a supervised professional year for all teacher education graduates starting from the year 2004.

In spite of the above-mentioned positive developments, in recent years the current situation in teacher education in Estonia is similar to the situation in Europe as a whole. According to Buchberger’s (2000) report at the European Union conference, the situation is similar in most of the EU countries and has the following features:

- it focuses on a relatively short teacher pre-service education in universities, not on learning during one’s professional career;
- it ignores the need to help a novice teacher to accommodate to the school’s professional culture and to create an atmosphere supporting professional development;
- teacher pre-service and in-service training is not incorporated into a common system, there is no continuity between training and promotion;
- there are no systematic connections between teacher (pre-service) education, schools, staff development, school development and improvement;
- there is no sufficient connection between teacher education, research and development activities.

Current Trends in Teacher Education in Tallinn Pedagogical University

Tallinn Pedagogical University offers teacher education programs for teachers for all subjects and all school levels (to the end of a gymnasium) as well as pre-school level. Since 2001, teacher education curricula have been launched following the directives settled by the Bologna Convention.

In the same year a teacher education strategy paper, based on the above-mentioned principles, was elaborated in TPU to guarantee education of teachers who respond to the expectations of the Estonian society and educational system, who are capable of flexible implementation of their pedagogical theories, innovative ways of management and active learning strategies. The following tasks were set up to achieve the goal:

- to develop a comprehensive teacher education system in which pre-service and in-service training are integrated and to create conditions for the teacher's professional development appropriate to the new/changed role image;
- to enhance university's educational research and development activities, and post-graduate studies in school and educational system development;
- to develop a co-operation network with different social partners to get constant feedback on university activities.

From the point of view of teacher professional development, it is essential that pre-service training, induction year and in-service training form an integrated ensemble, in which competencies with different content and quality will be developed at different levels of education.

The aim of pre-service education is to develop basic professional competencies in order to start an induction year, to be an active teacher after the induction year and to develop readiness for future in-service training. This aim can be achieved if the following aspects are considered:

- readiness for self-reflection and self-directed learning;
- subject training and competence in subject didactics and methodology;
- readiness to create a favourable learning environment and guide the learning process, taking into account the possible impact of the hidden curriculum (i.e., a great deal of learning is taking place outside of school) on pupils' learning;
- readiness to apply scientific research methods in the learning process and environment analysis, and to implement research results in practice;
- basic competence in information and communication technology.

Every year an action plan in accordance with the aims of teacher education will be elaborated. First of all, more attention will be paid to the integration of the content in educational studies and its implementation into practice, to guarantee student teachers professionalism, to strengthen the role of teacher education in the university and to develop in-service training for academic staff. Pedagogical practice proceeds from the idea that it is a long process to become a teacher in which a supportive tutoring system and guidance play an important role. An emphasis is on the co-operation with practice schools and the development of mentoring system in order to implement the induction year in 2004.

Early Childhood Teacher Education

Estonian pre-school education has undergone great changes during the last decades among which child-centred and parent-supported education are valued as most important tendencies. In Estonia two acts regulate activities in pre-school establishments: Pre-school Establishment Act (1999) and Framework Curriculum for Pre-school Education (1999).

Pre-school Establishment Act defines a pre-school establishment, i.e. an establishment offering care and pre-school education for children in a pre-school age. A pre-school establishment has to support the family, child rearing and promote development of children, taking into account the child's individual needs. Pre-school education is a set of knowledge, skills, proficiency and behavioural norms that will form the basis for success in everyday life and school. Pre-school education can be acquired in a pre-school establishment or at home.

In January 1, 2002, there were 624 pre-school establishments in Estonia with 49.852 children attending (total number of children 87.592). Based on statistics from January 1, 2002, 52.5 % of all 2-year-old children (12.044) attended a pre-school establishment (6.321). 6-year-old children formed a major group in pre-school establishments – 10.680 (83.3 % of children in the corresponding age group – 12.816).

In order to plan teacher training for early childhood education and to guarantee the state financed studies, it is necessary to have an objective overview of the present staff qualifications.

The statistics from January 1, 2002, shows that only 27.8% of 7.394 pre-school teachers working in pre-school establishments have pedagogical higher education and 1.7% has higher education in some other domain. Majority of teachers (60.4 %) have pedagogical tertiary education. TPU has educated pre-school teachers at a higher educational level with full-time and part-time programs since 1967.

Since the academic year 2002/2003, education of teachers for pre-school establishments is carried out according to the Early Childhood Education curriculum. The curriculum belongs to the teacher education domain and offers an opportunity to receive education at the BA level (120 credits, nominal study time 3 years) and at the MA level (80 credits, nominal study time 2 years). Thus, early childhood education teacher training programs is in accordance with the so-called 3+2 system applied in Europe.

Curriculum Goals and the Competence of an Early Childhood Education Teacher

During the past decade research in early childhood education has been an essential issue throughout the world. This is also emphasised in the OECD report (Starting Strong, 2001). Attention is paid to the quality of early childhood education and teacher education in this domain.

Early Childhood Education curriculum in TPU proceeds from the following principles:

- the curriculum is open and entire, it gives a graduate from BA level an opportunity to continue studies at MA level;
- the completion of the curriculum gives necessary competence to work as an early childhood education teacher in a pre-school establishment and other institutions in the field of early childhood education;
- the curriculum takes into account a student's capability, develops unified knowledge in theory and practical experience, and focuses on the development of a teacher as a leader.

Education consists of thorough studies in educational sciences, psychology, special-

ity and practice. Based on the logic of the curriculum, thorough studies in major and speciality support the development of an early childhood education teacher's cultural, social, communicative, professional and specialised competence for working with children from their birth to the age of seven in different pre-school establishments.

Completion of the studies at the BA level will guarantee professional competence and self-reflection skills for a novice teacher. The studies favour the development of a versatile specialist in early childhood education competent to fulfil the trends and needs of educational policy.

The curriculum supports a student's development and promotes readiness to continue the studies at the MA level.

The completion of Early Childhood Education curriculum at the BA level creates the pre-conditions that a graduate will have the following skills and he/she will be able/ready:

- to create a favourable environment for children's play, learning, intellectual, physical, social, emotional, moral and art activities;
- to co-operate with other teachers and parents (or persons substituting them);
- to direct a child's development with methods facilitating child's interest and initiative;
- to develop a child's primary learning and work habits;
- to integrate learning and educational activities in the child's environment.

The completion of an Early Childhood Education and Counselling curriculum at the MA level gives the necessary competence to work as a counsellor in a pre-school establishment or other educational establishments, or to work successfully in the field of educational science.

Early Childhood Education and Counselling curriculum at the MA level emphasises the following:

- thorough studies in speciality;
- new competence such as counselling skills, readiness to use scientific research methods in everyday work, management of a pre-school establishment;
- more thorough experience in scientific research.

The curriculum, thus, widens the career opportunities of a teacher involved in early childhood education.

Class Teacher Education

Class teacher education is based on the concepts of 1) the development of subject and didactic competence; 2) readiness to foster the development of students with different educational needs and personal qualities, self-reflection and continuum of learning; 3) readiness to consult the students as well as parents.

As the age range of students, the class teacher meets, is from first-graders to teenagers, the student teacher's development of competence in several subjects as well as his/her own personal qualities are equally important in teacher education. Considering a high dropout rate in the third school stage, the class teacher has an important responsibility in anticipating learning and behaviour problems.

The term *class teacher* is relatively new in Estonian educational system (since re-declaration of independence). It appeared in official documents only since 1993

when the Estonian Parliament adopted the *Compulsory and Upper Secondary School Act* that legalised the transition to a 6-year primary schooling and the term class teacher. The compulsory school involves three school stages: grades 1-3 form the first stage; grades 4-6 form the second stage and grades 7-9 form the third stage.

Before 1993, a term *primary school teacher* was used. Accordingly, a primary school teacher received education, allowing teaching of all subjects in grades 1-4. The term *class teacher* implemented similarly as in Finland, means, first of all, that a teacher acts as a class teacher for the same class the first six years at school. The fact that children are in the sphere of influence of the same teacher during a very important time of their school years presumes that a teacher has to have a good command of educational sciences and good practical skills to implement his/her knowledge in the classroom. Since 1993, the students in the class teacher program have to receive education, allowing teaching all subjects in grades 1-6, excluding the so-called subjects of aesthetic cycle (music, arts, handicraft). Still, it is possible to choose two subjects of aesthetic cycle, which ensures competence to teach these subjects only in the first school stage.

Based on qualification standards for teachers, since the academic year 2002/2003 class teacher education in Estonia is completed at the MA level, with the total of 200 credits or 5 years. As mentioned before, the class teacher curriculum is the only curriculum in TPU that is not divided into 3+2 levels, but is an integrated curriculum oriented on class teacher education from the beginning, i.e. from the BA level. Such an integrated education program will provide the student's positive attitude towards teacher profession from the very beginning of his/her education.

The current class teacher curriculum gives, in addition to teaching competence in the first and second school stages, the right to teach one subject until the end of the compulsory school. This widens the class teacher's range of activities, though, subject teachers, teacher educators, but sometimes also class teachers themselves have doubts whether it is realistic to acquire such a wide range of competence. There is no certain answer to that question, but research and observations show that a teacher who has received education in several subjects can better meet the different needs of children and they manage the class better. It is important for them to proceed from child-centred pedagogy.

Wider education does not necessarily mean that a teacher can put all his/her subject-education into practice. In other words, the class teacher is prepared to teach all subjects, but in reality she/he can apply these skills only partially. The reason is that besides the class teachers, TPU educates also subject teachers for compulsory schools and their professional areas in school often overlap. Every school decides itself what is the best solution in the interest of students and teachers. At the same time, there are some compulsory schools (grades 1-9) in rural areas of Estonia with a small number of students, where a teacher, who has specialised in one subject, has difficulties to find the full load job. In this case, a class teacher has much better chance to find work in accordance with his/her professional qualifications.

Situation in the Labour Market and In-Service Training Opportunities

Based on educational statistics from 2000/2001, almost 25% of class teachers are

over 50 years old. This is a clear sign that in some years schools will need many young teachers. Ageing of teachers as well as decrease of the number of students in a class indicate the need for new teachers.

Analysis of teachers' educational level indicates that there is many class teachers in schools who do not correspond to the qualifications set in the Framework Guidelines in Teacher Education (2000). Many teachers have received *primary school teacher* education with the right to teach in the first four grades. In order to receive class teacher competence, it is necessary to continue studies in in-service or correspondence courses. Only about half of class teachers meet the present qualification requirements. New trends in class teacher education take into account previous studies in the field enabling to choose a form of studies most suitable for a person.

Subject Teacher Education for Compulsory School and Upper Secondary School

During the transfer to the 3+2 system (3 years of Bachelor studies + 2 years of Master studies), curricula were developed which offer students general competence alongside with knowledge and skills in the major (subject) and create readiness for lifelong learning. Several new courses have been introduced alongside with traditional courses in educational sciences and psychology at MA level such as information and communication technology, educational management, leisure time education (the courses for orchestra conductors and dance teachers), social pedagogy and child protection, recreational management and others.

The benefit of the so-called 3+2 system for a student lies in a wider range of opportunities available after graduating from the Bachelor level. A student who has BA in Estonian philology can, for example, choose between several MA curricula: the teacher of the Estonian language and literature, linguistics, study of literary concepts, philosophy, communication or adult education. Certain MA level curricula (the curricula based on the major subject) demand BA degree in a certain field: in order to be admitted to be the teacher of the Estonian language and literature MA course, a BA in Estonian philology or an equivalent qualification is required. The same applies to all other subject teacher education curricula.

If a student wants to continue studies in teacher education, she/he has to take a professional aptitude test after 3 years of studies and BA degree. The aptitude test will guarantee that the student has pre-conditions to manage as a teacher in the future. Besides knowledge in the subject, social competence, ethical and moral values of a student teacher play an important role in the profession.

Pedagogical and psychological studies account for half (i.e., 40 credits) at the MA-level subject teacher education (total amount 80 credits). The aim of teacher education is to develop basic pedagogical and didactical competence, readiness to start the induction year and work as a novice teacher after the induction year.

All teacher education curricula implemented in TPU and described above support the student teachers' development as a learner and form the basis to continue their studies at the PhD level.

Conclusion

Constantly changing and challenging society needs a teacher with a new role image and competencies. Being a teacher means to meet challenges and develop skills to

manage with and influence change. In order to promote changes in learners, their learning environment and the whole society calls for openness and co-operation among teachers. The teacher must be a leader and a counsellor with the skills to take advantage of different learning environments including active participation in organisation and society development. A teacher has the opportunity to promote the student's values and understanding of a democratic society. It presumes a clear vision of education and of the future. The ground for this readiness is formed during pre-service teacher education.

Educational changes depend on what teachers do and think – it is simple and complicated at the same time. Learning to become a teacher starts already when we attend the school; it is a long process in which pre-service training forms only one, but a very important part. Throughout the whole process of teacher education both the trainers and trainees need to keep in mind the following:

- Teacher education, or teacher as learner, from day one, must be thought of as a career-long position. Teacher education or teacher development is a continuum of learning.
- Teacher development and school development must go hand in hand. You cannot have one without the other (Fullan & Stiegelbauer, 1991, 289).

Fullan also claims that teacher training is the weakest, but at the same time the most promising aspect of educational reform. All aspects of initial education - academic knowledge, general and specific pedagogy, foundations, and field experiences - need strengthening and above all require coherence and greater integration. In other words, regardless of approach, teacher education will have a decisive impact on the educational system, and even more, on the whole society in the 21st century: it will either encourage or hinder its development. Let us hope that it is within our possibilities to achieve the most favourable changes in the process of teacher education for the 21st century.

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Teacher Education in Norway: How to Meet the Challenge from the Multicultural Students?

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Abstract

The article presents some aspects from a project on Multicultural Teacher Education.

Oslo University College started in autumn 2002 with 70 students in so-called "Multicultural Teacher Education" (MTE). 30 % of the students were themselves immigrants from non-European countries, or descendants from foreign-workers families coming to Norway in the 70s, and were given priority by entrance. Other students were given the opportunity to participate the classes by choice. In this article I discuss how the students were integrated into the "Norwegian Teacher Education" for good and for worse. Their unique aspects of life, different from the majority population, and their bilingual skills were not taken care of and approved. This is to be reviewed as an integration process, like integration of handicapped children into the "normal" schools. Introducing a Multicultural Teacher Education (MTE) from this point of view is, on the one hand, stating of rights for some groups of students to have special tailored education to meet their qualifications. On the other hand, this includes a concept of not-normality.

Key words: multicultural students; teacher education.

Introduction

In this paper I analyse some perspectives on "Multicultural Teacher Education" (MTE) launched in Oslo, autumn 2002. The main question is to deal with the terms 'multicultural' and 'multilingual' as the terms are used in political papers and formulated in curricula for Teacher Students at the University College in Oslo, Norway. I will *deconstruct* the terms according to the perspectives of Michel Foucault (1972), analysing the origin and "history" of the students classified as "multicultural". In this presentation the *discursive technologies* (Gore, 1998; Germeten, 2002) is central to the way we differ, classify, include and exclude students into categories and groups with "special needs" for "special" kind of teacher education and training. This, I will argue, we can compare to different *regimes of thoughts* or *paradigms* like Kuhn (1970) presented this in science.

Even if this empirical study is locally contextualised in Oslo, Norway, I will argue that these perspectives are general in other aspects of teacher education as well as dealing with sustainable education. The UNESCO definition of Education for Sustainable Development (ESD) deals with changes in attitude and the way we

act in many aspects (UNESCO, 1997, § 4). Changing also means changing our categories and the way we speak about things and persons. “*Naming is dangerous*”, Foucault (1990) wrote. By naming, we tend to put things and people into “traditional” boxes or well-organised systems of our thoughts. This kind of diagnosis also indicates what belong and do not belong to the same category. Then we are very close to think in terms of *normality*. On the one hand, introducing a Multicultural Teacher Education from this point of view we state the rights for some groups of students to have special tailored education to meet their qualifications. On the other hand, this includes a concept of *not-normality*. In this paper I will discuss this problem as it can be inferred from what the students tell and state about their own cultural backgrounds and how they are positioning themselves.

