

Faculty of Education
Palacký University
Olomouc

IV/2015

e-PEDAGOGIUM

An independent scientific journal
for interdisciplinary research
in pedagogy

ISSN 1213-7758

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The e-Pedagogium journal is listed
in "The List of Peer-Reviewed Non-impact Periodicals"
approved by the Research and Development Council on January 31, 2014.

On-line journal site: <http://www.upol.cz/fakulty/pdf/e-pedagogium/>

This publication was not subjected to editorial revision.
Each author is responsible for correctness of content.

All contributions were reviewed. Each contribution was reviewed by two reviewers.
Names of the reviewers will be published in the last issue of given volume of the journal.

ISSN 1213-7758	printed version
ISSN 1213-7499	electronic version

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ONDŘEJ JEŠINA, TOMÁŠ VYHLÍDAL

Introduction

Dear readers,

similarly to a pilgrim going his own way, as mentioned in the introductory essay by Patricia Huion, we try to find our own and original way to describe the reality of education. In this closing issue of our 2015 journal edition, the editors have tried to select articles dealing with current topics and problems often being a subject of discussion of contemporary form of education. Also, the selected articles provide readers with reflection of the possibilities for teachers to diversify and enrich teaching practice at schools.

The development of soft skills and basic literacy through non-traditional methods is the main concern of this issue, as presented by Patricia Huion who refers to the legacy of Comenius education. In her article, Chinese author Lijuan Zhang discusses the importance and educational value of historical visual materials by giving an example of Confucius' teachings in which she analysed selection and application of historical visual materials in History textbooks. In the next article, another Chinese author Danping Peng discusses the nature of educational leadership and proposes a comparative study of activities of school principals in China and the Czech Republic and the determinants that affect educational mentoring.

Apart from school education, the authors address problems present in social education and social work. For example, the authors Adriana Wiegerová and Dana Hamplová deal with the pitfalls of alternate childcare in the families with divorced parents and the impact of this model on pre-school children. Also, they present the results of their qualitative research.

The article by Adéla Antlová must be mentioned too, as it focuses on the possibilities and potential of education, as well as the piece by Andrea Rozkovcová and Magda Nišpanská dedicated to personal and professional growth of starting teachers at elementary schools with strong linkage to Covey's professional habits.

The article by Jana Škrabánková and Eva Trnová deserves readers' attention too, as the authors present a modern diagnostic method 'Eye Tracking' based on the observations of human eyeballs' movements. This method can help to analyse the way talented pupils perceive texts and visuals. The pilot study verifies whether it would be possible to

use the 'Eye Tracking' method as an experimental one in educational and psychological research of gifted students.

The editors will continue with the efforts to prepare interesting and contemporary articles, of both domestic and foreign origin, and thus contribute to the expansion of the current range of knowledge of education.

Editors

Articles

If Comenius: a Traveler's Journey towards Storifying Heritage Learning

Patricia Huion

Abstract

The article describes the unusual possibilities for the development of basic literacy and soft skills. Through storytelling, students are aware of their feelings and possibilities for their further personal development. The author mentions the seven steps for digital storytelling, other procedures for the story's preparation and refers to the theory of social constructivism.

Key words: Storytelling, soft skills, education, literacy, heritage, digital storytelling.

Introduction

Imagine you set off on a boat. The weather is fine, the engine is humming, the maps are clear and the destiny is defined. You know what is expected of you and you know you are heading for success. Unfortunately a medium happens and all at once you find yourself on a forgotten island with a storm-battered boat at the shore and a tiny dwelling at the top of the mountain. You start climbing. You often lose your footing but you finally reach the cottage which proves to be one of those small eco-friendly houses. You're curious. You enter. The door locks behind you. You are almost panicking but you can still see your tiny boat and the beautiful landscape in between. So you look

around and discover a computer. It can be switched on which frankly baffles you but you decide not to ask questions at this stage in the story. Three maps are on its desktop. One is flickering continuously. Now you know better than to click on that one. The other two are labeled “Storified Heritage Learning” and “Soft Skills”. You click on the first one.

A window opens onto the Aqueduct project (502572-LLP-1-2009-1-BE-COMENIUS-CMP) showing the definition of heritage following the Council of Europe and Unesco: “heritage offers the opportunity to learners to engage in experiences that make them learn” (Aqueduct, 15). (1) (<http://portal.unesco.org>)

You cannot help yourself wondering whether there are experiences that do not make you learn. But you decide to read on:

“Exploring these (views and habits) and analyzing them across and beyond the borders of Europe may add to the mutual understanding of existing, and to the development of new rituals, norms, habits, traditions, values as well as more basic and practical ways of fulfilling our roles as citizens in our societies” (Aqueduct, 16).

You are happy to find a graphic representation of the definition of heritage education and its extending definitions (Aqueduct, p. 14).

Castles Monuments Monasteries Industrial buildings Collections Sites	T A N G I B L E	Parks Agricultural sites Trees Woods Habitats Seas, lakes, rivers
CULTURAL		NATURAL
Traditions Expressions Rituals Skills Convictions Beliefs	I N T A N G I B L E	Natural processes Climate Smells Phenomena Atmospheres Light/sound

And while you try to find some examples of heritage in your country of departure, the tiny boat below draws your attention. And you wonder whether it will ever be of “outstanding universal value from the point of view of history, art or science”, or “from an aesthetic, ethnological or anthropological point of view”? Will it ever have “an added instrumental value to achieve other societal goals such as a healthy and inspiring environment which serves people’s well being and adds to the quality of cultural life and the human processes which are part of it, such as learning, developing, communicating”? And will it ever strengthen “social cohesion, intercultural and intergenerational understanding”? (Aquaduct, 14, 15). You hope it might, not on its own perhaps but probably as part of a fleet, embracing little boats coming from everywhere.

You realise you are getting distracted so you click on this blue link “ways to proceed”.

A new window opens showing the storytelling approach:

Make an inventory of the current experience & knowledge of the learners	Storyline approach: Steve Bell, Sallie Harkness and Fred Rendell at Jordanhill College of education in Glasgow, Scotland
Choose a story	
Seek links with school curriculum & key competences	
Decide upon key questions or an assignment related to the story	“we consider the storyline approach to be the one which meets most of the criteria relevant to competence based heritage education” (Aquaduct, 23)
Design the learning process using the storyline format: storyline, key questions, activities, organisation, material & outcome	
Write down, compose, copy the storyline	
Elaborate key questions & supplementary questions	
Organise activities, make a timeline	
Choose objects, sources, design materials, documentation, audiovisuals	
Describe intended outcomes & identify an elaborate assessment tools	
	You can find the complete description in Aquaduct p. 24

And although you really hate hypertexts you do click on the blue assignment link as you are fully aware you are supposed to be obedient by nature and traditionalist by professional community.

“Also keep in mind that telling stories that are both personal and academic is an exciting academic frontier that most certainly will develop in the coming years” (Ohler, 28).

You might find yourself rereading this sentence. Perhaps you feel like raising your eyebrows. But there are no blues anymore so you decide to open the next map “Soft Skills”.