Background

A superior perspective on education in Norway is that children and youths with minority or multicultural background are supposed to take part in all aspects in education as well as society at all (St.melding nr. 17(1996-97)). This has been a wish for nearly ten years now, but it has been hard to realise. The goal of the educational policy is clear: Norway has become a multicultural society, and this aspect has to be reflected in the teacher education as well as in other aspects of higher education. The “minority perspectives” from students in education are important both for themselves and for the “majority”.

For Oslo University College, the largest teacher education institution in Norway, this has been a goal. There are two aspects in this: First, to increase the minority representation among the students. Secondly, to take care of the “minority knowledge” and bring it into the curriculum for all students. To recruit youth from different minority groups has therefore been an important part of the policy at Oslo University College. Oslo, as the capital of Norway, has a large number of minority youths. Out of 500.000 inhabitants, today there are approximately 25.000 young people ascending from different minority groups in Oslo. Most of them have ancestors from Asia and Africa, but the minority groups from Eastern Europe are increasing. Being second generation of immigrants, a large part of these young people have their primary education from Norway.

Previous, these youths occasionally became teachers for the next generation of young people in Norway. Seldom there was more than one student in this *classification* (Gore, 1998) in each class of teacher students at Oslo University College. All of them were descended from Pakistani or Turkish immigrants, and all of them have been women. With primary and secondary education from Norwegian schools and often with very good bilingual skills, these students have not challenged the teacher education in any aspects. They were integrated into the “Norwegian” teacher education for good and for worse. Their unique aspects of life, different from the majority population and their bilingual skills were not taken care of and approved. This is to be reviewed as an *integration process* (Haug, 2000) like integration of handicapped children into the “normal” schools. Haug referred to this as an époque of opening up for the rights of “the others” into the unions of “us”. In all aspects “we” decide what is best for “the others”. The minority has to be integrated on the terms of the majority. One perspective of this is to hide your “specialities” as best as you can. The more similarities, the better it is. Or in other words: The more “*normal*”

you are, the better. In teacher education these students became more integrated in the student activities if they referred to “our” way of life, if they wrote and spoke Norwegian well in college or schools of practice. They even spoke Norwegian in practice schools when they met pupils with the same mother tongue as themselves.

To be integrated like this, was succeeding the époque of *exclusion* (Gore, 1998; Haug, 2000) in Norwegian schools. In that previous period some groups of students were not even considered as a part of higher education at all. Moving from *exclusion* to *integration*, education is now open to all that qualify on the premises of the “majority”. We have never regarded “our” education with the eyes of the “others” (Gullestad, 2002). Being *excluded* meant having no rights at all, diagnosed as not clever enough or not wanted into teacher education. The second regime of thoughts opened up for *integration* as a responsibility of the individuals to qualify themselves in the terms of “normal” teacher education. This was the policy in Norway until the turn of the century.

From the Paradigm of Integration to Inclusion

The third regime of thoughts started by asking “what is best” for the educational system, for the multicultural children in school and for the students with other qualifications than the ethnic Norwegian? This regime or paradigm recognised the different backgrounds of the “multicultural” and the “multilingual” students as a qualification by itself. Secondly, this regime challenged the teacher educational context by asking what kind of education can suit this group of students and meet their needs for a teacher education. Recruiting students with different language, sex and social background became important as one task, to take care of their minority perspectives of life was another one. Previously, the teacher students did not represent all the different language groups that are in schools in Oslo. An extra challenge was, therefore, to recruit men from minority population and to make the teacher education attractive to different language groups from both “old” immigrants and “new” groups of refugees or political assailants. To value multicultural aspects in education has been central political goals in two White Papers sent to Parliament (St.melding no.17(1996-97); St.melding no.16 (2001-2002)). In these two White Papers the goals shifted from integration to *inclusion* (Gore, 1998; Haug 2000).

In the inclusive paradigm, the education reflects diversity and multicultural perspectives, and will value different aspects of normality and originality. Higher education in this way will be *differentiated and individualised*, similar to the National Curriculum for Primary and Secondary Education in Norway. These perspectives will give students autonomy in question of education and insure opportunity to multiple choices regarding the language competence and ways of working with their studies. The main question is therefore: How can the teacher education meet the challenges from the multicultural students in a non-discriminating way? How can we meet the challenges from the multicultural students avoiding segregation? Is there a way of making a sustainable teacher education without repeating the époques of earlier paradigms?

Multicultural Teacher Education (MTE)

As a signal to recruit young men and women from multicultural background, in spring 2002, Oslo University College advertised a new project called *Multicultural*

Teacher Education (HIO, 2002b). In the advertisement, it was written that multicultural students and multilingual students have a priority to admittance, but there was no description from the administration how to classify the “*multicultural*”. The college was successful with the advertisement, because more than 100 students applied for this project, approximately half of them wanted to be primary school teachers and the other half applied for pre-school teacher education. So far, everything was successful. There were enough students to start the project, but who was in the position to choose who had priority access? Out of the 100 students, approximately 30 % of the students had “strange names” according to the students’ administration (HIO, 2002a). This group of students was given priority, and the rest had an intern competition of marks, entrance examinations, etc. The aim of the University College was to qualify them as teachers and to find out how they could use their “double qualification” in schools and kindergartens (*barnehager* in Norwegian).

What makes a teacher education “multicultural”? Is it the headlines and the signals given by naming the teacher educational programme? Is it in the goals and content of the subjects formulated in the curriculum? Or is it in the way of *working* “multicultural”? In connection to the paradigm of the different regimes of thought in special education (Haug, 2000), signalling and naming is a way of legitimating, showing the “needs” or “rights”. The students are recognised as those with special needs, like special education for some other “special” groups of students. Calling a teacher education for MTE will be an answer to these “needs” for a “multicultural” group of students.

The second question is related to another *discourse* (Foucault, 1972; Germeten, 2002) or regime of thoughts. To connect the multicultural thinking to the goals and contents is a way of telling that the “ordinary” teacher education programmes are not multicultural. This may be a similarity to the regime of thoughts in special education focused on individual pathology, and the thinking of individual goals and contents (Haug, 2000). The ideal is that education is relative and subjective, and there is no absolute, true or genuine knowledge for all to become teachers. If you have diagnosed “the multicultural student”, you have to make a special recipe for their teacher education as well. The belief in education as social constructs is not far away from this point of view. Education has to be constructed in a “special” way with a “special” content given to this “special” group of students. “Ordinary” education standardised for all can create losers among the groups of students classified as “multicultural”. Therefore, Multicultural Teacher Education is welcomed as a new and innovative initiative.

The third question is connected to a “multicultural” way of working. This is similar to the regime of thoughts that focuses on individuality and differentiation in ways of working in this field. To “work multicultural” may not be the same as to work with as one method for all. It is rather a perspective of recognising differences and diversity (Rhedding-Jones, 2000) for all. In the community of all, no one is “special” because everyone is “multicultural” in one way or the other.

Starting up with this project nearly a year ago, the class of primary teacher students counted 35. One of the first tasks they were given in first term was to write an ethnographic school history, telling their own life stories in aspect of becoming a teacher. In these stories the students wrote about their background and previous

schooling, telling about their motivation for the teacher education, the aspirations for their future work and, not at least, their hopes for the teacher education that they just started. These stories gave me impulse to ask questions I deal with in this paper. I started to reflect on what is actually a “*multicultural student*”? Below, I will present some aspects of discussion and start to deconstruct the term.

Deconstructing “Multicultural” and “Multilingual”

First, by naming this teacher education for “Multicultural Teacher Education” and by giving information from the college about the priority for “multicultural” and “multilingual” students, the programme itself attracted students that wanted to be included in this classification. The college of teacher education signalled that this was a real term to use. Naming it is a way of showing acceptance to a category and a position. In other words: When there is a multicultural teacher education, there also have to be the multicultural students. The programme signalled that by formulating a priority for “*multicultural*” and “*multilingual*” students the college presumed there were students “out there” wanting to include themselves in this category. This was correct in the way that 100 students wanted to attend this education. The problem was to exclude the ones who did not match the criteria of priority. In this situation, the college chose to classify the students by their names. As already mentioned, the students with “*strange names*” (HIO, 2002b) were given priority. As in case with the colour of skin, to classify by name is a very complicated task. The so-called “*strange names*” in the ears of the Norwegians are names that do not sound “familiar” in one way or the other. Like the colour of your skin, this gives signals in different directions. One example to illustrate the complexity of the situation: your family name might represent you being from, for instance, an Asian family. But, you might as well got married or given the name for other reasons. This aspect can be compared to having black skin. Black skin might represent you, for instance, as a black African. But, you might as well be an adopted child grown up in Oslo without any other connection to the African culture than your “blood and skin”. This is the two-sided-coin of classification by visible signs. There is an equal chance of being right as well as wrong. In the described situation, the college was both right and wrong in their classifications by names.

The next question is about differences in being “multicultural” and being “multilingual”. The difference is obvious just by looking at the terms above; the first is about ‘culture’ and the second about ‘language’. Still, it is connected to the definition you provide of ‘culture’ and of ‘language’. As the programme and curriculum of the teacher education formulated in MTE, to both groups of students were given a priority. Asking this question here, I want to discuss what kind of terms we put together as “natural” connotations. ‘Multicultural’ and ‘multilingual’ are terms we often put together as if one multilingual student “naturally” is multicultural and vice versa.

By reading the students’ autobiographical school histories, this was not always the case. There were students naming themselves as multilingual or at least bilingual, but they were not identical with the ones calling themselves multicultural, and the other way around. For example, will some students, born in Norway, call themselves “Norwegian” (as monocultural) even if they were bilingual German-Norwegian, Punjabi-Norwegian, Sami Language-Norwegian or Sign Language-

Norwegian? On the other hand, there were also students brought up by Norwegian parents, for example, in Africa or Asia that called themselves multicultural because they had never attended the Norwegian school system. These students were also examples of being both multicultural and multi- or bilingual with a Norwegian family name (and by this not included as a priority access to the MTE).

Other students did identify themselves as multicultural with parents from Pakistan or Turkey, but did not speak their parents' language so properly that they wanted to include themselves as bilingual. They had picked up and learned to use the language of daily life, but the written part of the language were not familiar to them. Because of this, they could neither qualify themselves as bilingual in tests nor in exams. Yet, other students had the competence of more than two languages, being "multilingual" even if they described themselves as mono-cultural. These were students that have lived in more than two countries, or have learned a third language that were neither their mother tongue nor the language of the country they were living in. To illustrate this, I will give the example of a family using the third language in "family communication", for example, English. Their children were using English as their first language in Norway with one parent from Africa and one from Asia.

Students can be "multicultural" in terms of religion, too. Culture is connected to religion, and for some students this is an important part of cultural identification. For others, birthplace, family upbringing and traditions are more important and equally strong cultural elements. Some times student's connection to religion is visible in their way of dressing. By this, we classify students by visible sights like "*strange names*" or colour of the skin. In this class of students there were different groups of Muslims, different groups of Christians, different other religions and non-religious, too. The "multicultural" aspects were imprinted in diversity in this aspect as well.

Discussion

I started out with a presentation of three paradigms of thought connected to the ways we look at the development, changes and participation of the "others" in our Western European society. One part of this deals with the way we speak of the "others", and another deals with the categories and groups that we make to sort in and out things and persons that belong or do not belong to our groupings. I argued that this procedure is very close to including people in thinking of *normality* and *not-normality*.

I will sum up this presentation with identification of at least two aspects. First, the terms of 'multicultural' and 'multilingual' are discussed as *classifications* (Gore, 1998) that are far more complex than we often presume. If we take for granted that these terms are similar, we do not catch the complexity of identifications or the different ways students *subjectify* (Foucault, 1972) themselves. Secondly, naming a study programme "Multicultural Teacher Education" (MTE) will be defined and understood differently by different students, and, thereby, recruit "*multicultural*" students from many aspects of life. The terms 'multicultural' and 'multilingual' may not be useful terms for classification at all, being both inclusive and exclusive. Probably, the diversity (Rhedding-Jones, 2000) or multiplicity would be better terms, not linking to culture or language, only variety. May be this also will be linked to the term 'tolerance', the hopes and aspirations for equal opportunities in education for all.

From my point of view, the terms 'multicultural' and 'multilingual' are linked

to differentiation and individualisation, and often they are implemented as *segregation* and *exclusion*. The challenge for the regime of thoughts is to take educational context into consideration without making different arrangements for “special” groups, like MTE. In Norway there are still strong forces linking privileges to a segregated system. Like Haug (2000) pointed out, there are strong bonds between teachers interests, researchers and the field of education here. From this angle, a teacher education like MTE will be welcomed as an enterprise for the so-called underprivileged or weak part of educational system.

In constructing any teacher education, there is always a discussion of what is “best” for the students and for the educational system at all. All outcomes will more or less be influenced by different political or pedagogical regimes of thought. Therefore, there will always be different regimes in circulation at the same time. In official policy in Norway, we are passed the first regime of thought based on exclusion. We do not exclude students from teacher education solely by their sex, language or social background. But, as long as we do not have access for all, there will be a competition for the rights to study. The “rules” for competing are, therefore, a technique and a hidden agenda to exclude the ones that do not fit in. In the paradigm of integration, it is the open terms of the majority that decide if you have qualifications good enough to be a “normal” teacher student. In the name of the third paradigm of thoughts, Oslo University College wanted to start a “Multicultural Teacher Education” to welcome students from minority backgrounds connected to culture or language. From this point of view, the college wanted to do something with the *context* of education to meet the needs of this “special” group. The *context* was here linked to establish a new teacher education, an initiative that became segregation.

The last aspect is the question: how can we make the perspectives of minority groups to become the knowledge for all in an inclusive education. First, I will argue for taking the context into consideration by letting all students read books written by authors from minority population. Secondly, I think it will be good for all teacher students to attend schools for practice that have a diverse population of pupils to see how different language groups work together. Thirdly, I will individualise the education for becoming a teacher in aspects of how to study in a more project-oriented way. Using different kind of projects, the teacher students can differentiate their approach to learning, working both individually and in groups. Learning from teacher education of other countries is another important perspective.

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A New Approach to Environmental Science and Ecological Principles in the Higher Education

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Abstract

The paper aims at presenting a new approach to environmental science and ecological principles applied in higher education and reorientation of teacher education. Agenda 21, the statement published in the 1992 UN conference and confirmed in the 2002 World Summit on Sustainable Development focusing on the environment and development conceives: "Education has a primary role in advancing sustainable development". Understanding the principles of sustainable development, the interdependence of environment, ecology, economy and social systems ensures that humans may be able to use the natural resources and environment efficiently, yet preserving the homeostasis of the Earth.

Key words: environmental science; ecological principles; higher education; sustainable education.

Introduction

The term 'environment' is generally used for the environment of living organisms and humankind, the result of an extended evolutionary process of a few million years. When talking about the environment, it is always referred to as the interrelation, dialectic unity of something usually described as to be "surrounded". The nexus between the two implies that in some cases the surrounded becomes the environment while the original environment turns out to be the surrounded.

The paper aims to present a new approach to environmental science and ecological principles applied in the higher education and reorientation of teacher education. Another goal is to reveal the importance and role of "pure science" in environmental challenges and the activities for sustainable development.

Coming Closer to Our Environment

Environment can be defined as the circumstances or indicators that surround an organism or group of organisms (Cunningham & Saigo, 1995). According to a broad definition, the environment is the aggregate of actual life conditions. This approach involves all the environmental factors that – for the given object and with a view to the interrelation – can be regarded as considerable, rateable and active agents. In this sense, it is the interrelation of the living and inanimate world that is usually discussed, and the primary role is allotted to the non-living sphere.

In the past 3.6 billion years, the living, animate world, however, has called the biosphere into existence and framed it to her own image, which has allowed the appropriate evolutionary paces to occur in the earthly stage (Margulis & Olendski, 1992), and the biosphere has reached the form we know today. Thus, the quality being able to shape the active role of the living world cannot be over-emphasised. It should also be mentioned that the living world is the most vulnerable right in its structure and function, including the “wise” human.

As considering the interrelation between the living world and society, the priority or prime appearance of the living world cannot be challenged; yet it is this wide-ranging and colourful complex that mankind has worked out himself from, that witnessed his becoming a social species from the previously biological one (Gore, 1992). A social being has been able to “produce and raise” a social environment with admittedly high standards. It is also true, however, that numerous supporting columns of this social environment and relationships can be traced back in the natural environment, which has been created by the living world, therefore, only environmentally conscious actions on the humans part may yield a reassuring, future-oriented and conducive solution (Goudie, 1993).

Sub-Systems of Environment and Their Relationships

There occurs a demand to make a thorough analysis, detailed examination on the interrelations of the non-living world and society (Lakatos et al., 2002). Yet, this latter one is described the most frequently through various aspects of human economies or consumption of certain goods. Consequently, it cannot be adapted for the dialectic pair of concepts, environment and surrounded, given the above idea. There are cases when this factor should not be forgotten about. On the other hand, this pair of concepts allows us to differentiate natural environment from built environment and social environment. This division might not only be assigned a significance regarding evolutionary ecological thinking, but it plays its role in more common everyday actions as well since it can embrace a wide variety of interrelations, approaches and roles for the human in society (Lakatos et al., 2003).

The social environment is treated as the totality of relations, conventions and conceived laws of the humans building up the given society, though, not mentioning the category of built environment that represents a system of human-built, artificial elements in the environment. Houses, factories and roads are considered as belonging to the standards for the quality and requirements of human life.

Environment, therefore, comprises natural building blocks that have already been in existence before the appearance of humankind, and that the most often must be protected exactly against human impacts. Environmental elements include the soil, water, air, living world and the landscape. Today, in several cases, it is only the question of whether its being of sub-natural or natural characteristics that can be settled. Unfortunately, the influence and role of civilisation has reached such a degree that sometimes there has not remained a trace of once natural environment, though, even in these cases the presence of natural elements serving and being basically indispensable to human existence can be observed (O’Riordan, 1996).

Generally, it is the elements of the human-created or built environment that cause this harm against which some protection has to be performed, or the building blocks of the natural environment should be spared. These impacts include waste,

noise, vibration, erosion and this list would go on for pages to enumerate every single item. It seems to be obvious that the human environment inherited from our grandchildren on trust must be adopted as to ensure the environmental conditions that are essential to a human life of reasonable quality, and at the same time – as a direct consequence of the first statement above – provide unaltered, appropriate circumstances of existence for the next generations (Brundtland, 1987).

Accordingly, it cannot be denied that humankind, namely the humans of modern societies, do have a place in this terrestrial system, yet right on the basis of human consciousness and regarding their very status in the biosphere they have the obligation and responsibility to pursue harmony with the natural environment. This task is particularly justified by the natural environment being so much vulnerable as well as subordinate in the interrelation that rather favours the humankind with his accumulating and actively applying the scientific results of the past decades and centuries (Nash, 1989).

The Natural Environment

What is the environment? The astronauts travelling to the Moon met inhospitable conditions with no breathable atmosphere, the lack of living water, extremely high temperature in the glaring rays of the Sun, and low temperature in the dark side of the Moon. There was no soil, but dust and rocks with the menace constituted by meteorites. It seems to be a fact that the Moon is not suitable for sustaining any form of life, though, biologists still hope that there can be some micro-organisms found. The fairly uncertain information arriving from the Mars, however, suggests that this latter assumption may have some relevance.

Yet, the extreme conditions compelled the astronauts to wear spacesuits providing them with oxygen and maintaining the required temperature, because the above properties of temperature, light, humidity and ground structure constitute the environment on the Moon. As compared to the conditions on the Earth, it is a highly uncommon environment, and this is the reason why there is no living organism. Or in other words, the environment offered by the Moon is abiotic, incorporating only physical conditions. On the Earth, the abiotic environment of an organism is made up of physical variables, such as temperature, rain and snowfall, the nutrients and toxic materials in the soil, the power of waves and speed of wind.

Unlike the Moon, organisms on the Earth are affected by other organisms through the processes of, for example, pollination (Attenborough, 1984). The effects of these organisms can be regarded as a biotic part of the environment. Though, we tend to discuss the abiotic and biotic components of our environment separately, because the related education and instruction seem to be more efficient in this way, their interrelations are very complex (Odum, 1953).

For instance, the amount of light incident on the leaf depends on the position of the Sun and the cloudiness of the sky, as well as on the angle at which the given leaf sits and the shading effect of the surrounding vegetation. Soils being poor in nutrients can be inhabited by plants like nitrogen-fixing bacteria that live in the tubercles and increase the receptivity of nitrogen thus facilitating the appearance of other species. Fire is a physical phenomenon depending on the weather, and it can burn organic materials that form the biotic environment and then there occur grasslands in the savannah. The environment affecting any organism of a given community can be

considered as the result of complex interactions that originate from both biotic and abiotic factors (Kormondy, 1984).

Some factors can significantly increase the growth, development, survival or reproduction of certain organisms. In various periods in life of some organisms, different factors can gain importance, e.g. the needs of a caterpillar differ from those of a mature butterfly. The various aspects of the environment, which influence the germination of seed definitely differ from the ones affecting the adult plant. The environmental survival of an organism on every stage of its life, in a specific environment has particular significance, because it determines the spread of the organism within the habitat (Attenborough, 1984). Examination of the elements of environment (Salîte, 2002), as well as the responses of organism have a central role in ecological studies, and they bears a great significance in understanding the dissemination of species and the structure of community.

An Introduction to Ecology

Ecology is a science that belongs to biology, or to be more precise, to syn-biology concerned with organisational levels of individuals (supra-individual). Ecology is to examine the direct relatedness of ecological/environmental factors affecting the various populations and their communities to ecological/tolerance factors receiving these effects. The term 'ecology' was introduced by Haeckel in 1866. With ecology he understood those branches of science that studied the relationships between the living organisms and their environment, and at that time he regarded ecology as a part of physiology. Ecology is an organism-oriented science, and it requires thorough knowledge of living organisms from the ones being concerned.

It was Moebius, who first used the term 'biocoenosis' in 1877 to designate communities made up of shellfish. In one of his works drafted in 1879, Haeckel identified the interrelations between various populations and defined the subject matter of ecology as the connection of different organisms living together in a given area, and then in a later study he claimed that ecology was not identical with biology – a conception still accepted today – as it constituted a narrower field of science than that of the science of life, yet had a definite subject matter, function to concentrate on supra-individual levels of existence (Majer, 1994).

Today ecology has become a fashionable science, but therewith we also have to point out that ecology has come to pervade the everyday life of social person, since it establishes general attitude, lifestyle and a number of economic and political decisions. We do not intend to treat ecological problems with a technocratic or reductionist attitude. Our primary objective is to understand these problems for the benefit of environmental protection and sustainable development. To influence the human activities, we conceive ecology as the necessary fundamentals and approach to education and training of teachers.

Ecology focuses on studying the direct relatedness of ecological environmental factors affecting the populations and groups of population to ecological tolerance factors receiving these effects and reacting to them. Its task is to research the phenomena and processes such as coexistence, diversity, patterns, material circulation, energy flow, productivity, succession, etc. that actually cause the spatial and temporal quantitative distribution and behaviour of populations and their communities (Juhász-Nagy, 1984).

The science of ecology is closely connected to supra-individual levels of organisms considering the fundamental notion that secession of levels expressing the nature of development the most explicitly is also characteristic for the organisational structure of the biosphere, wherein individualisation and collectivisation arise as a sequential tendency. The superimposed levels correspond to the dialectic law on the negation of negation, as they bear the dialectic duality of elimination and preservation. Each level includes the previous one with the entirety of its properties but, at the same time, represents a new quality, similarly to Hegel's classic explanation of the barleycorn.

Objects and Characteristics of Ecology

The real indicators of environmental quality are the living organisms that reflect the quality of the environment and occurring changes in a sensitive, responsive and complex way. One characteristic of ecology is that it is organism-oriented. Ecology investigates the processes of living conditions, their coexistence, as well as laws.

The fundamental unit of supra-individual organisational levels is the population. The population can be defined by a mathematical approach as a set of individuals having common properties. On the other hand, in a biological interpretation, the population is made up of individuals, groups of individuals that establish an actual reproductive community. These are the populations – those with the possibility of gene exchange – that establish the species. The next unit is the community (biocoenosis), formed by the populations of different species that coexist in a certain time and space. As it has been mentioned above, quite frequently it might constitute the research subject of ecology, similarly to the fundamental unit, namely the population. Concerning the organisational units, Hungarian scientists regard holocoenosis (Majer, 1994) as a separate entity that comprises all the associations of a given region, thus representing a starting point for regional or “landscape” ecology. Communities having zonal alignments are designated as biomes while the only scene of life on the Earth is called the biosphere.

In general, ecological researches focus on populations, communities, or any abstract system models, ecological systems or ecosystems (Majer, 1994): an ecosystem is such a system model based on abstraction and set up for the ecological study of a given population or community that is applicable to reflect, describe and investigate the most important processes and phenomena deliberately selected from the complex processes of reality for that particular end.

The ecologists survey the ecological environment in a population-oriented way, because in ecology the objects of studies can only be populations or groups of population, the related existential, co-existential or segregational conditions. Accordingly, ecology does not investigate a given topographic space as such, but the associated biosphere on the level of populations not individuals. Yet, the answers on the questions regarding the constraint factors do incorporate the results of earth sciences, physics or chemistry revealing the related abiotic factors, as these provide the relevant information to meet the requirements of causality.

On certain levels and in some respects, the above-mentioned sciences have parts to play in revealing the prevailing environmental conditions. Consequently, they can serve ecology with essential aid. In these cases, they can be discussed as environmental earth sciences, environmental physics and environmental chemistry,

and they – alongside with some other environmental sciences not alluded to here and the use of ecological approach – provide a basis for conscious intervention of environmental protection or concrete action (Lakatos et al., 2002).

Naturally, ecology is not restricted to the study of ecological environment, though it is the very element that offers a proper scientific basis for any activity of environmental protection and education of sustainable development. Ecology gives a detailed discussion of information on populations and communities, the spatial and temporal characteristics of populations. Analyses on bio-coenosis find their focal point in trophic-interrelations, but antecedently they examine changes in the spatial and temporal structures of communities, as laying emphasis on the occurring succession steps and the preservation of biodiversity (Whitney, 1994).

Environmental Science and Interdisciplinarity

Ecology has infiltrated our everyday life both as a branch of science and as an attitude that determines our responses in the sphere of politics and economy. This statement, of course, may reflect the infinite, unlimited nature of ecology, yet, at the same time allows the people of scientific considerations and knowledge to think and act according to the requirements, principles of ecology. Attempting to define the boundaries of ecology as a branch of science, it is important to point out that today, beside the presence of an ecological attitude, there occurs a need to equally possess an appropriate economic approach, even at the most basic stages, and probably it is the adequate information from both pools of knowledge that brings about the ecological economic and economic ecological forms of action and behaviour (Filho, 2000).

The two aspects concurrently contribute to a conscious and rational evaluation of the role that the modern society plays in the survival and preservation of earthly existence. After all it is quite common to say that humankind has always inhabited two worlds. One is the natural world of the Earth which is the biosphere comprising plants, animals, soil, air and water with its past of a few billion years. The other is the world of social institutions and built environment, called into existence by humans with the help of science, technology and political organisations.

Both worlds are essential to our life and integrate the phenomena of the past, present and future. Between these two worlds environmental science gains a vital role as the one providing the proper information and knowledge, as well as, keeping the key to problems. For long, the natural world had held a number of mysteries to humans, controlled their survival. In our age the relationships between humans and environment have largely been modified with the humans of modern societies becoming the dominant agents. The living world of the pre-human and historical times has had an indefeasible part in the fact that we are offered to dwell on this wonderful Earth. The responsibility is to be received that the blue planet, which in 1969 Scott saw from the Moon, can be preserved and permitted to fulfil its mission in the future, too (Chapman & Reiss, 1992).

A Challenge to Science

Science is the most magnificent thing in the world that humans have created; it has always been a generator of development. Science has provided the foundation for the benefits we have been sharing. Been incorporated into every single atom of our

lives, it filled our existence with additional fineness, sense, beauty and purport. Its traces are present in our homes, cars, telephones, televisions, medicines, or even in our stockings and everyday bread. Science is the “supreme power of man”, notes Goethe in *Faust*, the novel, truly omnipotent, devoutly grand God, and its cultivator, deacon is the scientist who thus also have a share in the mastery. Obviously, this is the reason why the scientists worship it, holds to it, and are willing to persecute the sceptics, the heretics.

Furthermore, scientist feels comfortable when his/her opinion is announced as a revelation. Enlightenment did not question the mission of science, knowledge and reason saying that they were able to better the world, and would have possibly reckoned right, had modern science not been the offspring of a divided, disjointed and disharmonic society. By the end of the 18th century some post-clerical scholars had already seemed to presume that cloudless confidence was not entirely the justified path to walk upon. It was the above mentioned Goethe who chose to depict the prototype of the scientist as to suggest that he is inclined to team up even with the devil just to acquire additional knowledge (power). He is a two-faced character, similarly to his God, science. With one hand to build, and the other actually to destroy.

The so-called environmental crisis, the disappearance of the “ecosocial” lifestyle was induced by the Western social development of modern times, or to approach the issue with slight irony, by scientific progress (Meadows et al., 1992). It is not hard to test the truthfulness of this statement. No industrial revolution takes place without steam engines, as neither steam engines nor electric power can exist without classical physics. Had the science of modern chemistry and biology not evolved, there would be no chemical industry and chemicalisation. There would be no need to speculate on the risks of nuclear reactors or the possible consequences of a nuclear world war, if the scientific progress had been stopped in the middle of the 19th century. It is the European type of knowledge that can be regarded as responsible for the destruction of nature.

Since every single scientific finding or “problem solution” of modern times has led to some kind of environmental impacts, there are suspicions that if “science” will face the challenges generated by environmental crises and start to “solve the problems”, then it would be more advisable to strike our camps and seek for another planet, because the by-product of these “solutions” now directly threatens to bring about catastrophes.

Even a simple, unprofessional, consequently “unscientific” example can shed some light on where these veins of thinking are pointing at. A look at the “problem” of wastewater, when, for instance, the extraction of heavy metals constitutes a task for science. Let us assume that the researcher has successfully worked out how a proportion of the dangerous material can be withdrawn from the water – and this would put an end to his/her work. However, something must happen with the extracted material. How is it usually treated? It is pumped over to another bed to find a nice location for it. Alternatives: the toxic waste is loaded in a mine, or some depressions are filled up with this rubbish, or the undesirable material is sent over to a less well-to-do country as an exchange against some money, etc. Why is it so? Because it is not a science, that possesses the right to decide but the policy-makers and the figures of the economic sphere.

Science has become a “game for the tongues”, or one from the immense number of “social sub-systems”. Instead of having been effective in occupying a dominant position against one and the other system, it cannot even communicate with them by the means of its own voice. Though, the dialogue is not so important. Science is to satisfy the demands of the client. The client, because he/she is not partaking the tongue game of science and not bound by the ineluctable consequences of the recognised “truth”, may consume this “truth” or as many “truths” as he/she needs to reach his/her objectives.