The first window opens and shares a definition from Oxford Advanced Learner's Dictionary:

Soft Skills
personal qualities that enable you to communicate well with other people
<i>Candidates should demonstrate soft skills, such as team work, enthusiasm and emotional intelligence</i>

By now you are probably a tiny bit bewildered. You find it very hard to connect to this. You also realise you have not gone upstairs and now you wonder whether there are other people in the house or on the island. But there is this blue link and you decide to visit the next window first (/2/ <https://bemycareercoach.com/soft-skills/list-soft-skills.html>line Journal):

Self-management	People's skills
persistence & perseverance	communication skills
self-awareness	teamwork skills
patience	interpersonal relationship skills
perceptiveness	presentation skills
stress management	meeting management skills
self-knowledge	facilitating skills
resilience	selling skills
forgive and forget	management skills
growth mindset	leadership skills
emotion regulation	mentorship skills

You feel this list is a possible definition of the key concepts in the Oxford Dictionary but you still do not have a clue where you are going to. So you click on the final link in this map to find another table:

Prepare a story workshop linking storified heritage education to soft skills using the seven steps of digital storytelling (Lambert, 2010)
Own your own insights
Own your own emotions
Find the moment
See your story
Hear your story
Assemble your story
Share your story

You might realise you are not sitting in your library. You might read some of your books on Icloud. Or you might “prefer it this way, confronting something and not quite knowing yet what it is” (Calvino, p. 9).

As a consequence you might experience fear. You may calm yourself down connecting to “the anxiety of influence” which is the writers’ fear not to find their own voice and remain copycats of their forefathers (Bloom, 1972); or you might even recall the plight of nineteenth century female writers struggling with “the anxiety of authorship” wondering whether it is even acceptable for women to become writers (Gilbert and Gubar, 1978); or you can think about the “overloaded memory bank”, “the editor” or “the good consumer habit” which are today’s storyteller’s stumbling blocks (Lambert, 2010). You feel relieved you are not the only one to experience this writer’s block.

1 Owning your own insights

Now you find yourself choosing from many insights which can be linked to the Olomouc challenge. Some are too personal; others are too banal and yet others may not seem researched enough. And you might want to reflect on your unlearn trajectory disconnecting from the informal ways of learning through grandparents’ stories, the fairy tales being read, one’s own library explorations. And you might want to consider that “stories might become the metaphor of our times of constant conflict resolutions” (Ohler, 2013). You might want to connect to deep learning which is being “willing to integrate it into her existing body of previous ideas, and understandings, reconsidering and altering her understandings if necessary. The new ideas are ‘filed’ carefully and integrated” (Moon, 2001). Finally you might want to connect storytelling and deep learning:

Link between reflective learning and storytelling (McDrury, J., Alterio, M. 2003) p. 47	
Reflective learning (Moons, 1999)	Learning through Storytelling (McDrury & Alterio, 2003)
Noticing	Story finding
Making sense	Story telling
Making meaning	Story expanding
Working with meaning	Story processing
Transformative learning	Story reconstructing

So now you know which one to select. It has a strong relevance for today’s society characterised by “information overload and conflicting perspectives” (Ohler, 2013), “distance learning and blended learning environments” (Frazel, 2010) and a need for deep learning (Moon, 1999).

You take a deep breath and formulate your insight: education should become a story space where both learners and educators learn through storytelling as reflecting. Due to the Internet which stores all information, we need more storytelling to connect these data.

2 Finding the moment

You time-travel through your personal history to pinpoint the moments when this concept of storytelling as deep learning tool emerged. You did learn, of course, about Aristotle and his concept of story as the only valid representation of ideas in action. You have also been teaching about narratives in different media quoting McLuhan, Ong, Janet Murray, Bolter & Grusin, Ryan, 2004 to create this table from a media perspective.

oral	print	digital
Right side of the brain	Left side of the brain	Right side of the brain (McLuhan)
Acoustic space	Vision: reading linearly	Hyperlinked space (Murray)
All senses create information: artistic, holistic, metaphorical, or musical types of imagination	Logical, abstract, and controlled thought	All senses: immersive
Use stories of human action to store, organize, and communicate much of what they know (Ong, 140)	Drama, novel	Platform of stories
Multiform: each performance creates a different plot within a frame (Murray)	A crafted structure: Freytag Triangle	Remediation (Bolter & Grusin)

And you have researched how reading groups read novels as equipment for living (Burke, 1969): novels offer a lens to look through and thus help you decide how to act.

Yet after careful reflection you realise there is one dominant thinker who gave you the courage to formulate and validate your insight: the centenarian Jerome Bruner. Bruner argued that there were two modes of thinking. The paradigmatic mode uses causality to explain human experiences. Its logical statements are verifiable. The narrative mode, on the other hand creates meanings through stories creating verisimilitude.

And then you remember reading Sontag's approach:

"There is an essential – as I see it – distinction between *stories*, on the one hand, which have, as their goal, an end, completeness, closure, and, on the other hand, *information*, which is always, by definition, partial, incomplete, fragmentary" (Sontag, 223).

You remember how she explained how time existed so that everything does not happen at once and space existed so that everything does not happen to you. For Sontag "to tell a story is to say: *this* is the important story. It is to reduce the spread and simultaneity of everything to something linear, a path." (Sontag, 225).

And you remember how you defined Moon's definition of reflection as a story:

"Reflection is a form of mental processing – like a form of thinking – that we use to fulfil a purpose or to achieve some anticipated outcome. It is applied to relatively complicated or unstructured ideas for which there is not an obvious solution and is largely based on the further processing of knowledge and understanding and possibly emotions that we already possess" (based on Moon, 1999).

And you remember thinking how you both as a teacher as well as a learner, could use storytelling to create this path for deeper learning.

3 Owning your own emotions

You do not have to think for a very long time about the emotional layer of your workshop: stories for learning create flow. Csikszentmihalyi describes flow as "being completely involved in an activity for its own sake. The ego falls away. Time flies. Every action, movement, and thought follows inevitably from the previous one, like playing jazz. Your whole being is involved, and you're using your skills to the utmost." (3) (<http://www.brainchannels.com/thinker/mihaly.html>). To create flow you need tasks which are both challenging and feasible.

You use Rory's story cubes to initiate the journey from logical-analytical to narrative thinking and to bypass any fears of incapability. At the same time the cubes allow you to explain the major difference between a lesson plan and a story because in stories the unexpected is expected.

You adopt the constructivist paradigm of learning and stick post-its to the surrounding walls, rules of thumbs for creating stories on heritage. And just to make sure you add a description of story:

Scene: time and place	Narrative according to Burke (Bruner, 2004)
Agent: individual or group	
Act: what causes the story to move forward?	friction
Agency: what are the "powers" of the Agents that allow them to act?	
Purpose: why do Agents act in this scene?	

You might want to elaborate on the Act or plot. You might want to include surprise and new information that "causes tension or cognitive dissonance" either between "what you expect, and what happens" or between "what is already known and the new information" (Moon, 2010).

You allow your storytellers to choose the order in story, heritage and story approach thus stressing again the unpredictability within stories.

To create their stories the Voices teachers' soft skills will be tapped into. They have to team-up, communicate with each other, connect with each other, sell their idea, meet about creating the group story, deciding who will tell it and how it will be told.

As they only get a limited amount of time their stress management, growth mindset and forgive and forget attitude will be tested. You want them to experience self-confidence while embracing a new method; excitement and anxiety at the same time while trying something new and risking making mistakes. You want them to be the hero of their story of resilience embracing a new approach to enhance their practice rather than blaming the system or media for anything that might go wrong wrong.

3.1 Seeing your story

While trying to see this workshop teacher's narratives might come to mind: from *The Breakfast Club*, to *Teacher Man*, from *Dead Poet Society* to *Monsieur Lazhar*, from *Detached* to the TV-series *Rita*.

But you opt for a story space rather than a school or classroom. A story space is "calm, with as little background noise (television, radio, other conversation) as possible; circular, so that the speaker and listeners can see each other, with space in the center where the words may come to rest" (Baldwin, 45). You can envision a talking stick and people taking turns in telling the story. You can see applauding people sharing their joy of having been given a story.