To science, an environmental crisis means some challenge only through a great number of transmissions. Direct challenge should be faced by the totality of the Earth’s present-day societies, if there were the global society acting in this way. Owing to the fact that at the moment there is no such collectivity, it is justifiable to say that the problems are waiting for the developed societies of the world, and the tasks originating from various environmental situations are sieved by economic and political decisions of these societies.

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Mathematics and Literacy as Tools for Accessing Science: A Success Story for Integrating Curriculum and Synthesizing Standards (Western United States Case)

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Abstract

Experienced elementary teachers seek to attain a personal level of self-efficacy; that is, to adopt dispositions that allow them to work at a comfortable pace when dealing with district and statewide changes. Not surprisingly, there is a direct link between teacher thinking and student performance. The “invisible” thinking skills of teachers help generate new possibilities and increase instructional flexibility. When given a sustained professional development opportunity that challenges their content knowledge and pedagogical thinking, teachers may develop an increased capacity that leads to a higher level of professional efficacy. This research illuminates how elementary teachers internalized a model for integrating the skills of mathematics, reading and writing with the teaching of science. Educators learned to synthesize curriculum standards while planning and teaching an integrated unit. The research results document significant increases in teachers’ personal development and student achievement.

Key words: university-school partnerships; teacher development; integrated content units; synthesizing curriculum standards; student achievement.

Introduction

Each child has a strong individuality, and any science must take stock of all the facts in its materials. Every pupil must have a chance to show what he truly is.

John Dewey (1916)

The current trend in education is to address national, state and local content standards with the ultimate goal of supporting student achievement. In the United States, standards shape curriculum, instruction and assessment (Marzano, Mayeski & Dean, 1999). When elementary teachers look at the content standards within one discipline, let alone across disciplines, they recognize that they cannot teach them all as separate units. In the process of planning instruction, many teachers have begun to see that there is “common ground” within the standards, and that similarities exist in the objectives and goals across the standards. The standards clearly emphasize the importance of relationships and connections among disciplines (Lehman, 1995).

The challenge is to develop a different type of integrated unit, which brings together content, skills and dispositions in a manner meaningful to both students and teachers (Brazee, 1995). To accomplish this task, teachers must shift to a new conceptual basis by beginning a unit with specific content standards, and ending with a synthesis of those standards.

Traditional teacher education has prepared teachers to begin a unit with a topic in a single content area, using a textbook as the primary source. In most schools, subject area textbooks have traditionally defined the course of study and played a major role in implementing intentions (Goodlad, 1994). The “textbook driven” curriculum makes it difficult to integrate and connect the unifying themes and topics of the content areas being taught. The challenge is that the agent of change must be the teacher, not the books or materials. The skills and knowledge base of the teacher are the most powerful variables in the classroom (National Commission on Teaching and America’s Future, 1983). However, most teachers have had little or no training or experience in integrating, let alone synthesizing standards across the content disciplines. Thus, professional development becomes the key to helping elementary teachers develop critical knowledge and understanding of the content they teach as well as the pedagogical skills that encompass the integration of content and synthesis of standards. This increases teacher effectiveness in designing lessons and integrating instruction.

Effective teachers must allow time for personal reflection on professional growth and communicate with colleagues so that they will better serve as mentors and models to others. The greatest potential benefit for teachers is the emergence of educative communities (Goodlad, 1994). Instead of feeling isolated, teachers who become a part of these communities and participate in professional development programs become members of a larger sustained community of educators, which affords them the opportunity to encourage and support each other’s efforts. This concept extends beyond individual teachers doing their jobs more easily. A community may emerge from the bonding of people with common goals, mutual values and shared conceptions of being and doing. It can create webs of meaning that connect people together by developing a special sense of belonging and a strong common identity (Sergiovanni, 1996). This process has the power to extend elementary teachers’ visions of who they are and what they can do; it broadens their horizons as educators and empowers them as agents of change in the broader scope of the educational enterprise.

Experienced elementary teachers seek to attain a personal level of self-efficacy; that is, to adopt dispositions that allow them to work at a comfortable pace when dealing with district and statewide changes. However, there is a direct link between teacher thinking and student performance. The “invisible” thinking skills of teachers help generate new possibilities and increase instructional flexibility. When given a sustained professional development opportunity that challenges their content knowledge and pedagogical thinking, teachers may develop an increased capacity that leads to a higher level of professional efficacy (Costas & Garmston, 1994). To put this educational theory into practice, participants voluntarily chose to become part of The University of Northern Colorado and Adams Twelve Five Star public school district partnership. The two-year federally funded grant was entitled, “Using Literacy Integration for Communicating Scientifically” (U-LINCS).

Research

The U-LINCS project provided a model for integrating the skills of mathematics, reading, and writing with the teaching of science. National, state and district standards underpinned this project. The major innovation of this project was to demonstrate how discrete standards for science, literacy and mathematics could be combined into a comprehensive synthesized standard which would serve as the basis for curricular units integrating mathematics and literacy within the context of elementary school science.

Faculty from the University provided sources for expanding the knowledge of content, current research, and “best practices” in pedagogy to facilitate professional growth. Mathematics and literacy are the communication tools for science. The two disciplines share processes, such as reasoning, critical thinking and problem solving, which are essential to achieving conceptual understanding of scientific ideas. The hardest part of learning may not be the answer, but to conceive of the question (Bronowski, 1973). An essential part of using these skills lies in the framing of the question. The development of these skills was encouraged for both teachers and their students during the U-LINCS Project.

The following terms were used by the researchers for this project and are depicted in Figure 1. “Capacity” is the mental power to contain, receive, experience, produce and maximize effective instruction in both pedagogy and content. For the U-LINCS teachers, capacity involved enhancing teaching skills and cognitive abilities through problem solving and a willingness to learn new and in-depth subject matter. This process was enriched by the synergism that occurred in their learning communities. “Efficacy” is the power to produce an effect in the learning of students. Efficacy for the U-LINCS teachers involved reflection about their own learning, which led them to become internally-driven decision makers who were empowered to change their teaching to accomplish the project goals.

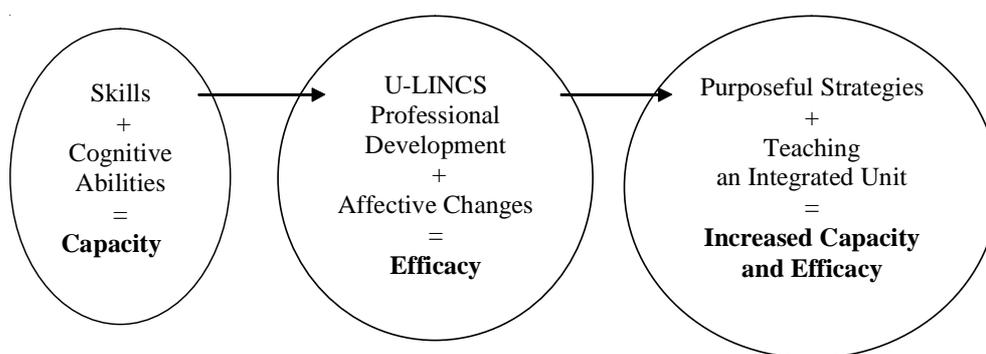


Figure 1. The U-LINCS model for building professional capacity and synthesize standards

The Elements of the Project

Thirty teachers in grades three through six participated in the U-LINCS project which began with a week-long workshop during the summer and was followed by four Saturday morning workshops, classroom observations by project staff and e-mail journaling during one academic school year. During this time, teachers finished writing and implementing their integrated science units. During a culminating three-day workshop the following summer, teachers presented their units, shared student

work and discussed their experiences.

Capacity Building

Teacher participants were given explanations and written examples about how to synthesize content standards. They began with their district’s version of discrete state model standards such as those listed below (see Table 1).

Table 1. Example of district’s version of discrete state model standards

Language Arts – Reading	Science – Investigations
Understand a variety of narrative and expository texts at literal, interpretive and critical levels.	Read information to plan and conduct scientific investigations that include asking questions.
Increase vocabulary.	Explain and observe change in a system using words, diagrams and graphs.

The following is an example of how teachers chose to write a synthesis of these two standards for their integrated unit activity. Concepts from mathematical standards are also embedded in the description.

Synthesized Standard for “Were You Aware” Activity

First, the students predict and make a graph using the percentages of the types of water found on earth. Then the students read a science story to confirm and adjust their predictions. For this, they set a purpose for reading, then read for understanding. Using their new learning, they re-evaluate and adjust the graph. Finally they share their learning and knowledge by writing sentences about the interpretation of the graph, using vocabulary that is mathematically and scientifically accurate.

In comparing the two ways to write standards, one can see that synthesis requires the capacity to incorporate content from reading, writing, math and science. The process goes beyond curriculum integration and needs a higher level of conceptualization by the teacher to maximize student learning. Teachers must think about instruction as a unified process.

Efficacy through Professional Development

To increase their efficacy, U-LINCS teachers became more reflective about their own learning. While planning and writing their integrated science units, the U-LINCS teachers volunteered comments in their reflective journals. Qualitative data illustrate how the teachers and students benefited from content integration as an aide to communicating scientific ideas. In analyzing the journal responses given by teachers, seven major themes regarding the project emerged.

Theme 1: The ability to integrate curriculum is a process, which is valuable, challenging and occurs over time.

— “I felt we went a long way today. We are getting closer to being able to integrate science, math and literacy.”

- “I will make a concept map for more subjects... I see this intertwining to make larger integrated units.”
- “Today I made connections between the Literacy, Math and Science standards. I felt surprised that there were so many ways that standards connected.”
- “Today I felt confident with my skill in science and being able to integrate with other subjects.”
- “It’s good to move beyond the ‘theme’ and into the ‘meat’ of content and essential learning which drives what we are doing.”

Theme 2: Increased knowledge of teachers enhances the understanding of how students learn.

- “Students need practice in a ‘real world’ setting through science.”
- “There is a need for schema building and having grand conversations with students.”
- “Today I saw some new ways to test for sugars and acids. These activities showed me the value of hands-on activities. Students learn more and enjoy the lessons.”
- “The more frequent and more authentic the task, the better retention the students have.”
- “Make a model of the water molecule so kids can see the relationship between the H and O atoms to form a molecule, and the way the molecules adhere together to form water... I will try this.”

Theme 3: Teacher reflection on knowledge and insights gained promotes efficacy and enhances the craft of teaching.

- “I need to look at and think about what I want the kids to come away with.”
- “I think these connections will help me become a better teacher.”
- “I’m glad there was an expert from the University to help me understand the content.”
- “I need to work on questioning skills during science investigations. It needs to bridge the gap between doing experiments and understanding the concepts.”
- “We teach kids to navigate the wonderful world of learning. It was illuminating to me that I often let myself rely on ‘tried and true’ techniques when I should be stretching beyond.”

Theme 4: Literacy may be used as a tool to access science.

- “I need to be sure to include more reading strategies in science. It will increase comprehension.”
- “I need to use pre/during/post-reading activities during content area reading.”
- “I’m really excited to get into the Literacy Link Notebook! It will be so rewarding to add these layers of richness into my teaching next year!”
- “The University instructor has given me very effective strategies for vocabulary development. Students need to use these terms in their natural speaking and writing.”
- “I found new strategies to use when reading non-fiction.”

Theme 5: Mathematics may be used as a tool to access science.

- “We worked on metrics in area and volume and I need to work with this more and spend time teaching it next year. It should be taught before the science units.”
- “I can see that strategies play a very important part in estimating.”
- “I heard and saw many ways to integrate measurement with the human body.”
- “I used calipers for the first time ever! I found I got better with practice and I gained confidence as I went along.”
- “I worked with measurement and I am starting to understand volume.”

Theme 6: Collaboration between teachers is a dynamic and generative process.

- “... felt good about small groups—scientific inquiry and how it works is much clearer now.”
- “The integrated unit group was great! We learned about different kinds of questions. I’ll add this to my unit.”
- “As a small group, we discussed the advantages of curriculum integration and how to plan with those goals in mind. Need to work at integrating more throughout the unit.”
- “The Integrated Unit—great to spend time with peers to do planning. Great ideas were flowing!”
- “The unit has come together and I’m ready to do it with my students. Planning with others has given me more ideas...”
- “People have very different ways to plan. Sometimes I felt frustrated trying to plan in another person’s way. Next time I will ask more questions before getting started...”
- “This was a powerful planning project. It could not have been done any other way.”

Theme 7: Inquiry drives instruction.

- “I like the concept of inquiry-based teaching... but putting it into action is the challenging part.”
- “I learned more about inquiry-based teaching and learning. We were given a lot of interesting ways to pose questions.”
- “I have realized that there are two forms of thinking I must follow. Think as the teacher to anticipate questions and ensure they understand the concept. Prior to answering these questions, you should put yourself into their shoes to see if the lesson makes sense or if it has any gaps.”
- “Inquiry: How else could I look at it differently? It promotes healthy scepticism.”
- “I will concentrate more on content. I wonder if I didn’t go into depth enough with the students. What is too much for them?”

Increased Capacity and Efficacy

1. Results of Teachers

Quantitative pedagogical and content assessments were developed by the

University faculty and were administered at the beginning and end of the initial summer workshop. The goal of the summer workshop was to increase teacher capacity by deepening their knowledge of science, mathematics and pedagogy. The assessments were scored by the U-LINCS staff and the data analyzed by the external evaluator. Six open-ended knowledge/skills questions were administered, in addition to a 10-item Likert scale teacher self-assessment of proficiency in pedagogical knowledge and skills. The instrument was scored using a 0 to 4-point rubric. A repeated measures statistical analysis revealed a statistically significant increase. Results are summarized in Table 2.

Table 2. Gains in Pedagogical Knowledge and Teaching Skills

Time	N	M	SD	% increase	<i>t</i>	p-value
Pre-test	26	11.42	6.15			
Post-test	26	18.38	2.08	60.9%	6.03	.0000

All U-LINCS teachers were also given a pre- and post workshop assessment of their knowledge of metric measurement concepts. This test had a possible score of 21 points. Pre-test data analysis showed a group mean of 9.68 points with a 2.79 points standard deviation. The group mean score for the post-test was 14.08 points with a 2.10 points standard deviation. The data reflects a 45.4% gain score that indicates a significant growth of teacher knowledge in metric measurement concepts and their application as a language of science.

As is true of many elementary teachers, the U-LINCS participants came to the project with a variety of backgrounds. Only a few were well-versed in science. Therefore all of the total gains show moderate to significant improvement in content knowledge as shown in the table below.

Table 3. Total gain in content knowledge from U-LINCS

Topic	Pre-test M (SD)	Post-test M (SD)	Total Gain
Human Body	19 (7.69)	64.12 (14.0)	237%
Measurement	9.68 (2.79)	14.08 (2.10)	45.4%
Water	31.2 (11.63)	46.2 (2.68)	48.1%
Food and Nutrition	6.6 (3.29)	14.6 (2.07)	121%

2. Results of Student Achievement

A second-strata goal of the U-LINCS project was to significantly improve student achievement in the areas of science, language arts and mathematics as measured by standards-based assessments. District grade level achievement tests showed improvement in mathematics, reading, and science. State CSAP test scores were raised in mathematics and reading; science is not tested until grade 8. Three of the four schools showed increased achievement in reading.

The 5th grade science curriculum had embedded mathematics problems and emphasized extensive use of students working with numeracy skills, geometry concepts, probability, collecting data, making graphs, and interpreting data from charts and graphs. In all U-LINCS fifth grade classrooms and schools, the teachers re-

ported emphasizing the improvement of mathematics skills through science because of low scores on state mathematics tests in previous years (Figure 2). Many more mathematics integration pieces were added to the fifth grade science units than in grades three and four. These observations suggest that the teachers' understanding of how mathematics is used in the context of science supported increased emphasis on integrating mathematics over literacy.