As Jan Blake (2012) explains storytelling is not a spectator's sport but it is about creating a story together. It is about community. So you might see a cosy room with warm colours and comfortable chairs. And just to be sure that we stay out of the academic debate we might place some "light (candles) and significant objects in the middle to remind us we are setting our words down in neutral space. Nobody has to pick them up; we can listen without having to agree" (Baldwin, 47).

3.2 Hearing your story

You might focus on the voice of a storycatcher. "Storycatchers become the librarian, taking care of the stories that are already there, adding stories to the shelves, and ensuring that the stories remain available for the future" (Baldwin, 71). Storycatchers make us "conscious of the story just beneath the surface of our talk and invite us to speak it" (Baldwin, 30).

Or you might focus on the buzz of conversation, "no opinions, just story; no attempts to change minds, just listening" (Baldwin, 46). This platform of stories might be your favourite soundtrack to convey the feeling of connectedness.

3.3 Assembling your story

In assembling your story you might want to experience the workshop from your Voices' teachers' perspective. There will be activists who prefer doing and experiencing something new. So you leave out strict criteria and only share rule of thumbs for them to tinker with. There will be reflectors who prefer to observe and reflect. So you create team activities in which not everybody has to have an active role and you end with a reflective moment. What allowed me to start? Other suggestions? What made me continue? Other inspirations? What is new? New questions? What is challenging? There will be theorists who want to understand reasons, concepts and relationships. So you make sure your theoretical concepts are clear and you send them the Aqueduct manual. You even share the Tales manual for more theoretical approaches on stories for learning. There will be pragmatists who like trying out things and seeing whether they work. So you focus on clearly defined activities and as much of learner time to do the activities as possible (based on Honey and Mumfordt in Aqueduct, 2011).

But above all you adopt an upbeat pace to allow the New European Teachers to experience flow.

3.4 Sharing your story

Now that you might want to save your document, you might be tempted to open the flickering map on your desktop. Perhaps you could save your copy first on the memory stick you happen to have brought along.

You click with excitement and trepidation on the map. It reads "Omnes omnia omnino, J. A. Comenius". You probably might have to look up what this example of intangible heritage means.

You read about the terrible life of this 17th century refugee who managed to create a didactics of inclusive education: everybody should be able to learn everything in a thorough way both inside and outside school during all stages of their life. You might think I should have a picture of Comenius in my story space.

Then you continue reading:

"Let the main object of our Didactic, be as follows: to seek and to find a method of instruction, by which teachers may teach less, but learners may learn more; by which schools may be the scene of less noise, aversion, and useless labor, but of more leisure, enjoyment, and solid progress" (Comenius, 1961; therefore see the reprint in: Keatinge, 1907/2012).

And you might think it a good idea to include this in your finding-the-moment trajectory.

And then, then there is this passage:

"Everything is presented to all the sensations as much as possible: the visual phenomena to the sight, the sounds to ear, the smells to nose, the tastes to tongue, the tangible phenomena to the touch. If something can be perceived by more senses, let it be that way. Nothing is in the mind that hasn't been sensed before." (Comenius, 1658).

And you know you have to include it into your insight as it is about deep learning, about story and about the extended definition of heritage as having a value of its own but also as being a tool that allows us to increase the quality of our life in general and of learning in particular.

Now it is time to look up. You have saved your document and even sent it to your friend in Olomouc. You have to go. Perhaps you want to have a lie down or freshen up a tiny bit. You climb the stairs to discover another window showing a new harbour. You are not sure of what you are seeing. Are they using boats or trains or tiny planes? But you do see there are a lot of people arriving and leaving. And you can see there is a lot going on. So you rush down, switch off the computer, and look through the peephole. The door opens and you enjoy the fresh air, the earthly scent of the ferns, the warmth on your skin, the wind through your hair.

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Acknowledgement

The Article is dedicated to Project The VOICE of European TeacherS (VOICES), 526613-LLP-2012-NL-Comenius-CNW.

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The Selection and Ues of Image Historical Materials in History Textbook: Take the Example of *The Picture of Confucius Teaching*

Lijuan Zhang

Abstract

The image historical materials have the vital historical and teaching value. This paper took the example of *The Picture of Confucius Teaching*, analyzed a teaching practice about the selection and use of image historical materials in history textbooks. It is agreed that before the invention of photographic technic, most of the image historical materials are the author's imaginations. The students' interpretations of *The Picture of Confucius Teaching* were not the simple picture interpretations, but rather were their own previous experience reflection. When textbook editors and teachers selected the image historical materials, they should understand what the images want to transfer, studied and estimated seriously what the images reflected. If the images distorted, misrepresented the original history, we must select and use it carefully.

Key words: the Image Historical Materials, the Selection and Use of Imges, the Picture of Confucius Teaching.

Introduction

Image historical materials can be called audio-visual historical materials, which included maps, pictures, paintings, photographs, statue, relics, film and television etc. (Shen Minhua, 2005, 109). From the source, image historical materials can also be divided into primary images and reproductive images. Primary images enjoy a higher degree of authenticity. The reproductive images were created by authors' imagination and experience, due to the subjective and objective reasons, there existed a gap between the images and reality.

1 The Value of Image Historical Materials

Images have the vital historical and teaching value. Images themselves also are history, which recorded history from the different angles. Images can be used as historical evidence (Peter Burke, 2009, 1), supplement history (Chen Zhongdan, 2013, 65), makes the history more clearly and vividly (Qian Huizhen, 2011, 177–180). Images have the vital historical values. The unearthed Qin Terracotta Warriors and Horses in Xi'an proved what Sima Qian said in *Historical Records* was true. For a very long time, ancient Sichuan was considered as wild places, but the historical relics of Sanxingdui and Jinsha proved that ancient Sichuan enjoyed a high level of civilization, and also was one of the birthplaces of Chinese civilization. There are many beautiful words described olive green porcelain, such as their color looked like green lake, glittering and translucent moist as a jade, only the Royal can use it. People are very curious about what the mysterious porcelain look like. Until the Xi'an Famen Temple cultural relics unearthed, can people believed that the olive green porcelain really existed, the relics supplement with the words, made the history more clearly and vividly.

Images can also be served as political tools, such as the famous photos *The Vulture and the Little Girl* (also called *Hungry Sudan*), and *The Running Children in Vietnam War*. Both of the two pictures won the Pulitzer News Prize. In 1993, Sudan broke out a war, many people died of famine. A bony girl was so hungry, she will die down. behind her a also hungry vulture was waiting for the girl to die and to eat her. The photo was published in The New York Times in March of 1993, and sparked a wide reaction. *The Running Children in Vietnam War* was chosen as the World Press Photo of the Year for 1972. It communicated the horrors of the Vietnam War in a way words could never describe, people took this photo as a turning point of public attitudes (Kiku Adatto, 2015, 101). The publication of the photo urged the United States to end one of the most divisive wars in American history. People evaluated the photographer Huynh Cong Ut helping to end the Vietnam War earlier.

Images also have vital teaching value. Using images can attract students' attention, improve learning interesting, make the boring and difficult content become more vividly(Li Chunxia,2011, 6–9).Teachers can use images to cultivate students' abilities of observation, imagination, understanding and appreciation of the beauty (Huang Mhang, 2001, 27). Teacher also can use images to cultivate students' consciousness of scientific historical inquiry, make students' emotional resonance (ZhangJian, 2009, 2–19).

2 A Teaching Practice about The use of Image Historical Materials

Teaching content: A Hundred Schools of Thought Contend and the Formation of Confucianism

Teaching method: discussion in-group

Teaching task: which thoughts and historical contributions of Confucius *The Picture of Confucius Teaching* reflected?

Figure 1

The Picture of Confucius Teaching



There is a picture in a text of *A Hundred Schools of Thought Contend and the Formation of Confucianism* in an upper secondary school. When a teacher named Shen Weihui taught the lesson, he didn't know how to teach students this picture. So at first he looked up the information from many books, Internet, libraries, but failed. Finally he consulted a professor from history department of Nanjing Normal University. Professor Zhang told him this picture's author is a painter of Ming dynasty, but no caption. He advised teacher Shen let the students find the answers by themselves. Inspired by what professor Zhang said, teacher Shen gave the pupils a task: which thoughts and historical contributions of Confucius *The Picture of Confucius Teaching* reflected? Please discuss this question and submit the answers in-group. After a heated discussion, students submitted their answers, as follows:

Table 1
Students' Answers (positive view)

Number	Students' Answers
1	Students respected teacher
2	Confucius' teaching focused on communication and discussion
3	The relationship between teacher and students was harmonious
4	Teaching out doors
5	Provided education for all social classes
6	Teaching in accordance with students' aptitude
7	Look up to men and down on women, women had no right to be educated
8	The happy learning of quality education
9	No classroom, this was a private school

Teacher Shen reported students' answers to professor Zhang, after revised by professor Zhang, teacher Shen made such a conclusion: *The Picture of Confucius Teaching* reflected Confucius' educational thoughts and historical contributions, such as Confucius founded a private school, teaching learners without division of classes, outdoor teaching, ritual culture, the harmonious teachers and students relations (Shen Weihui, 2007, pp. 38). This teaching practice once served as a masterpiece of exploiting image historical materials, many secondary school history teachers learned from it, and many experts praised it (Chen Yadong, 2007, pp. 39–40).

But there were some other secondary school teachers did the same experiment in their own classroom (Liuqiang, 2010, 78). Some of their students' answers were very different with others, as follows:

Table 2
Students' Answers (negative view)

Number	Students' Answers
1	The relationship between teacher and students was unequal
2	The learning atmosphere was very depressing
3	Confucius expounded his idea mechanically

They told their teachers that Confucius sat in the middle of the students, his position was higher than others, the disciples sitting around him. It seemed that the relationship between teacher and pupils was unequal. There was a student absent-mindedness in class, his attention was not centralized. His face toward the other students instead of Confucius. The learning atmosphere was very depressing, no discussion, no debate. Confucius only was a boring preacher.

3 The Misapplication of Image Historical Materials and Application Notice

Why there existed such huge difference? There are three questions we should consider: Does the picture really reflected Confucius' thoughts? Were the students' interpretations the reflection of their own previous experience or purely the illustration of the picture? If picture distorted the real history, can and how we use it in teaching?

It is well known that before the invention of photographic technic, most of the image historical materials were the author's imagination. According to their own experience, educational background and the previous documents, the authors produced such images. Absolutely, these were not the accurate images of the historical reality.

Li-Xue ideology was very prevalent in Ming dynasty, The imperial examinations focused on learning by rote. The scene of relationship between teacher and pupils was unequal and the learning atmosphere was depressing described in *The Picture of Confucius Teaching* more tally with the actual situation of Ming dynasty. The painter gave Confucius' teaching the educational characteristic of Ming dynasty.

There existed some distorted facts in the details of *The Picture of Confucius Teaching*, which reflected the actual education of Ming dynasty, but not Confucius' educational thoughts. These images were some kind of understanding of history, which including authors' imagination, absolutely not the actual historical original features. The students' interpretations of *The Picture of Confucius Teaching* were not the simple picture interpretations, but rather were their own previous experience reflection. Although this imagination more or less based on the historical records, however, in general, these imaginations cannot be used as historical data directly. And *the picture of Confucius*

teaching is no exception. When we research Confucius thoughts and achievement, *the picture of Confucius teaching* only can be served as secondary source.

Similarly, when a teacher taught students the urban economy of the northern Song dynasty, he used a famous Chinese painting *Qingming Festival* in his teaching (Ji Lianhai, 2009, pp. 22–28). But there are many versions of this painting, the Qing version of this painting is very different with northern Song version, which reflected the Qing dynasty's urban economy, rather than the Song dynasty, this teacher use Qing versions to teach students urban economy of northern Song dynasty (Zhao Chenyan et al., 2009, 9). Obviously, This was another typical misapplication of image historical materials.

Views come from historical material, and history comes from evidence, which are the unique characteristic of history discipline (Xu Jinchao, 2008, 45). The cultivation of historical thinking abilities, the acquired of historical experience and the formation of students' values depend on the reliable historical fact. The reliable historical fact is the essential characteristics of history teaching. Teacher Shen let students inquired *the picture of Confucius teaching*, students inquired the information about Confucius' thoughts, we can not say there was not the consciousness of historical evidence, but during the teaching and studying process, teacher Shen took the paintings of an unknown painter of Ming dynasty as a reliable historical material to make a study of Confucius' thoughts. The consciousness of historical evidence was more or less vulgarized, and also lack of the sense of historical identification.

It's agreed that although there existed some distorted facts in the details of the images, if the basic historical fact of the images contained is true, we can use them in teaching. But if we want to make rigorous history research, we should consider it carefully. For example, we know in the image of many soldiers with an American flag was posed in the picture of the famous *Battle of Iwo Jima*. But the fact U. S. military occupied Iwo Jima was true, so, when we used this kind of pictures to teach students U. S. military occupied Iwo Jima, we needn't to investigate whether the scene was posed or filmed immediately. On the contrary, due to the influence of political reason, ideology, some pictures totally distorted the fact. We should use them discriminately. For example, some people changed the figure of Zhude joined forces with Mao Zedong into linbiao joined forces with Mao Zedong in the oil painting of *jinggangshan stationed* during the Cultural Revolution. When we are teaching students *Jinggangshan stationed*, we can't use it, but when we are teaching students the Cultural Revolution, we can use this picture to illustrate how politics affected art field.

Conclusion

We can make full use of image historical materials in history teaching, but when we choose the images, we should pay much attention to the authenticity of the selected images. *The Picture of Confucius Teaching* reflected the actual educational situation of

the Ming dynasty, rather than Confucius education thought. So, it's inappropriate for editors and teachers to select *The Picture of Confucius Teaching* to illustrate Confucius thoughts.

What pictures want, is not to be interpreted, decoded, worshipped, smashed, exposed, or demystified by their beholders, or to enthrall their beholders... What pictures want in the last instance, is simply to be asked what they want (Mitchell, 2005, 48). When history teachers use image historical materials to teach students, they should pay attention to the guidance for the students' reading images strategies and the cultivation of students' reading images abilities. When textbook editors selected the image historical materials into history textbooks, they must understand the content of images want to transfer, studied and estimated seriously the truth of content of images reflected. There are the following principles we should focused on, that is, scientific principle, interesting principle, representative principle, pertinence principle, moderate principle, etc. The scientific nature of the images are the most basic principle of the selection of image historical materials. We must consider whether the images conveyed the true, original historical information. At the same time, on the premise of the ensuring the scientific images, we should select the interesting, audio-visual, figurative and vivid images to fully arouse the students' enthusiasm for study, to enlighten students' thought, to enhance interest and vividness in history teaching. Representative principle means when textbook authors select images, facing so many images, they should choose those which can make sure students master the essence of historical knowledge in the shortest possible time. For example, when there exist several images which can show the same historical content, the history textbook editors should select the most persuasive one. Pertinence principle means when we select images, we should consider the important and difficult points of textbook. As for the important content, we can add some pictures to deepen the students'memory. For the difficult points which can not easily express with words, we can use some pictures to provide either supplementary or explanatory information. Moderate principle references to the number of the images in textbooks is not the more the better, too many images maybe a reversal of the order of host and guest, will distract students' attention. Practice has proved that in general, the proportion of the images and text should be controlled between 1 : 1 and 1 : 2.