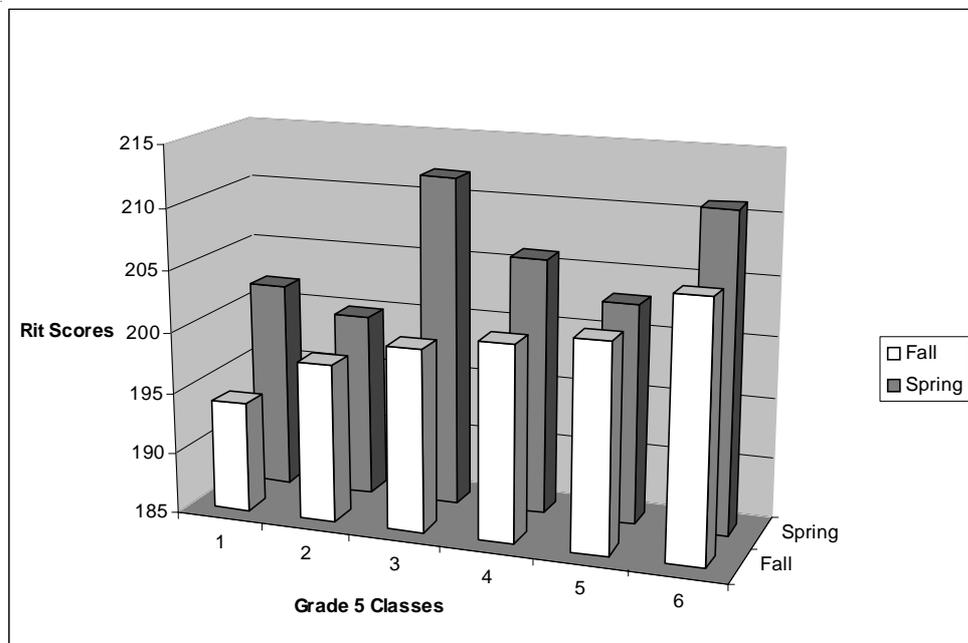


Figure 2. ULINCS Grade 5 science level test

Professional Development Gains –Intentional Use of Teaching Strategies

U-LINCS accomplished many of the vital signs for effective group professional development. One of the most telling improvements made by the U-LINCS teachers was in their ability to acknowledge and change their approach to choosing and using strategies to enhance the integration of science, mathematics and literacy. In their own words they commented about their intentional use of strategies:

- “When we choose strategies to teach the science concepts, we need to know our own students’ background, abilities, knowledge and behavior.”
- “There were many occasions when some of my strategies were validated. Yes!”
- “It was so valuable to do some hard thinking about how it is we go about choosing the strategies we teach kids to use to navigate the wonderful world of learning. I often let myself rely on the tried and true techniques I’m comfortable with when I should be stretching beyond.”
- “I do know that I have a variety of strategies to choose from. I surely need to look and think more clearly about what I want the kids to come away with.”
- “How you choose a strategy was very enlightening. I have a tendency to use a strategy, which I think would be easier and has fewer steps. In choosing a strategy, the instructor considered the outcome of the unit, the students’ background knowledge, and what is engaging for them in addition to time con-

straints.”

There was a concern that some teachers worried about what name to call a strategy, and that a different name might confuse the students the next year. One teacher reported, “When we use a particular strategy, explain it to the students and tell them what you are doing and what it is called.” Another teacher countered, “Some students might be irreparably damaged if next year’s teacher calls strategy X, strategy Y.” However, the dissenting teacher also understood that the point of teaching a heuristic strategy is to help students make meaning. She noted, “The strategy is a tool - not the point of learning. A strategist is a problem solver who has some systematic way of going about things... the strategy is an artificial scaffold to help access material that would otherwise be inaccessible.” It is assumed that at some point the scaffolding can be removed and the brain will process the text efficiently, and thus allow for making meaning.

Conclusion

If the purpose of professional development is to build teacher capacity or, in the words of Vygotsky (1962), to enlarge the zone of proximal development, then teachers need to be able to increase their body of professional knowledge. The knowledge and skills gained through the U-LINCS Project empowered the teachers to be more effective in terms of their pedagogical skills and instructional strategies. Furthermore, communication increased among colleagues and encouraged self-reflection about professional growth so that these teachers have the capacity to better serve as mentors and models to other educators.

The overall success of the U-LINCS Project was based on teachers’ increased capacity, which positively impacted student test scores on district and state assessments. It has been shown, through the U-LINCS Project, that the synthesis of academic content standards supports teaching and learning across the elementary school curriculum. When teachers collaborate and form educational communities with common goals they are able to grow professionally and to support their students to achieve at higher levels.

“What an amazing, complicated endeavor we’re all engaged in. One teacher’s reflection on her increased capacity summarizes the U-LINCS project’s sustainable power:

The art of teaching is so rich, it can be overwhelming. Teaching is not for wimps!”

Recommendations

Writing Synthesized Standards

Teachers were able to use samples of synthesized standards, but when it came to writing them on their own, a few teachers found writing synthesized standards relatively easy, while most reported difficulties articulating this writing task. The following example was used by the university professors early in the process:

Students will be able to read expository text to plan and conduct a scientific experiment, explain an observed change in a system, use correct vocabulary, design diagrams and graphs, write an explanation of the science process in a content-based summary report,

and present the findings orally.

Participants found this wording “too academic.” The professors learned from this feedback, and as a result, recommend that teachers be allowed to solve their writing problem in ways that best fit their personal learning styles. Several teachers used concept maps or rewrote a standard in their own words. The external evaluator for the grant project also pointed out that teachers must not just select similar words to write when synthesizing discrete standards. For example, “area” in mathematics indicates a geometrical definition while in science the term can vary with the context. A true understanding of the vocabulary of each content standard must be attained before attempting to write the synthesis.

Using Purposeful Strategies

Further educational research is needed on what teachers and students are thinking at a meta-cognitive level when they process and translate a heuristic mathematics or literacy strategy within a science lesson.

Adding to the Research Body of Knowledge

This research paralleled some of the techniques used by Klentschy (2001) who saw increased student achievement while using science kits and intensive literacy strategies. This U-LINCS project extended the research methodology by using mathematics as the language of science and the language arts to communicate scientifically. Educational research improves through replication and extension of methodology. It is hoped that readers of this article will take ideas from this project as a foundation to add to their own research, which can benefit teachers and students across cultures and continents. Any researcher who would like more details on the processes used in this report are encouraged to contact the authors.

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Management and Consultation. Different Ways of Changing School

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Abstract

The author is asking for the difference that school development consulting, seen as a systemic organizational consultation, can and does make concerning school management. An essential question is whether the school leadership excludes consulting tasks from school management. If not, there is no necessity to cooperate with external consultants – an often used argument of principals. I want to show that on the level of targets, settings, concepts and methods we in no way can separate the consulting from managing a school easily and clearly. We are close to being forced to speak of the match between them. But the difference is being made by theory – systems theory.

Key words: school management; consultation; school development; systems theory.

Should headmasters consult their staff in matters of school development?

This question is significant in practice, because school administrators in Germany often wonder if it is worthwhile involving an external consultant in their school's development. Obviously, a consultant would not do anything else than what the principal wants anyway. Usually the consultant moderates meetings, insists on keeping arrangements and motivates the staff – in a way: sometimes without knowing how he/she does it. This is relevant, because the difference between consulting and management is hardly recognizable in terms of behavior but can be theoretically explained. Therefore, I will start with pointing out the similarities existing in behavior, tasks, goals, and concepts of consulting and management.

Systemic Consulting – Against a Reduced View

Grounding on the respective German literature (Rolff et al., 2000; Schratz & Steiner-Löffler, 1999) it is justifiable to suggest that school development consulting is to be understood as systemic consulting. Initially, I would like to take a position on typical interpretations that accompany the discussion about systemic consulting. The interpretations show that systemic perception is increasingly applied in practice and cannot be thought missing from a discussion about school development consulting.

“In spite of this development (*of the debate about systemic consultation*) observers of the systemic scene, involved or not, still have imaginations of systemic consulting in mind, that seem reduced or outdated: Systemic consultants are described in a one-sided way as being artists of complexity encapsulated in circular

thinking, as meta-players fixed on organizational micro-settings or as process guides lacking content.” (Hilse, 2001: 323).

Advisory practice, as well as publications and conference discussions show that these images of consultants being one-sided or circular thinking are invalid in Germany, as reflected in the points below

- In systemic consulting processes we do not only find typical methods like circular probing, reframing, etc. being used. This becomes evident in consulting on school programs. Consulting processes show that a combination of intervention methods involving several disciplines does make a consulting term in schools successful.
- Systemic consulting does not focus only on the micro processes but, concerning schools, is connected with the quality increase of the whole system.
- Consulting on school development in all federal states is performed not only as a process oriented strategy, but also includes the specialized interventions demanding the consultant’s field competence.
- Systemic consulting not always pursues the aim of building up complexity and forcing the changes. Often systems operate in such a reduced and routine-like mode (observation, generation of sense and decision), that the consulting system has to actually shake and confuse the clients’ system to enable the latter to unfreeze. In times of accelerated change and constantly readjusting demands however, deceleration might be a more appropriate way. This would focus on strengthening the operative unity thereby defining the system more clearly. Interventions of this kind touch upon organizational dilemmas and paradoxes and, again, are bound to confuse the organization or the client, because they deal with the aspects not observed at the moment.
- Systemic consulting does not only focus on system, structure and functions. Systemic Consulting simply is not blind towards people.
- Concepts or theories of consulting involve control systems as well as individual acting strategies. Communication and communication generated expectations are in the focus. This includes both organizationally established and implicit rules, as becomes evident in consulting practice. During the contact phase the consultant’s functions are being discussed and set up deliberately, as is the influence of the client. However, the consultant’s influential power is not perceived as linear and consequently considered minor. Therefore, it is rather unlikely that the consultant will make a successful intervention.

School Management in Germany – a State of Art

Unfortunately, there has not been done much empirical research on consulting processes in schools. Systemized case histories however show that aspects and practices mentioned above are typical for systemic consulting (Lindau-Bank, 2002). Anything goes – sometimes the acts of consultants seem to be better and more effective management action instead of supporting school manager to improve their management.

We might be able to detect a difference if we take a close look on typical actions and action concepts of school principals:

- Enlargement of the room for maneuver;

- The school management should attend to its task in a way that the pedagogical leadership of a school becomes common business of those involved with school life
- School leadership as cooperative body;
- Tasks of school leadership:
 - Planning of educational and organizational development
 - Development of school-specific syllabus
 - Advocacy of decisions in collaborative bodies
 - Advice for collaborative bodies
 - Evaluation and reporting (rendering of account)
 - Decisions regarding personnel together with the staff council
 - Resources management
 - Decisions about cooperation with external partners
 - Public representation of school

M.T. Gather (1997) differentiates two possible roles of principals. Principals can go for management or for leadership:

- Principal as a leader
 - Deciding and innovating the direction of organization's development
 - Developing strategies
 - Suggesting and encouraging ideas
 - Setting goals
 - Developing clear and explicit work programs
 - Facilitating the execution of programs (negotiating claims and resources with the environment)
 - Offering frequent possibilities of reinforcement
 - Organizing the systematic continuation of projects and the necessary arrangements
 - Insisting on the project being pulled through and brought to an end
- Principal as a manager
 - Making sure that the set direction is kept
 - Creating the conditions for the realization of strategies
 - Asserting one's influence (i.e. connections) in favor of new ideas
 - Creating of ideas of how things could be improved
 - Transferring the ideas into practical projects
 - Communicating the ideas in a way that they motivate and engage others
 - Integrating the group into mutual and continuing planning
 - Creating a climate favorable for solving problems
 - Personnel, budget... and reward for efforts invested

This view can be compared to that of F.Malik (2002). The author suggests that we can clearly see that the role-related tasks will not be found in their pure form, because principals do not understand themselves as typical managers or leaders. Both ideal types of action by principals include demands that could also relate to the consultants.

Therefore, we can state that the school management plays a partly administrative and partly pedagogical role.

Roles/Figures of school leadership

- Administrative role
 - Keeping the syllabus
 - Co-ordination
 - Organization
 - Fiscal administration/ administration of finances
 - Public relations
- Pedagogical/educational role
 - Professional development of the teaching staff
 - Co-operation
 - Integration of experience
 - Evaluation of quality

School Managers as Consultants – Two Visions

M. Fullan (1993: 72) discerns the element of consultation among the functions of school management giving the answer to the question “what’s worth fighting for in your school”:

- Understand the culture of the school
- Value your teacher: promote their professional growth
- Extend what you value
- Express what you value
- Promote collaboration, not co-optation
- Make menus, not mandates
- Use bureaucratic means to facilitate, not to constrain
- Connect with the wider environment.

M. Fullan writes that “[...] leadership skills in question require great sophistication. Conceptual clarity... [...] educational leaders must learn to influence and coordinate non-linear, dynamically complex change processes:

- Developing a new understanding of control
- Designing appropriate uses of power
- Establishing self-organizing learning teams
- Developing multiple cultures
- Taking risks
- Improving group learning skills
- Creating resource slack” (Fullan, 1993: 74)

The understanding of leadership provided by P.Senge greatly resembles the understanding of consulting.

“Today many leaders seek to achieve the commitment and focus that come with genuinely shared visions. Unfortunately, too many people still think that “visions” is the top leader’s job. Individual leaders’ visions may succeed in carrying an organization through a crisis. But, (...), there is a deeper challenge: creating sense of purpose that binds people together and propels them to fulfil their deepest aspirations. Catalyzing people’s aspiration doesn’t happen by accident; it requires time, care and strategy” (Senge, 1994: 298).

The development of shared vision requires capacity for leadership. That means the degree of success increasing the active involvement. Senge talks of five steps:

First Step: Telling – We’ve got to do this. Be excited about it.

- Inform people directly, clearly and consistently
- Tell the truth about current reality
- Be clear about what is negotiable and what is not
- Paint the details, but not too many details

Second Step: Selling – We have the best answer. Let’s see if we can get you to buy in.

- Keep channels open for responses
- Support enrollment, not manipulation
- Focus on benefits, not features
- Move from the royal “we” to the personal “I”

Third Step: Testing – What excites you about this vision? What doesn’t?

- Provide as much information as possible, to improve the quality of response
- Make a clean test
- Protect people’s privacy
- Combine survey questionnaires with face-to-face-interviews
- Test for motivation, utility and capability

Fourth Step: Consulting – What vision do members recommend that we adopt?

- Build in protections against distortion of the message
- Gather and disseminate results
- Don’t try to tell and consult simultaneously

Fifth Step: Co-Creating – Let’s create the future we individually and collectively want

- Start with personal Vision
- Treat everyone as equal
- Seek alignment, not agreement
- Among teams, encourage interdependence and diversity
- Avoid “sampling” – take your time to speak to everyone
- Everyone speaks only for himself
- Focus on the dialogue (Senge, 1994: 315 - 326).

So much about demands on leadership and typical role-concepts. Drawing a line between leading and consulting still seems to be ambiguous.

The specific actions and processes could give an indication of the difference.

School Management in Reality – Empirical Studies

In this paragraph I will sketch the state of research on this matter. Empirical studies on school management show that principals’ work is marked by communicative situations.

- Empirical studies concerning School management (Fullan, 1993):
 - Fullan, 1993:
 - Headmasters in Northern America spend 25% of their time in planned and prepared meetings

- 25% in planned, not prepared meetings
- 15% in occasional, not planned meetings
- 15% for free communication
- 20% are non-communicative occupation
- Headmasters get involved in problems, without setting priorities
- Headmasters carry out 149 tasks a day, 50% of which have to be stopped prematurely.