In conclusion, the selection and use of image historical materials is a promising research field. Paying great attention to the images selection, contrast the pros and cons of different images, exploring the implication of the images, making a study of images teaching, are some solid research work need to be done.

Acknowledgements

This paper is dedicated to the following projects: The research of the value orientation in secondary school history textbooks (15YJC880131), funded by Ministry of Education

of the People's Republic of China; The research of the exploitation and utilization in secondary school history textbooks resources (15ZD007), funded by Sichuan Normal University. IGA_PdF_2015_022 „Popis základních fenoménů vztahu edukace a myšlení v kontextu konstruktivistického vzdělávání učitelů a žáků“

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Power and education

Adéla Antlová

Abstract

In this paper, we raise the question about the position of education in contemporary society, and we try to give an answer to it. We focus on two words: power and education, and we reflect the connection of these two terms from different points of view. At first we contemplate about the different types of power which can be found at school, second we consider the power of education, and third we seek the ways of making education even more powerful. It is a reflection on the potential of education as well as its limits. We also focus on aims which education has to fulfil.

Key words: school education, power, development, aims.

Introduction

What is the position of education in today's society? Can we still consider school education to be the best way of formal learning? We are to answer these questions in the following paper. Formal education plays an important part in our lives. Nevertheless, its position has to be discussed and evaluated. Either parental or school education is a human construct, and that is why it develops together with the development of society. It is possible that one day the power of education will start to weaken. For example today, there is a thread of growing influence of technologies, which have brought changes in education already.

In the past, the power of education was sometimes underestimated, sometimes overestimated. What do we say about the power of education today? Is it possible for children to develop without education? Our assumption is that a human being pos-

sesses innate predispositions which direct him or her to his or her development, as the ability to learn is developed in all organisms. The example of so called feral children shows, that human beings are able to survive without education, they will also develop to a certain degree, probably to the extent of what they can observe and imitate. In contrast, Vygotsky pointed out, that a child achieves better results with a little help from adults. If left alone, children would probably develop to a certain extent. However, the majority of them would probably get to a much lower level compared to the level they would reach with the help from adults.

1 Power in education

Power is usually considered to be a tool that enables one to control the others, to impose his or her will on others, something that gives us certain superiority, etc. We have to be careful not to consider power only a negative force. For Foucault, power is present in every relationship, and it is a necessary, productive and positive force (Chudý and Neumeister, 2014, 46–47). Foucault (in Chudý and Neumeister, 2014, 46) points out the connection between power and knowledge, and he concluded that knowledge is not neutral in relationship with power but they are productive. That means that knowledge gives an individual certain power, and at the same time power demands the increase in knowledge. In short, the greater the knowledge, the greater the power. The higher knowledge therefore gives teacher a certain power.

Another form of power we can find in education is what Foucault called “shepherd/pastor power” (in Chudý and Neumeister, 2014, 46–47). This relationship between the dominant and the submissive might be described as the permanent care for an individual as well as the entire herd. The shepherd leads and takes responsibility of the herd, and the herd obeys him in response. Chudý and Neumeister (2014, 47) compare this to the situation at current school, where teachers are in the role of shepherds and their pupils in the role of the herd. Some teachers, nevertheless, try to establish the relationship between them and their students on a more democratic basis (in Chudý and Neumeister, 2014, 49, 90). They try to approach to the pupils or students in a friendlier, more equal way. This partnership is broken after not fulfilling the agreement between pupils and teachers, though. Therefore, the teacher’s effort to gain the power again breaks through.

But we have to be careful when we connect knowledge and power as in life knowledge does not necessarily mean we will be more powerful. We have to consider what specific knowledge or combination of different pieces of knowledge gives us power in a certain situation. The school situation is even more specific as the call for its democratization and humanization forces teachers to be partners of learners rather than their leaders. This partnership is more natural because knowledge is not an abstract entity, and the teacher cannot possess it and distribute it. He or she as well as their learners

create knowledge themselves. Therefore, the teacher only helps them in this process while his or her development is not finished yet. Therefore, teachers exceed their learners in some aspects but in some other aspects their students or pupils exceed their teachers. That is why the power of teachers is limited, and this might be the source of problems teachers encounter in their lessons. They overestimate their power or they underestimate the power of their learners¹. The teacher than tries to change the fact that his student does not accept the submissive role and does not realize he or she has only a little chance of doing it. Some teachers try to become friends with these influential students, and these teachers are more successful in cooperation with the powerful learners as they mutually tolerate each other. The problem is, as Fullan (2013) states, that school “pushes learners and teachers out of school” as they consider this place boring while the world outside (together with technologies) alluring. We should accept the fact that in a democratic society the power of teacher does not span over all of the students unless school is less boring place than the world outside.

In conclusion, the knowledge of the subject might put teachers in the more powerful position when compared to their learners. This knowledge, however, does not necessarily mean that the teacher can use this knowledge successfully to maintain his/her power because other variables such as personality traits, appearance, communicative and social skills etc. play an important part.

2 Power of education

In the previous chapter we dealt with the power as a part of the educational process. Now we are going to reflect the power of education, seen as the effect of education.

Let us get inspired by nature, as Comenius used to do, as nature may supply us with many examples that we can apply in this case. Let us imagine the power of education as sunshine and its energy, which can be either constructive or destructive. When the strength of the rays is too powerful, we have to hide from it in order not to get damaged. On the other hand, when it comes in a moderate intensity, it is life-giving, energizing, healing and comforting. Similarly education, in case it forces some conviction, it leaves deep scars on the soul of a person who is being educated. When it moderately enlightens, its impact will be positive. At the same time, we should consider the power of education as the first impetus which sets in motion the forces bringing a person to his or her growth rather than a force causing sudden and enormous changes in an educated person. Similarly as the first spring rays awaken the forces in the seeds and cause the changes leading to their growth, which is progressive and not sudden.

¹ For example, some learners have higher power in some respect than the teacher and therefore, the teacher is helpless in this class. The teacher tries to impose his or her will on the learners, but his position in the class is more submissive than dominant when compared to certain student. The power of the dominant student might come from his or her personality traits, physical strength, his parent's influence, some skills...

The above mentioned example shows us how education can positively affect an individual. That is to awaken the hidden forces and to enlighten. Beside these, there is another source of the power of education. It is its ability to transfer knowledge. Adults or those who consider themselves more advanced in something try to pass their experience on the young. Although Fink (in Strouhal 2013, p. 38) points out that experience is not directly transferable because it is always distorted. And more complex the information we want to transfer, more distorted it must be. Palouš (in Strouhal 2013, p. 39), on the other hand, adds that to transfer the direct knowledge (the knowledge of one person to another person) is not the aim of education because it is not even possible as knowledge advances into new context with every person. The aim of education for Palouš, on the contrary, is to prepare an individual toward the openness to the world and other people.

Bearing in mind the above mentioned with which we agree, we need to highlight that education *enables* to transfer knowledge, experience. Even though everyone transforms the knowledge, which is coming from the outside, in his own manner, it is still the knowledge which comes from the outside and from human history. Even though, transformed and passed on someone else. Without the ability to suck in information from the outside and to pass it on, our development (the development of humankind) would not be possible. Without the influence of other people or other sources we do not create anything. Education therefore functions as an inspiration, the source of information which must be overcome, in order to develop.

In conclusion, school must be a source of information, or it should help learners find information and help learners process it in a useful way, similarly, as learners do project work nowadays. And the school success should be measured according to quality of work done and not according to quantity of content learned as it is common.

3 How to make education more powerful?

Although education is powerful itself, teachers all over the world kept thinking about how to transfer knowledge in the best way possible (to make it even more powerful). Dewey (2001) speaks of learning that comes from experience, which a learner acquires from an activity. This is the way how we obtain true knowledge. There is, however, a difference between learning “for” school and learning from life. The second comes as an inevitable result of our acts, and the former one is reduced and artificial, in comparison to it. Life teaches us every time we have to adapt to changing conditions. This happens almost permanently, and it is especially expressed whenever we have to make a decision and evaluate. For a teacher, this means to provide learners with as many situations which make them decide and evaluate as possible.

We have to emphasize at this point that it is not our aim to criticize practical school activities, i. e. any activity which teachers use to connect theoretical knowledge with

life. We agree that they deepen knowledge, expand learner's viewpoint, encourage their curiosity, etc. However, it is still something that must be done because a teacher urged them to do it; and therefore, it is far away from a natural activity arising from the current state of a learner's development and needs. Practical education does not guarantee understanding, getting under the surface. This usually happens when we are engaged in an activity personally and when our emotions are involved in it. Tichomirov (in Babaeva et al., 2013, p. 7–8) proved that emotions partake on cognition and play a positive role as they integrate former pieces of knowledge and help an individual construct new personal meaning. The so called "emotional solution" to the problem precedes comprehension and verbalization of an idea. For example, this happens when we have already heard something for so many times that it is fixed in our memory, and after connecting it with a specific situation in which our emotions are involved, we suddenly realize its true meaning. To get under the surface means to know and to feel at the same time; to know the wide theoretical base, the context, and to feel it in connection with our life. To understand the deep meaning is a difficult process, and it takes a lot of time. Therefore, school conditions must be adapted to it. The qualitative learning should replace the quantitative learning; therefore, the content taught at school must be changed as well. School has to select the most important content of every subject and leave out the rest. We consider the most important pieces of knowledge those values and phenomena which are fundamental to human, natural and society's preservation.

The power of education lies in an ability to renew the unity of a person, i.e. the unity of body, mind and spirit, and moreover, our unity with nature, the universe and other people. The unity does not mean to disappear in the crowd. Everyone is a unique being that matters because he or she acts, affects, creates... and by the activity transforms themselves as well as the world outside of him or her, and thus fulfils his or her duty, to fulfil the existence. This activity, mental or physical, is the sense of life. That is why we should consider an education towards activity as an opposite to apathy, indifference, unconcern... another significant aim of education. The young have to be brought up to make decisions and to accept responsibility for them.

4 Education as hope

The aim of education (both, school and parental) is to bring up the young in such a way that they will enable nature and human race to thrive. Unlike the recent parasitic way of living, which is conditioned by someone else's detriment. Human welfare is nowadays growing to the detriment of nature. Some nations survive only because other nations are exploited. And this state continues despite (and also because of) the enormous scientific progress. Obviously, there is a gap between scientific and socio-environmental development, which must be overcome. In other words, we are developed enough in

scientific area, and now we have to concentrate on the development of our harmonious coexistence on this planet (coexistence with other people, other creatures and with inanimate nature).

It is quite understandable (when we imagine what the content of education during last decades was) that scientific progress is more advanced than any other because school concentrated mostly on knowledge transition. We have to make a big change in our thinking. We have to educate the young towards the sustainable development at the first place. Therefore the main aim of education cannot only be to know but also to feel, to get to know the value of nature and society. And this must not be accepted as a momentary, fashionable tool but holistically, systematically and purposefully. To put in harmony our industrialized society and nature is one of the biggest tasks of this and next generations. We have to adjust our development to the laws of nature so that the future development of humankind does not destroy the rest of the planet.

People not only have to renew the connection with nature, they also have to renew the connection with other people. That means to treat them as in “love thy neighbour”, i. e. to make an effort to get to know people around you, to build up the relationship on appreciation of others for their virtues, not to take them as your rivals and not to judge them because of their mistakes. On the contrary, one has to help others uncover and overcome their faults and thus help him or her in their personal growth.

To get to know the value of nature means to love her as our mother. We would be condemned to death without her. If we do not systematically cultivate the respect and love for nature in children, it will sooner or later give up the fight against our damaging conduct. Not nature as a whole, because organisms are very successful to find any possible way how to adapt to almost any conditions, but nature in its biodiversity, which has already been dying out. We take our surrounding environment for granted. We will realise how fragile it is if we move to live in a big city where nature almost gave up. Many people have already been fighting for preservation of biodiversity. Nevertheless, there are plenty of those who think it is not their concern. For example we can see how little attention is devoted to current disastrous fires in Indonesia. It is only another example of the superiority of money above nature. In conclusion, it is the main duty of every parent and every teacher to awake in the young the humility, respect and love for nature.

Conclusion

It is probable that formal education such as we know it today will change fundamentally one day. School develops together with the development of society and it adapts to its changes. The changes in education must follow the needs of the planet. The young must be therefore led to a better cooperation, coexistence with other people and with nature. Formal education is the best way how to affect whole generation which must

be taught new values and, it must focus on emotions equally instead of former focus on knowledge.

The connection between the words power and education can be thought of from different perspectives. Knowledge gives an individual certain power, as it puts him/her in a more advantageous position (i.e. power to make better decisions and better choices according to certain knowledge). In school environment, knowledge (any kind of knowledge i.e. of a subject, of a learner, of method etc.) gives a teacher a certain degree of power (e.g. he can choose a better method for the distribution of certain knowledge). However, it does not secure teacher success, as there are other variables which enter the teacher-learner relationship. Many problems come from the fact that a teacher does not realize and admit that learners also possess a certain degree of power, which might in some aspects be even more influential than teacher's.

The interference in human development should never be violent. It must not force children into anything that would damage their spirit. On the other hand, children must be taught what is necessary for the world's and society's survival. Besides, education must contribute to an individual's growth. Education should inspire, offer, show, make learners process this source of information and transform it in his/her own way.

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Covey's Professional Habits in Czech Elementary and Lower Secondary Novice Teachers

Andrea Rozkovcová, Magda Nišpanská

Abstract

The text deals with elementary and lower secondary novice teachers in the Czech Republic, Liberec County, in the context of Covey's professional habits of successful people. The habits were operationalized into measurable factors and expert-driven validation and Cronbach item reliability performed. The correlations confirmed our assumptions of the interrelatedness of the habits on the one hand and on the other hand their uniqueness. The final questionnaire can serve to evaluate the level of mastering Covey's habits in novice teachers. The adapted version of the questionnaire will prospectively serve as an evaluation tool of effectiveness of educational programmes focused on personal and professional student teacher growth.

Key words: Personal and Professional Growth, Elementary Novice teachers, Lower Secondary Novice Teachers, Personal and Professional Habits.

1 Introduction

During our long practice educating teacher students in fields of pedagogy and psychology we more and more acknowledge the necessity of educating them differently than predominantly theoretically. We view teacher personality to be of the same importance

as his or her expertise. Personal growth is a very individual whole-life movement of every person, nevertheless it is directed by some universal principles. When thinking of the growth we have been inspired by Stephen Covey (2006) who studied successful people in historical perspective and recent time. He states there is a specific pattern behind every respectful and wise life embedded in "universal ethic" and in developing inner qualities in which a person believes and which are essential for him or her. Among the qualities Covey mentions integrity, courage, fidelity, responsibility and trustworthiness. Covey noticed that demoralisation and weakness of individuals, groups, organizations and cultures is interrelated with the deviation from essential personal principles, which are, as he believed, the primary conditions of authentic being, and with the shift towards techniques serving the purpose of a plausible being or an expected image. If the techniques serving the latter purpose are not deeply embedded in "character ethic" (Covey, 2006), the effort to impress people or to gain some advantage cannot last long and will be revealed. The truthful being is rooted in character values such as inner meaning, the will to create more permanent values and serve the whole. Techniques and programmes change according to fashion or benevolence of decision-making authorities, who are responsible for policies. That does not mean these people understand the fields they decide about properly. There are also important hidden aspects which play an important role in decision-making such as economic or other factors which frequently collide with humanistic and democratic principles and values. Principal values, those which support life, growth, success and happiness of individuals, on the other hand, remain the same and are universal.