In their own perception headmasters according to modern image of management see themselves as consultants and supporters of staff and pupils. Only reluctantly they are willing to see themselves as the decision-makers.

- Study by the IFS (Institute for School Development and Research), qualitative study on 20 headmasters (Bonsen, Iglhaut & Pfeiffer, 1999):
 - Conversation as a time consuming factor, mostly counseling or conflict counseling
 - Lessons – giving lessons as well as supervising lessons
 - The significant importance of pedagogical self-concept as well as contacts with the pupils
 - Administration and organization are experienced as the time-killers
 - Processes of decision-making – only deciding on details headmasters regard themselves as exclusive decision-makers

All the same, the headmaster is seen and repeatedly requested as gatekeeper for reforms.

- Baumert & Leschinsky, 1986:
 - 1000 headmasters were questioned in writing
 - The influence of the headmaster depends on how far he/she succeeds in balancing the conventions on seemingly contradictory expectations
 - The decision system's structural heterogeneity and the folding of bureaucratic and non-bureaucratic elements of organization make the headmaster the most important and influential person for the realization of school's pedagogical objectives and concepts
- Rosenbusch, 1989
 - Pedagogical reform projects in the realm of the school cannot be realized without or against the headmaster – regardless of their internal or external origins

Empirical studies concerning School management

- Leithwood, 1992 “Transformational leadership” (in Rolff, 1993).
 - Transformational school management is more demanding than the concept of “cooperative leadership”, because it attempts to reach self-organization (p. 186)
 - “Our results signify that transformational headmasters aim at three goals more or less continually:
 - Helping the staff members to develop and foster a collaborative and professional school culture
 - Encouraging and supporting a development of staff as well as

- Enlarging the capacity for solving problems within the staff (Leithwood, 1992: 9f).

These studies show that on the level of targets, settings, concepts and methods we in no way can separate the consulting from managing a school. We are close to being forced to speak of the match between the both. But the difference is being made by theory – systems theory. In order not to indulge in academic self-contemplation it is not sufficient to ask for the difference, we also must take an interest in learning to what extent we can establish, respectively, prove a profitable connection between theory and practice.

School Management and Consulting – a Nice Distinction

The systemic examination reveals the organization's operative unity orientating its operations on internal references to the system, only conditionally taking advantage of external impetus. As stated beforehand, a consultant has to bear in mind his/her intervention's tendency to fail. To the organization the consultant acts as an environment or *second order observer*.

“The consultant runs a specific relationship to the structures of the system he counsels. He observes, as required, the difference that is reconciled by the structures or the structures that reconcile the difference” (Baecker, 1999, 2002).

The consultant can achieve the lasting indispensability if he/she succeeds in maintaining the difference i.e. alternately accentuating both aspects the paradox. The system's solution is the allocation of a consulting commission, which, for the consultant, is the opening of a game. The commission makes him/her part of the system, respectively, lets him/her keep the consistent arguments in the respect of operative unity. He/she becomes a system-reproducing structure by itself (and often faster than it would be beneficial for the system). By not committing himself/herself to this structure, the systemic consultant achieves the option to remain *second order observer*. The consultant compares structures and as a result increases the options of possible action.

“Structure is the expectation that orientates and steers systems operations and by whose fulfillment or disappointment the system checks up on its construction of reality” (Luhmann, 1999: 382).

Here, we have presented an argument in favor of the fundamental difference between school management and systemic consulting. School management sets structures and identifies itself with the system's interests and standards.

The more systemic way the consultant operates, the more he/she will refuse the specific commission judged by structural changes and instead will try to enable the system to find and pursue its own goals. Nonetheless the consultant has to oscillate between the role of observer and that of the observed. This means that he/she has to operate using figures of renunciation of authority towards every position he/she wants to observe. The headmaster, being an authority, makes the difference between consulting and managing a school. Referring to authority, the communication changes.

Headmasters have to communicate in order to be understood. If they really are understood by the system, the surprises become expectable and the system is operating in the way that has been set by the headmaster.

Consultants have to communicate in order to understand. This understanding, however, is the understanding of an outsider. While the system observes the outsider, it observes itself from another perspective. From this results the hope for successful consulting as seen from a systemic point of view.

How does theory come into practice?

The Difference in Practice – a Concluding Comment

The consultant maintains the distance from the system. This is exemplified by the optimization of mediation, which is demanded from consultants but is contrasting with the discussion concerning school development. School development debate calls for concentration on what is essential at school that is lessons, and therefore does not treat the borders of the system, but its center. But looking at lessons it is easy to find tasks the school has to fulfil, as this is a customer orientation or performance measurement.

From the point of view of the consultant, the problem of the system school in the way it acts towards the systems mediators like society, economy, education policy and parents, are based on fuzziness. At the moment this may give advantage but in the long run this will affect the structure of the school.

Bearing this in mind, optimization of mediation means emphasizing the operative unity of the system and establishing borders between inside and outside. Regarding practice this implies clear definition of and agreement on common purpose, role model or whatever you will call it. "The more clearly links of possibilities are defined, the better the affected can get their bearings and interact with them" (Schratz & Steiner-Löffler, 1999: 108).

School management considers the system's operative unity and therefore lasts as long as the system. Consulting stays out of things.

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Quality Management in Human Services

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Abstract

The article shows that quality management in the field of human services differs from the quality management in the field of industrial production. Contrasting the neo-liberal point of view, which is a restricted one, the special qualities of human services have to be considered. There are three approaches in defining quality management in human services. The crucial idea is the clients' co-productivity in performing human services.

We summarize that, in order to develop a sustainable quality of human services, the participation of co-producers - in addition to the knowledge of discipline and reflection - is inalienable as much as ever.

Key words: quality management; human services; uno-actu-principle; client as co-producer; social work.

There is nothing new in efforts to improve a quality of person-related human services. Traditionally the welfare institutions set the tone for the discussion about the quality of human services. This causes the strained relations. On the one hand, these complex institutions have different values and different religious foundations. On the other hand, welfare institutions work as the agents of representation for people with social problems. The welfare institutions were thoroughly convinced that both to feel committed to values and to be an agent of representation would produce an excellence in social work. Additionally, in Germany since the sixties and seventies the administration of welfare institutions is legally accountable for their proceedings (one of the well-known reports is the *Bundesjugendbericht*).

From the perspective of social policy this conception of human services creates a specific form of services production. Other people, namely experts, institutions of social work or people, who have studied the social problems, know what the persons concerned need, which kind of help is necessary, and how to support the interests of persons concerned.

From this perspective of human services specific offers have to be made available that enable to treat problems of persons concerned in different social milieus. Furthermore, the offers should be based on different methods.

The Neoliberal Point of View

For quite some time the perspective of social policy has changed fundamentally: the neo-liberal perspective has been more and more successful. For this perspective it is typical that a model, which was generated in the industrial production (for example, car production), was transferred into human services and believed to be equally

valid in that area. The product of human services has to be as efficient and effective as possible (“make the things in the right way” and “do the right things”). It is a perspective of business management, which the neo-liberal view transfers to an area where no goods are produced in the sense of industrial production. Astonishingly, institutions in the social sector (and also in social work) quickly get familiar with this idea.

For this we can suppose the following reasons:

- The organisations and institutions in the social sector are under a growing pressure to cut the costs. Despite conditions of limited resources and strained public budgets, human services should produce “excellent” products, which in this context means excellent service. It is obviously necessary to ask how effectively and efficiently an institution really works.
- People who believe in this concept as well as many directors and managers hope that they would be able to tell what a consultation exactly is, what a specific educational step is or what their staff really do.

So, if it is possible to do the quality management in this sense, it will be done. Quality management is always running the risk of degenerating to a programme of downsizing and manpower cut.

Special Qualities of Human Services

In contrast to the concepts of quality management transferred from the industrial sector, you have to be aware of what a human service is. The classification of services as human services refers to their function in the field of social policy; and the classification of services as person-related refers to the interactive aspects of services.

Comparing with the conditions of industrial production the conditions of production of human services are different in three respects:

- The person-related human services in their substantial dimension are not directed by financial interests.
- It is impossible to standardize the products of human services in the same way as it is in case of manufactured things.
- The most important feature of human services is the so-called uno-actu-principle. That means the temporal coincidence of the production of human services with their consumption.

The activities in the field of education, consultation, assistance, therapy, teaching, etc. in a fundamental sense need the co-production or the participation of persons affected.

At this point we can draw the initial conclusion that the quality of human services is related to the level of interaction in a very basic sense.

Therefore, the quality management is a relational concept. Quality is not a fixed term, but an imagination, an idea or a specific construct of reality. It becomes obvious if we take a closer look on the different approaches.

Different Approaches and Client’s Co-Productivity

First approach: in defining quality we can speak about the **social-technological**

approach. Quality in the social-technological sense is the quality of results, which are produced according to certain standards. This is an idea of quality analogous to industrial production.

It comprises the following assumptions:

- the institution offering a service is exclusively responsible for the definition of the service's quality;
- the interactive aspect of human services is left aside;
- the quality is the result of an inner-organizational process of production.

Therefore, this approach does not take into account the subjective and the situational conditions of human services production.

The second approach can be called the **expert's control**. It is related to the traditional understanding of the profession of social work. Here, quality is exclusively defined by professional standards. Though, we have to make some critical notes: the relationships between the social work and its clients are asymmetric – these are the relationships of subordination. The expert stands apart from layman. The expert reckons that he/she alone is in command of the relevant and exclusive knowledge. But the expert's control approach, on the one hand, allows considering the subjective conditions related to the respective situation; on the other hand, this approach makes hard to get familiar with the client's understanding of situation. The risk is that such a vicarious understanding neutralizes client's needs.

The third approach in defining quality I call **the participative or democratic approach**. The client's perspective is in the focus of this approach. And the knowledge about the specific conditions of human services production is accepted, for example, in the uno-actu-principle: it means the client's co-productivity.

Within this approach we can distinguish two versions.

The version where the exclusive centre of consideration is the consumer I call the consumer version.

Quality in this version means keeping the consumer satisfied. But this view is a restricted one. A consumer's needs cannot be merely defined with respect to his/her subjective needs. Objective demands, too, have to be taken into consideration. Usually, social, political and subjective needs do not match. Further, we know that the perception of consumer needs is depending on the consumer's ability and his/her opportunities to articulate them. And more: the consumer version leads human services into the paradox of the intended compensation of social problems at the same time deepening them.

Therefore, I prefer a democratic version of participative approach. The essential criterion of this version is the constitutive integration of clients in the process of production of human services. This criterion leads to the activity in production in contrast to the orientation toward the result. Here the co-productivity and the participation are in focus while producing human services.

The question of quality is related not only to the dimension of result, but also to the whole system of social work. Therefore, the quality of human services is not merely the result of an inner organizational decision. It is the product of the interaction between the whole range of human services.

We can distinguish three dimensions in this chain of producing human services.

First, it is the process of establishing contact with clients as a part of social work. Contacting the client the implicit question is about the circumstances of the given social problem (which I will not deal with at this point).

The second dimension is the process of human services production itself. In relation to that we can hold on to the key words 'co-productivity' and 'participation'.

The third dimension in the chain of human services is that of obtained effects, or, better: the achieved outcome (in contrast to output). The outcome quality is the relation between the achieved effects producing human services and the goals intended. And this quality is impossible without the co-productivity of clients.

Here we have made a full circle: an evaluation of outcome quality is connected with the definition of quality, which affects the production of prospective human services.

Conclusion

As a summary the following can be stated: client's activity as a "hidden resource", activation by the profession as an agent of innovative processes, attention to the whole process while producing human services - that can enable a continuous and sustainable generation of quality-related social work. In this case the definition of quality is defined as people concerned and people affected.

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Roles of Child During the 20th Century: Examining Educational Publications and Juvenile Literature

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Abstract

The presentation and balance of different roles of child have undergone changes related to historical, social and cultural development of Estonia. The cognitive theory of learning presupposes the teacher's deep understanding of the possibilities of child's both constrained and voluntarily learned roles, and empathetic attitude to them. The aim of the study is to enrich the teachers' ideas about the child clarifying the changes of the meaning of the child during the 20th century.

The author uses inter-disciplinary approach, applying the ideas of W.Corsaro (sociology of childhood), J.Habermas (development of the public opinion), J.Lotman (cultural semiotics) and U.Bronfenbrenner (socio-cultural model of child's development). The study includes the comparison of two clusters of texts reflecting the Estonian children's life during the period 1900 - 2000: children's prose and journals. Difference between the conditions in the periods 1900 - 1940, 1941 - 1991 and 1991 - 2000 may be described as a movement from plurality to unity and back to plurality.

Although the analysis here proceeds from the texts of the small culture, the results - general tendencies - can be comparable with the processes in the neighborhood.

Key words: childhood; semiosphere; meaning; education; children's literature.

Introduction

Today teacher is urged to accept the pupil as a subject of her/his education and to integrate the learning process at school with the life experience of the children.

Who is the child? The opener and filler of copy-book? Independent discoverer? The delight to the eye of family? The property of parents? The labor reserve for tomorrow? The actual manpower of today? The citizen of the state? The carrier of the nationality? The resident of Universe?

The presentation and balance of different roles have changed during different historical periods, social and cultural development of Estonia.

The cognitive theory of learning presupposes the teacher's deep understanding of the possibilities of child's both constrained and voluntarily learned roles, and empathetic attitude to them.

The aim of the study is to enrich the teachers' ideas about the child clarifying the changes of the meaning of the child during the 20th century. Who has been the

child in different historical and social conditions, including periods like 1900 - 1940, 1941 - 1990, 1991 - 2000?

There have been quite different conditions in these three periods for writers and publishers of the children's books, for children and for their educators.

Every teacher, dealing with the children's problems, would be proceeding from her/his personal experience of notion of 'child' – influenced by her/his childhood conditions created by parents and educators' beliefs about education. No wonder that the teacher takes her/his personal child-concept as an ideal, and might feel her/himself downhearted if today children would be even contrary to their ideal.

Hopefully, the knowledge of children's books could help the teachers to understand the child better and to get interested in his/her individuality.

Children's books, presenting an aesthetic generalization about children's characters, ideas, wishes, etc. could improve adults sensibility and open their eyes to the events of current life.

Essential factor, influencing the childhood, is the contact with older generations, the comparison of their childhood experience with that of new generation: it is a memory of childhood, composing our joint understanding and feelings about childhood and helping the children understand their experience and possibilities.

In the soviet time the parents and grandparents were afraid to tell the children about their childhood and about the past, because the myth was enforced by official institutions – kindergarten, school, periodicals, literature, songs – that the childhood in Soviet Union would be the best. The events in 40s and in the beginning of 50s – the repression of families, deportation, losing the home and home place – have frightened the people for long time. In the conditions of the new independence we don't discuss too much about our soviet childhood because it would cause a schizophrenic feeling. There are like the walls of the silence between these periods.

It is hard to the younger people to understand, why absolutely strange children's books have been written in earlier periods and why those books have been accepted as the classics.

There are a lot of questions arising like – are the children's books trustworthy as a mirror of real life? Did the children in the past really behaved like those depicted in the books?

The goal of this study is to discover the educational and cultural background of children's literature, to examine the needs and beliefs of adults creating the fictional child in his/her different roles (Lesnik-Oberstein, 1994).

Theoretical Foundations

This study belongs both to the history of education and history of children's literature. The theoretical background of this inter-disciplinary, inter-textual and comparative study is developed from the works of W.A.Corsaro, J.Habermas, J.Lotman, K.Lesnik-Oberstein, M. Nikolajeva and U.Bronfenbrenner. The concept 'meaning' will be clarified as a result of communication (O'Sullivan, 1997).