For three years we have been reading student essays dealing with the topics: "Teacher (educator) who enriched me" and "Teacher/educator I would not like to be like" (essays are written by teacher students and students of Leisure Studies at Department of Pedagogy and Psychology at Technical university of Liberec). These essays show us how important teachers were and are for students. Students remember with respect and gratefulness the very teachers who lived according to solid principles, believed in meaningful values, were willing to educate them with love and determination even if it was sometimes difficult. Those teachers were interested in their students' inner life and at the same time were able to open to them in a human way, learn from them and grow together. Such teachers live in the students' memories as examples of kindness and humanity. It is these personal qualities which students value more than teacher expertise: interest in the other person, authenticity, modesty, kindness or fairness. The expertise is also important, but it is more subject to change and definitely more often than universal principles.

This text aims at introducing Covey's model of personal and professional growth which stems from the humanism approach to a person. Owing to its comprehensibility and clarity it seems to be a suitable basis on which a subject for teacher study programme can be built. The humanistic and democratic principles are in Czech culture,

not only in American, perceived as the main and universal societal pillars. It is important to care for these values and transfer them with means of education to following generations as the gift of the greatest value.

Individual Covey's habits were operationalized to gain measurable factors with which we can estimate the level of mastering the habits by novice teachers. In this context we aim at studying the consistence of the model and the degree of similarity of the individual habits.

1 Theoretical Background

Important Czech and Slovak authors focus their attention in respect to teaching profession, apart from other serious issues, to professional growth of teachers. For instance Urbánek mentions the importance of teacher's ability to build relationships and the complexity of the profession, in which the teacher adopts various roles and can experience conflict (Urbánek, 2005, p. 23–25). Helus demands „education of transformation” in the sense of personality developing instruction (Helus, 2012, p. 22). This approach requires mature personalities who can practise it. Kohnová speaks about the importance of professional teacher development as a key to the success of educational systems. (Kohnová et al., 2012). Pupala (2006, s. 15) categorizes qualities of a teacher-professional: *“...the teacher should be an expert in self-knowledge, in pedagogical relationships, in facilitation of learning and in permanent reflection of their practical activity and self-reflection.”* Spilková a Vašutová (2008, 2010) also significantly contributed to discussion about teacher professional standards and also to the discussion on interconnection of theory and practice during initial teacher education (e. g. Vašutová et al., 2008). Newly Tomková contributes with the principle of isomorphism in teacher education (Tomková, 2015). We also acknowledge the views focusing on curriculum and the quality of teacher education in this respect (Janík, Slavík, 2012). These authors believe that contemporary models of initial teacher education do not sufficiently accentuate didactical preparation of teachers. We try to see the teacher as a complex personality which develops multi-dimensionally. We believe that focusing on supporting character and personal development allows for supporting all dimensions of teacher development (acquiring knowledge and competence, personal development, becoming more professional in didactic transposition and other). We stand the view we cannot divide artificially the personal and professional human growth. They are always both present – if you develop personally it supports professional development and vice versa. The personal as well as the professional growth are based on the ability of reflection and self-reflection and also such behaviours which enable it. Korthagen (2011, 2005) introduced the concept of “core reflection” and discussed the importance of reflection and self-reflection in initial teacher education. Covey's model of habits for successful practice (Covey 1989/2006)

also implicitly demands continuous reflective practice of the individual. Korthagen repeatedly claims that some students do not see any sense in reflecting their practice and he asks why? We have a similar experience with teacher students whose reflective abilities are limited or quite superficial. Such superficial discussions or mere descriptions without deeper reflection and without looking for answers to arising questions are unproductive and unsatisfactory. The openness of students to their own asking can be influenced by some inappropriately built study programmes which force students to participate in many subjects for which they get very few credits. This approach does not allow for asking and looking for answers as it supports quick solutions and quick pass. Students are overloaded with information and mundane tasks and tend to superficial thinking and to the survival strategy. The other important factor of insufficient reflection is the approach of a teacher who does not care for the quality of growth and is content with his or her recent horizon of knowledge.

It is our aim to support questioning, discussion and the reflective approach to experience which students gained throughout their present lives and have been gaining during their initial teacher education. In long-term student teachers should acquire these qualities (questioning, discussion and the reflective approach) to be able to reflect and act in practice when they no longer are under supervision of either teacher educators or expert mentors.

S. Covey (2006) does not speak about reflection explicitly but, when studying his work carefully, reflection lies in the roots of each of the habits. Covey was aware of the importance of reflection in the sense of understanding one's behaviour, thinking, emotions and their implications for the life of an individual. We can say Covey works with self-reflection as the elementary condition of true human growth. Covey's model of personal and professional growth consisting of the seven habits seems to be a useful tool of self-knowledge of the teacher as well as for the reflection of the teacher's interpersonal activity. Could it be a suitable approach for initial teacher education?

In accordance with Korthagen and Covey, we believe, that before being able to teach and educate children, before being able to transfer curricula (in the didactically transposed or the authentic form) the teacher must decide to work on themselves continuously. In Covey's terminology it means the teacher student or the teacher becomes "proactive". We perceive "proactivity" as the key quality enabling personal and professional growth of every teacher in all dimensions of his or her personality.

2 The Significance of Reflected Personal Growth for Teacher Profession

In childhood, the most important forms of learning are imitation, identification and learning from examples (e.g. Říčan, 2005). Quite for this developmental regularity accompanying cognitive and emotional human development it is important that the human who, in the teacher role, comes to educate children was also properly educated. The teacher's behaviour aimed at cultivation of the child should of course be cultivated. The teacher must be able to grow consciously towards universal values and principles and this growth is enabled primarily by self-reflection. Self-reflection helps to compare past and present state of matters, realistically evaluate our own experience, assess contributions and wrong steps and estimate the rate of one's responsibility. Such self-reflection helps to draw conclusions for future conduct. Teacher's ability of self-reflection can be measured through his/her work on personal growth, his/her self-regulation purposefully oriented at mastering such valuable personal qualities which lead the teacher to specifically manifested professional competencies. Teacher's ability to grow can be manifested in his/her ability to create deep and effective relationships with pupils/students and their parents but also with their colleagues. People feel good in the presence of such teachers. People ask the teachers for help freely without being manipulated, asked unpleasant and irrelevant questions, being objected or blamed. Plenty of good teachers mature towards integrity and good character through their own internal effort and through self-reflection. Some teachers live in accordance with the principles without even knowing Covey's model. Nevertheless, theory can help a perceptive and responsive student to find his/her own good direction and a meaning in everything he/she does; it can help to assure oneself in the attitudes and approaches, especially during the time of contradictory experience for which he/she was not prepared at university. This is our attempt to contribute to the discussion on personal and professional teacher growth with an emphasis on values represented not only by Covey but also Rogers, Maslow, Fromm, Satir and other humanistic thinkers.