Subordinating the theme of the research to more general background of cultural studies, the connection between children's literature and educational texts will be interpreted from the position of cultural semiotics, first of all, in J. Lotman's works (Lotman, 1999). J.Lotman's term 'semiosphere' will be used to describe a conditional space of meanings around the child symbolizing all ideas about child: the ideas about childcare, educational beliefs and specific scientific knowledge about

child's life.

Social movements – as an external message – will break the boundary of semiotic structure and create a new meaning there.

The discussion will focus on the following questions:

- Which aspects of children's life are reflected as the most significant in children's books and in the educational publications of each period?
- What status is attributed to the child in different social conditions?
- How to explain the influence of ideology on the treatment of child's life in education and children's books?

Difference between the conditions in periods 1900 - 1940, 1941 - 1991, 1991 - 2000 may be described as a movement from *plurality* to *unity* and back to *plurality*.

The periods treated in the study include very different and even contrary sub-periods:

- 1900 - 1934: movement to the freedom; foundation of independent Estonian government (in 1918), construction of national culture and educational system.
- 1934 - 1940: official requirements to the literature and education after political turn and establishment of authoritarian regime.
- 1941 - 1956: subordination of the literature and education to the soviet ideology; Communist party tries to shepherd the cultural life by the resolutions.
- 1956 - 1968: formation of the soviet/national double culture.
- 1969 - 1980: strengthening of political and administrative control, forced Russification.
- Since 1987: change toward the re-establishment of civil society (Aareleid, 1990).

Of course, there are also different stages of social and cultural development in the 90s.

Method of Research

The study contains the comparison of two clusters of texts reflecting the Estonian children's life during the period 1900 - 2000:

- articles of educational journals "Education" (1919 - 1940), "Soviet School" (1940-1990), "Education" (since 1991) and other publications describing and analyzing the way of life of Estonian children in 1900 - 2000; more or less professional observations, measurements, surveys including statistical data about children's health, food and pupils' academic achievements.
- Estonian juvenile literature (or books published for children) written during the 20th century, approximately 110 books.

U.Bronfenbrenner's socio-ecological model of human development (including the micro-, meso-, exo- and macrosystems) was adapted to treat the child's roles reflected in children's books and educational publications (Berger, 2000). According this model, the roles of child have been described as a member of family, a pupil (in school or kindergarten), a discoverer of the Wide World (or a communicator with the Wide World), citizen (a member of nation, a builder of communism).

The method of text analysis could be described by very general notion of 'coding'. The role of fictional child was determined from the viewpoint of Bronfenbrenners' model, including the different order of main motifs and side issues.

The specification of the role was provided by the hero's sayings about her/himself, the opinions of other characters about her/him and the activity or function of the main hero (both individual and collective).

Results of the Study: Child's Roles in Different Historical Periods

Children's status in different periods will be described considering dominating roles presented in educational publicity and juvenile literature. Also the sources like the memoirs of writers and educators have been used as the evidence of educational and cultural background. So, for example, one of affirmations expressed by the writer, teacher and journalist Marta Sillaots has encouraged me to penetrate into the issue of child's possible roles. She - born in 1887 - has written: "We have been the property, the ownership of our parents".

Manifestation of child-centredness in the beginning of 20th century

For a long time the education operated from the belief that the older generations know what is good and necessary for the younger generations. The children's books expressed mainly the straight didactical attitude towards the child.

The rise of child-centredness in pedagogy (M.Montessori, J.Dewey, E.Key, etc.) coincided with the publication of books describing the child newly and fresh in plays and dreams, without any didactic attack, discovering the possibilities of child's imagination and emotional life (authors like E.Nesbit, J.Barrie, A.A.Milne, etc. in world literature). The central meaning of the child could not be anymore the property-ownership, but something else – the child would be valued as a self dependent personality, a player, a discoverer, a learner.

The first remarkable message about the child centredness in Estonian literature was a fictional book, childhood memories of Jaan Lattik (later pastor and politician), published first time in 1907 and then in many new editions (1908, 1914, 1921...) and also in textbooks for primary school. His first book was not accepted by contemporary critics as something special, but with a time Lattik has been interpreted as a discoverer of the realistic children's prose and his themes and psychologically profound way of writing would be followed by many children's writers during 20th century.

The majority of books of this period – written for children or published later as the children's books – are based on childhood memoirs (with very rare exceptions). The child's roles in this memoir literature are mostly *a member of family* and *a discoverer of the wide world*. Often the working child is depicted – tending the cattle, employed by another family as herd child, but also engaged in other farm labor.

The motifs of working child are sometimes controversial: on the one hand, the work is tiring and unhealthy, on the other hand, work allows for a new knowledge, interesting experience in the nature and meeting with exciting people.

Usually the role of *a pupil* is confronted to the free play age before the school. Reflecting the idea of child centredness many stories are written by the writers educated as the teachers, like cited above Marta Sillaots and the most famous devel-

oper of realistic tradition in Estonian children's literature Jüri Parijõgi. Many of their works could be classified as the educational formula stories: they are presenting a child or a couple of them in a psychologically exciting situation (a child waiting for her birthday, when the uncle has promised to present the living puppet; child's feeling after unclear, unmotivated punishment) and against the solution of this problem the writers would testify their educational principles.

Child as a nationalist

The political turn, the establishment of authoritarian regime in 1934 had the immediate influence on the cultural life. There were high expectations for the ideological education. The most important theme of educational publicity was the forming of the Estonian citizen at school.

The unequivocal requirements were set up for the new children's books in 1935: the extremely positive hero and the loyalty to the government would be clearly presented in the book. A noticeable amount of books was written and published rashly under these requirements of positive formula. Usually those books were aesthetically weak: the composition was amorphous and characters not convincing.

As a rare exception, subversion to official policy and an aesthetic opposition to the authoritarian requests the memoirs by the most important presenter of aesthetic movement in Estonian literature Friedebert Tuglas – "Little Illimar" were published in 1937.

The most remarkable role of the fictional child in 1934-1940s was *a discoverer of the Wide World* – but in the context of national mentality: overstrained examples of child's behavior dominated there. Many books were also reflecting the child as *a pupil and a citizen* – and these roles were especially prevailing in the formula books written under the ideological influence to demonstrate the ideal of education.

The motifs about the child's family life become less important than in previous sub-period.

Idea of the collective education

Frightened by the repressions of Stalin's regime the writers tried to write the books welcomed by the power structure. Dominating model in prose was the story about the children's collective giving a hand to one or two fellows, whose behavior does not suit to the soviet child.

The idea of collective education has been the main in the educational publicity. The development of educational science and child's psychology was inhibited. It is complicate to compare the child's life of this period in Soviet Union with the childhood in Western countries like it is presented in many publications (Quortrup, 1995).

The *roles* of the child in 1940-1956 first of all are *a pupil and a citizen*. There is a remarkable feature in the books written at this time: the sub-systems of Bronfenbrenner's model were assimilated by each other in soviet children's book: the home life was subjected to the official ideology represented by the school and communist youth organization. There was nothing of the kind of child's independent communication with the wide world – all contacts and interests would be realized through the communist organization.

Child as a critic of the system

The turn to the normalcy was relatively hurried. Immediately after the public condemnation of the excesses of Stalin's regime the changes have taken place both in educational publications and children's books. The themes of home, children's play and adventures were legalized after a long period of political prescriptions. The new and vigorous generation of writers began to create children's books in different ways, using a wide scale of possibilities like humor, nonsense, psychological immersion, hidden meaning, etc.

The most developed idea in educational publicity was defined as the 'Bringing the education closer to the life'. There was a remarkable interest to the child's personality, activities, independence and pre-school age. There was an appeal to use the local activities and national themes in the education.

The *roles* of the child after 1956 were opposite to the roles of the former period. Now the child was depicted as *a member of the family* and ***a discoverer of the Wide World***.

There was a remarkable growth in toddlers and pre-school children's literature. We can discover fictional children playing at home, telling stories, discussing with their parents and grandparents – who have been deported from Stalin's period children's books because of their bourgeois past.

The meaning of the notion 'the communicator with the wide world', could be cleared by the fictional children of 60s:

- Small children playing and discovering the phenomena of nature, multiple things and people outside of home and kindergarten;
- Older children's adventures, war games – these are opportunities to reflect the knowledge of history, adventure books, criminalistics, politics; to recognize the ethical values like friendship, self-sacrifice, faith;
- Children really studying the nature;
- Children working – mostly at summer holiday – to see the world, to get an experience of independence and obtain the self-confidence;
- Sporting children.

In 60s the collective education formula stories – diligently used at Stalin's time – are reflected mostly in a way of parody.

Although there was so called "thaw" in the beginning of 60s in political and cultural life, the system was the same. The researchers of culture have defined that period as a formation of double-culture: official soviet and unofficial national culture. The educational editions as the official channel of ideas stayed relatively inflexible. There were some new themes like the articles about psychology, about the research of child, individuality of the child, but the tendency to lead all children's life by means of the school system would be very evident. There was even an idea to organize children's summer holiday by school (calling it kindly as the 5th quarter of school year) to swallow down the most important children's 'time out'.

The children's literature began to flourish in 60s by different reasons. Children's literature has been recognized as an independent phenomenon. Strongly critical subversive attitude to the official educational system is shaped in children's books, describing this education as too formal, remote from life, not accepting children's needs.

The evidence of the double culture could be found in stories, using the motifs of communist education, naming the fictional children as 'pioneers' and 'October children', but at the same time depicting their activities and ideas breaking out from these oppressing conditions. In 60s the children's literature as an agent of communist ideology has turned into a critic of it, realising the idea of subversive function of children's books (Stephens, 1992).

Escaping into the fantasy and past

The time of standstill (stagnation) began after political events in Czechoslovakia in 1968. The depression connected with social pessimism, the feelings of restrictions and laxity paralyzed the mentality and influenced also the treatment of the child.

Whereas the school again was pointed at as the main educational factor, the only role of the child in educational publicity during 70s was to be a pupil. All children's and young people's life in broader meaning was oppressed and controlled.

Children's books of that period could be described as opposite to the official educational system. Children's writers were avoiding the motifs of school as much as possible. Generally, the real life was not popular theme of children's books.

The escape into the fantasy and past was the most developed tendencies in children's books of 70s. There were a lot of fantastic stories written *without child* as hero. The characters of fictional grown ups like dwarfs, witches, clowns, etc. – people from the magic world – have played the main role in children's literature. Of course, deep in their souls they have been childlike characters. There is a possibility to interpret such heroes as an attempt to present the child in more general aspects than peculiar child of specific age, to go deeper into the essence of childhood as it was possible for the educational ideas of that time.

The childish features like curiosity, playfulness, thirst for pleasure, creativity, etc. are most remarkable attributes of those magic characters. The child with such character in real life might have the regular conflicts with official educational system. The adult age of the magic characters is a sign of carnival: the adults mask is protecting them of child's adversity to be punished, disdained, suppressed.

Another tendency was to write the stories in a realistic key but reflecting the events and heroes from the past. A noticeable amount of childhood memoirs in 80s could be treated as the nostalgic preference of writers' childhood atmosphere to the contemporary real life with its ideological restrictions. Also it was the possibility to send the message to younger generations about our national traditions in the family life and culture. The fear to lose our national identity was evident in the space of meanings, as it would become known during educational debates in the middle of 80s.

Development toward the diversity

Beginning from the middle of 80s, the treatment of child in educational publicity is changing. One can notice the switch from the role of pupil to the more complex understanding of child: the relationship between family, school, social networks and government would be analyzed as a background of every educational problem. Also the child's roles in fiction are relatively multifarious. Analyzing the presence of relevant social problems in educational publications and children's books the light-weight of children's books has to be declared. It seems that children's writers are

afraid of real life problems, only illustrating their existence.

An interesting inconsistency can be noticed comparing the child as a hero in educational and literature treatment: if the children studied in educational research are mostly high school students, then the most popular hero of children's books is a pre-school child.

It seems like the adults dealing with the children are using the most comforting way for adults themselves.

Conclusions

The meaning of the child in our society has been subjected to evidently diametrical influences by the social movements mostly in connection with strengthening and weakening of authoritarian regime. However, in time the children's literature is getting more and more sovereignty and discovering the new opportunities to express its subversive position to the educational institutions and all "adults world".

Both the children's literature and education are relatively conservative systems: they are preserving all possible interpretations of child's roles. The importance of the studies of history to deal with the contemporary problems has to be pointed here, and specially in the light of tendency when the small nations are directed by the experience and advice of larger cultures. Certainly the actual understanding of the child depends on the phenomena peculiar to our national development in the education like the harsh changes in estimating of child's value, the ignoring of the childhood as a phenomenon during long years, the periods of forgetting of children's primary role like the member of family, etc.

The analysis here is proceeding from the texts of Estonian culture, but there would be the appeal to the colleagues of neighborhood countries to compare the developments in the meaning of the child in our cultures.

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Children's Play World in the Family Context

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Abstract

The researches of the latest years have shown that parents of preschool children understand the importance and necessity of their children's development and also think that play and toys have an important role in it. But at the same time young parents have little actual information about child's play. On the other hand, the studies indicate that children's play and toys have now changed their traditional meaning.

The aim of the study is to analyse preschool children's play at home and their mother's role in it. I analyse how and in what way parents create conditions for their children to play and how they promote it. Interviews and video observation were the methods used in the study.

The results show that play is a general everyday activity of the child or it is closely connected to other activities (TV watching, painting). Although mothers go to work, they try to find time for their children in the evening and at weekends. The toys and materials for play are bought inexpensive and parents often discuss with the child what objects to buy. How much and how often the mother plays with her child depends a great deal on how many children there are in a family. When there is one child in the family it is the children who invite their mother to play and they love playing with their mother, as she is the only playmate at home. If there are two children in the family, they mostly play together and the mother's role is completely different here. But joint plays between the siblings of different ages are less successful, as play interests and ideas are very different. Here, too, children want and need their mother as a play partner. The results show that when parents are highly interested in their children's play, their children play creatively and resourcefully. The study indicates that children need the parent as a play partner and as an adult who supports and promotes the play. Play is the children's main activity in their preschool age and it is important that adults are interested in the play and what and how they would support the child's play.

Key words: child; play at home; maternal involvement.

Introduction

Children's play world has changed in the last decades and it is claimed that the real meaning of play (play as a child's work, as another reality) is vanishing. Play emerges first between the mother and the child. Pretence and play are initially learned under the supportive guidance of more competent adult or peer. Our preliminary study indicated that parents acknowledge the importance of play in the child's development and consider it necessary to support the child's play (Saar & Tuuling, 1998). But, at the same time, young parents have little actual information about child's play.

There are a lot of studies about mother-child play in the first, second and third year of life. It has been found that pretend play lasted longer when mother and child played together (Dunn & Wooding, 1977). Several studies show that toddlers engage in both quantitatively and qualitatively more diverse and advanced forms of pretend play when playing with mothers than when playing alone (Slade, 1987; Fiese, 1990; Bretherton, 1984). It has also been analysed which way of mother's stimulation in the play is the most suitable for the child (O'Connell & Bretherton, 1984; Beizer & Howes, 1984). The studies indicate that the mothers offer a wide-range guidance, though, not adapting instruction to the skill level of their children. The children themselves are selecting mothers' instructions and deciding which of mother's suggestions would be applied to the play activity. The plays of younger children (12 and 24 months) and older children (36 and 48 months) with their mothers with the help of various research methods (observation, interview and other ethnographic methods) have been studied by Haight and her colleagues (1993, 1999). Researches conclude that pretend play with mothers is one-sided only at the earliest age. By twenty-four months, when pretending is fully developed in the children, mothers and children show mutual interest in pretending with one another. Between age of 36 and 48 months, children begin to pretend about equality between them, mothers and other children. Increasing involvement with other children as the play partners does not dampen the children's interest in pretending with their mothers. Mothers and children initiate and respond to pretending and mothers elaborate and prompt children's pretending.

Thus, the joint play of 1-3-years-old child with mother has been studied primarily in laboratory conditions for a long time and a lot of quantitative research methods have been used. The child's play at home following that age has seldom been observed by the researchers. The general aim of current research is to study the pre-school children's play at home. In the study the mothers' views on the child's play and mothers' support for their children's play are analysed. This study is based on the ideas of the cultural/historical theory of play (Vygotsky, 1966; Leontjev, 1983; Elkonin, 1978). According to the cultural/historical theory, pretend play is the leading activity of preschool children and the most important element of play is an imaginary situation, the role that the child takes in the play, and rules. The play is the source of development and creator of the child's zone of proximal development. Vygotsky and others have emphasised the role of parent, teacher or more capable peer. More experienced members of the culture scaffold children's pretending, facilitating its early emergence and elaboration (Berk, 1995).

Methodology

The study was carried out with four-year old kindergarten children. Based on the teacher's description and author's observations in the kindergarten, author selected five children with different play patterns. A child, who played pretend play a lot, was called an active player and a child, who engaged in pretend play less, was called the passive player. In the study participated two active players Anna and Kalev and three passive players - Nele, Neeme, and Toomas (all names have been changed). Three of five children were boys and two were girls. Two of them were the only children in the family and reared by mother. There were four working mothers and one mother who was a housewife. Three children had a younger sister or brother

and one boy had a five years older brother.

The research was carried out as a qualitative case study. Case study is characterised by the collection of research material in the natural conditions using qualitative research methods, presenting the results as a deep and systematic description (Patton, 1990; Yin, 1994). In the study it was tried to find an answer to the ethnographic problem: What is the child's play world like at home? The study was carried out at home and kindergarten, and various data collection methods were employed in the study.

Interview with mothers was chosen in order to get reliable information from the mothers. The aim of semi-structured interview was to create pictures of the life of interviewee and to study their experiences, thoughts, beliefs and feelings (Kvale, 1996; Mishler, 1991). In the interviews the mothers' views on child's play was found out, namely, what the mother thinks of the role of play in the child's development and what is her opinion about the necessity to stimulate the children's games. The interviews were recorded with a cassette recorder and later the transcription was made. In addition to the interview, child's activities and play were video-recorded. Video enables to record social events as they occur and with a level of detail (Jordan & Henderson, 1994). During the observation, neither the child nor the mothers were asked any questions nor the communication with them was initiated. After every video recording, the content of the recording was written down - all events, interaction between the child and mother, and the duration of the recording. Every child was recorded at home for 10 hours; thus, the total time of observation was 50 hours. The analysis of each video observation was made describing what the child and mother did at home, what was done together and whether it was played together and briefly also the content of the play. Also children and mothers' actions, talks and the use of materials in the play were fixed. The children's solitary play and their joint play with mother were analysed, defining the initiator of the play and creation of play's imaginary situation.

The play stimulation was divided into the promoting one, i.e. mother's encouraging reaction to the play and non - promoting, i.e. mother's reaction that would interrupt or stop the play. The promoting stimulation was divided into three types: verbal promotion, demonstration, and offer of means for the play (see appendix).

Results

In the interviews the mothers emphasised that play is a natural child's activity and no one considered play to be an unimportant or unnecessary activity for the child's life and development. The importance of play was pointed out suggesting that in their play the children reproduce their environment, imitating what they have seen, heard or experienced. One mother (Anna's mother) said that while playing, more and more new moments are introduced into the play. The play is important in the child's development also because in the course of the play all kinds of questions are bound to appear. Play was characterised as a means of learning and a way of preparing for school. It was thought that a certain play is good, because in that way the child quickly, easily and in a playful manner learns to count or familiarize herself with letters. For example, Kalev's mother said that the letter game is good and important because letters can be learnt and practiced in it. Nele's mother emphasized that

board games were especially good, because they develop the child's logical and strategic thinking in every respect, and that games give something concrete for the learning of the child.

The mothers' opinions on joint playing were different. First, it was thought that the child is so big already and can manage himself/herself. Earlier, when the child was small, it was necessary to play together, because the child could not initiate play by himself/herself and did not manage. On the other hand, the mothers said that the children love playing with their mothers and joint playing is a fine activity, indeed. If the mothers happened to have time, they did play together. Mothers told that children asked them to watch their plays or came themselves to their mothers to show the play. When there are several children in the family, the mothers do not consider joint playing important. But all the mothers said that conflicts and problems constantly emerge between children of different age (e.g., because of different play ideas, arguments because of toys).

It was found that all children played altogether 16 **solitary games** and these lasted altogether 6 hours and 29 minutes. 15 plays out of 16 were pretend games and children played these games 6 hours and 12 minutes. Thus, solitary plays formed nearly 13 % from the total video recording time of five children (50 hours). When the child played alone in the play corner, the mother was usually either pottering about in the kitchen, reading a paper, mending clothes, etc. The children themselves initiated the games and they did it in various ways. For example, they told what they are going to do: "I'll start playing with a cooker" or "I am going to make tickets." Some children went quietly to their play corner, found their toys and started playing. The content of the children's solitary plays was often one-sided and consisted of repeated stereotype actions with objects, for example, the piling of objects from one place into another in the cooking play. The children usually acted out their play scripts in object-role manner.

Only one child, Neeme, invited the mother to play. But the mother was talking on the phone and did not go to play with him. Most of all the children addressed their mothers to get help. For example, they wanted their mothers to help them to disassemble Lego bricks, or they wanted various materials for their play – pillows for dolls to lay their heads on, a bowl for putting food in it. The children also wanted to show a material made in the play, to receive a confirmation-support for their play idea or just to see what the mother was doing in the kitchen. Mothers, in their turn, showed little interest in children's solitary games and what was going on in the play.

The mother's stimulation of the child's solitary game

Most of all there was promoting stimulation (181 cases), which foremost involved verbal stimulation (162), then non-verbal promoting stimulation (19 cases). Also the non-promoting stimulation (14 cases) was discovered. Promoting stimulation included the following (see Table 1):

Table 1. The mothers' stimulation the child's solitary play

Questions	70
Explanations	40
Support	29
Suggestion	12
Order	11
Labeling	0
Offering a material	18
Demonstration	1
Total	181

These results showed that the majority of verbal stimulation was in a form of *question* (70).

The questions asked by the mothers to their children can be divided into two classes. A larger amount (2/3) of the questions was indirectly connected with the play, but a smaller amount (1/3) of questions was connected with the play more directly. In case of indirect questions, the mother showed general interest in the child's activity or, for example, asked what colour straw the child would like to have in his/her play, or she expressed a hope that the child would not drink a dangerous drink. The direct questions showed the greater interest of mothers in their children's play (theme and content), they wanted to know what the material in the play will be used for, how it is possible to play – act with the material selected by the child. For example, it was asked: "Where can I get with those tickets? Whom are you cooking for today?"

As an element of the verbal stimulation the *explanations* (40) were also used to justify why the child could not use a certain object in his/her play or which toy could be involved in the child's play. For example, to Toomas's request to get a bowl, the mother explained why one bowl could not suit (could be broken, the other one is wet). Or in Anna's play the mother explained that the liquid (magic potion) must not be drunk, as it was poisonous.

Toomas' mother, who continued the play situation initiated by Toomas, explained it in a very playful way. The mother imagined as if she has become wet and how good and pleasant it was, but after that the water became colder and finally hot again. Toomas wanted to continue the play, but the mother invited him to eat.

Table 1 shows that there were 29 cases of mother's *support* for the children's solitary games. The children often came to their mothers themselves in order to show and explain what they have done in their play or they invited their mothers to see their play corner or game and toys. The mothers supported the constructions built by their children: "Well done!" "Fine!" "Great!" Support could also be brief: "Ahaa", "mmh", "fine," "great." With the help of *suggestion* (12) the mothers tried to help their children, when they were in deadlock or could not continue their games. They suggested either building something else or making more "money" in the ticket game. The children usually accepted their mothers' suggestions.

In Nele's cooking episode the mother participated in a playful way. Nele wanted to lift the lid from the pot, which was on the cooker. She exclaimed frightened: "Oh, hot!" Mother, who was busy in the kitchen, said to her: "You must take

a potholder. You can't do it with a bare hand...!" Nele quickly took a potholder.

There were 11 *orders* announced by the mothers. They asked the child to show something or do something. Generally, all the children accepted mothers' directions. In solitary games there were also an *offering of material* – mothers did it 18 times. The mothers offered different materials (a straw, a cup, snail shells, pillows, Lego blocks). They often did not ask why the children wanted a certain material and what the children would do with a means they asked for. There were also cases when the child would not accept the objects offered by the mother. For example, Neeme addressed his mother in order to get "müriks". The mother took one piece of Lego and said: "Take it, it is a robot." Neeme replied to his mother: "No, it is a sword, a magic sword". *Non-promoting* mother's reactions were also traced (14 cases). It was mostly connected to the correction of the child's behaviour (don't shout so loud), the correction of speech or drawing attention to tidying up the toys.

31 plays were played by **the children** with their mothers, which lasted five hours and 27 minutes. Among them there were eight pretend games, which were played by three children (Nele and Toomas did not play any pretend plays with their mothers). This pretend play lasted two hours and 25 minutes and made nearly 5 % from the total video recording time. The plays were initiated by children seven times and once by mothers. When mothers suggested that the child would play with smaller sisters or brothers, the children did not agree. If the play was interrupted for some reason, it was always the child who wanted to continue it.

The players and mothers applied different roles: waiter/waitress, shop assistant, builder, police officer, etc. The children and mothers in their pretend plays were acting according to the role and joint play scripts were acted out both as the object and social role-play. The main content in joint plays was the relationships with another player and the roles were clearly differentiated and defined. There were different actions in the play, for example, addressing the play partner according to the play partner's role.

For example, in the café play, Anna - waitress asked her mother - customer: "What would you like?" Having heard the answer, Anna pours "coffee" into the cup from the coffeepot and asks: "Sugar too, don't you want it?"

The play scripts were mostly connected to the players' social interaction.

Total number of play stimulation reached 533. It involved more promoting stimulation, which in its turn included most of all verbal stimulation – 511, offering objects – 11, demonstration - 1 (see Table 2) and non-promoting stimulation – 10.

Table 2. The mother's play stimulation in the joint play

Questions	170
Explanations	141
Support	112
Suggestions	52
Direction	31
Labeling	5
Offering objects	11
Demonstration	1
Total	523

Analysis of mother-child's plays showed that most of all the mothers ask their children *questions* (170). The questions asked by mothers in the joint plays can be divided in two classes: the questions connected to the organisation of the play when the course of the play is fixed, roles are allocated, and the questions connected to continuity of the imaginary situation in a play. The mother's questions made the children, in addition to the creation of new script, also change their roles. For example, the mother's question - where is the shop assistant? - was the basis for Neeme's wish to take a new role as a shop assistant of a car shop. The mother's questions in the Café play were the basis for acting out the play script more precisely and deeply, e.g., not only coffee was asked, but also coffee with sugar and milk, not only cake was asked for, but cheese, apple, and strawberry cake. The questions asked by mothers were related to the play, which was taking place, they helped to preserve the pretend in the play and to carry it on. The children accepted and elaborated the mother's questions. Table 2 shows that there were altogether 141 *explanations*. The mothers explained how to play on and why to play on in that particular way. They explained what the person does, how he/she acts and speaks. The explanations were usually short, one or two sentences, and after the mother's explanation the play continued. Often the child hooked on the mother's explanation immediately. The mothers often explained general themes connected to the play. Such explanations were frequent when children played together with their siblings, e.g., the mother explained how to play, so that the little sister would not get hurt or that the child cannot feel insulted when the little sister wants to take away a toy. The children often asked the questions either connected to the play or not directly connected to the play, but still important for them.

There are various kinds of mother's *support* (112) in the joint plays. They are often the mother's verbal confirmations of the child's question whether he/she has said or acted in the right way. Such kind of support was brief: "Mmm", "yeah", "right", "well", "I see". Nodding or glance accompanied the short verbal support, e.g., Neeme said to his mother: "See, how brave I am! Marek, see, how brave I am!" Mother: "Ach, really you are!"

It has been already described how mothers create a play world together with their children and also the fact that the children do not always accept their mother's *suggestions* - 52. It applies both to the creation of play scripts and also to the play materials offered by the mother. The mother's suggestions had to be thoroughly grounded by them; only then they were accepted by the child. In the pretend play directions (31) were connected to what to say or to do in the play, e.g., the mother said: "I found more treasure. Take it there!" There were not a lot of directions that were connected to the play. They were mainly remarks on how to play (e.g., don't shout, don't take that thing, etc.). In the joint play were a lot of directions when the children played together with their siblings. *Non-promoting* (10) stimulation has already been briefly analysed before. On several occasions the mothers asked questions during the play, which were not at all connected to the play (e.g., whether the child was hungry, whether he/she was cold).

Discussion

All the mothers considered play to be an important factor in children's development. In current study the mothers expressed the thoughts, which coincide with the ideas

of Vygotsky (1966), Elkonin (1999), according to which the children in their plays reflect the social environment, what they have seen, heard or experienced. Play is important because it allows children to try themselves in the new role. All the mothers considered play very essential in teaching the child and preparing him/her for school. It turned out from the present study that mothers did not consider joint playing very important. If the child invited, then the mother would go, although she did not always really wanted it nor had any time either. But all the mothers found that their children love playing together with them and joint play is a fine activity indeed.

The present study showed that all the children played alone predominantly a pretend play which they initiated by themselves. But while playing together with the mother, only three children played the pretend play. The results indicate that the children play alone on the lower play level (object role-play) than playing together with their mother (social role-play). In the child-mother's joint play, language and imagination have a great role and play script is acted out more profoundly. These findings are consistent with previous studies, according to which the children's plays are more developed and varied while playing together with their mothers (e.g., Slade, 1987; Fiese, 1990; Fein & Fryer, 1995).

Analysis of child-mother joint play revealed that playing together with their mother at home the children did not play enough a game, which is important for the child's development - namely, pretend play. According to cultural-historical theory the pretend (role) play is the leading activity at preschool age and has a key role in the child's development. On the other hand, all the mothers played with their children other games – board games, verbal or physical games. The study tells the teachers more about the children's play at home and support of the family in solving educational problems. The present study also adds to the teachers' knowledge about the mothers' understanding of play. It turned out from the ways of mothers' stimulation that, while playing together with the child, the mothers used verbal stimulation. In joint plays questions were the most numerous. The mother's questions improved the quality of the play scripts and also helped to bring the new roles into the play. The most frequent use of the questions by the mothers in stimulating the children's plays coincided with several earlier studies (Lisina, 1985; Novosjolova, 1989; Haight & Miller, 1993).

In the future the studies need to be focused systematically on the investigation of cultural context where child-mother pretend play occurs (for example, to examine child's physical and social environment and play).

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Appendix

- Verbal stimulation was divided into subsections:
 - Suggestion*. For example, the mother says to her child: Let's start playing the shop. You will be a buyer in the play and I will be a seller!
 - Labeling*. The mother takes a Lego and says: Lego man will be a security man, who will be keeping order.

Question. For example, the mother addresses her child and says: Butterfly, where are you flying?

Explanation. For example, the mother explains, how to spell a word in a play.

Order. For example, mother says to her son: Well, sing a butterfly song!

Support. The child has built a big house from Lego and addresses the mother: Look, what a big house! The mother replies: Yes, it is a big house. Such reaction as: mm-mm, ahhaa, yes, belongs to the supporting stimulation.

2. *Demonstration.* For example, the mother shows how to make “salad” in a café play or how a “repair man” must mend a roof.
3. *Offering play materials.* For example, the mother gives a dinosaur that comes to be a guard to the house.

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