3 Covey's Habits of Successful Life

Now we introduce briefly the habits, except of "synergy", in the succession in which Covey introduces them. Covey claims it is important to develop these habits continuously starting with proactivity (Be proactive), work with vision (Begin with the end in mind), time and priority management (Put first things first). Only when the person touches the innermost powers of the self and develops the first three habits to some level is it possible to cultivate properly the following habits serving the "public victory". They

are: the win-win approach (Think win-win), emphatic and courageous communication (Seek first to understand, then to be understood). We work here only with the first five habits and the seventh which is the habit of self-renewal (Sharpen the saw), because we consider "synergy" to be rather the final goal than a "habit". In the continuum of cultivating the habits individuals mature to understanding that their person, however unique and important, is a part of community and functions in mutual dependence with others. Synergy is so complex that we excluded it from this research. However, we always bear in mind its importance and use it during initial teacher education.

Proactivity is the way we handle reality. Proactive people can perceive and interpret reality very clearly, they can reflect on themselves, they take into consideration facts and influences. The ability to keep the distance in a situation enables proactive people to act with forethought and consideration. It makes their behaviours maximally human and at the same time effective. Proactivity also enables people to act according to the vision and goals they set (e.g. according to the school vision with which the person identifies. It is important to realize that proactivity is quite the opposite of "reactivity" when people only react to situations without their active participation in regulating their reaction proactively. If we persuade student teachers to become proactive, we are halfway through to their success and success of their pupils. In context with Korthagen's "core reflection" and his conception of the reflective professional (teacher = reflective professional) proactive teachers not only know how to reflect their work and themselves, they also want to do it.

Vision is enabled by the proactive approach. It means people can see the situation and the potential for change. Such people take responsibility for creating their own goals and understand their role of active creators of their own personal and professional lives. The vision includes expressed meaning of action, a clear image of the future and a certain possibility of change. Thanks to vision teachers can start to plan steps and strategies to fulfil the goal/vision. Vision enables the teacher to plan concrete steps of action towards fulfilling it. With regard to the need of changing the Czech school system (and the system seems quite resistant to change for many reasons), the vision in the mind and heart of every teacher is of greatest importance. Every school should have their own vision (perhaps in the form of the School Educational Programme). Teachers who perceive the job as their mission or calling need the vision. The vision is also a very important part of the strategical developmental school plan. Teachers who understand the school vision and agree with it tend to be much more engaged.

Self-organization in Time – if we have our vision or share it with our team, e.g. the teacher faculty, we need organizational skills to realize it. Organization according to disposable time and priorities in Covey's model includes personal as well as professional life planning. This kind of planning works with values and priorities and it helps to focus in our behaviour towards our vision. It is a higher level of time-management skills.

Problem-solving „win-win“ – it means that the effective and human problem solving is based on looking for solutions suitable for all parties. It is a way of keeping our relationships harmonious showing respect for others – their time, individual character and needs. We do the same for ourselves though, as it is necessary for personal integrity and self-renewal. If the solution is not “win-win” for both sides, it is better not to “make the deal”. There is no manipulating, the relationships can stay correct and this fact can contribute to finding a solution in the future when something changes (e. g. legislation, financing etc.).

Communication is essential for problem-solving, realization of our visions and for relationships. To become a peaceful, reasonable, human and constructive communicator can be difficult for some individuals (false communication patterns, pride and immodesty, lack of experience etc.). Our variable “communication” includes two components – courage and clarity. Courageous communication is important if we want to explain our point of view and persuade someone of our ideas. Clarity is important for explanation, elucidation and instruction.

Self-renewal is a habit of balancing giving and taking. We consciously restore energy for further giving. Self-renewal is more than pure “psycho-hygiene” as self-renewal often brings new ideas, visions and the personality growth. Self-renewal activities are individual and unique and it is only essential to help people cultivate the habit and support their further learning and cultivation. The aim of this habit is not only finding activities for “psycho-hygiene” but to understand how much we do for our self-renewal just with acting in accordance with the other above-mentioned habits.

4 Research

Aims

In our study we set three aims:

1. To create a questionnaire for measuring the level of the Covey's habits internalization and manifestation in novice teachers including the content validation of the instrument
2. To administer the questionnaire to novice teachers in Liberec County and to verify its reliability using item analysis.
3. To find out interrelations among variables (habits) using correlation analysis.

The Research Instrument

The first aim of the study was to define and operationalize Covey's habits to create measurable factors in the form of a questionnaire „CHT” (Covey's Habits for Teachers). We followed standard steps required in the process of operationalization, from defining variables, formulating items through expert-driven content validation. Five experts

with good knowledge of Covey's work contributed to the final version of the instrument. In the scale-construction we were inspired by Bandura's "Teacher Self-Efficacy Scale" (Bandura 2006), as we came to a conclusion that Covey's habits can be viewed as complex self-regulatory strategies (Zimmerman et al., 1992, s. 665). The items in Bandura's questionnaire (2006) begin with "How much can you...?" In our questionnaire we used the words "To what extent can you/do you/are you..." etc. because we wanted to soften the pressure on respondents answering sensitive questions and also to identify more precisely, how they perceive their inner dispositions to act and not only their final outcomes. The final questionnaire consists of 78 7-point Likert items on which respondents had to specify the level of their agreement with each statement.

The final questionnaire was administered to respondents (sample specified below) and gathered data were analysed using Cronbach alpha statistics to estimate the internal consistency of statements. All the scales displayed the Cronbach alpha $> 0,80$, only the Communication scale $\alpha = 0,76$. We supposed that the scale might not be unidimensional, so we used factor analysis (PCA with Varimax normalized rotation) which revealed two separate communication subscales (factors with eigenvalue $\lambda > 1$) with Cronbach alpha level above 0,8. These subscales were labelled as "Courageous communication" and "Comprehensible communication". Table 1 shows Covey's habits with brief definitions and items used.

Table 1

Operationalized Habits; CHT-questionnaire

PROACTIVITY Definition: To act actively in accordance with the values and respect towards people and situations.	Cronbach α : 0,82
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To what extent can you stay calm if something doesn't work the way you have expected? To what extent can you consider the wider context of the problem before making a decision? To what extent can you accept the views of your colleagues? To what extent do you respect the boundaries of other people in promoting your views? To what extent do other people ask you for advice? To what extent do you value highly your success in work? To what extent do you act so as to avoid problems? To what extent do you try to anticipate the consequences of your actions? To what extent do you engage to improve the problem? To what extent do you consider yourself to be enterprising? To what extent can your colleagues rely on you? To what extent do others perceive you as a diligent person?

VISION Definition: All I do in my life, I do it with the idea of the final output.	Cronbach α : 0,82
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To what extent do you consider what your student will become in a result of your influence?
 To what extent do you set your career goals reaching beyond one year plan?
 To what extent do you have a clear idea of your future career development?
 To what extent do you think about what improvements can be made in your profession?
 To what extent can you redirect yourself towards desired outcomes under changing conditions?
 To what extent do you have clearly defined goals?
 To what extent do you work systematically to achieve your goals?
 To what extent do you keep working hard to achieve your goals?
 To what extent are you successful in achieving your goals?
 To what extent are you living your life according to meaningful values?
 To what extent do you consider your thinking innovative?
 To what extent do you plan educational activities for your professional development?
 To what extent do you take part in educational activities for your professional development?

SELF-MANAGEMENT IN TIME Definition: I always put important things at the first place.	Cronbach α : 0,80
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To what extent do you complete your professional duties according to headmaster's demands?
 To what extent can you finish your tasks before appointed time?
 To what extent are you able to effectively organize your work?
 To what extent do you attempt to reach excellence in everything you do?
 To what extent do you find enough time for important professional matters?
 To what extent do you waste time before you get started?
 To what extent do you get into situations of not having enough time to fulfill your professional duties?
 To what extent do you attempt to fulfill your tasks with utmost conscientiousness?
 To what extent do you consider yourself as a well-organized person?

WIN-WIN PROBLEM SOLVING Definition: I try to come up with the best possible solution for all involved participants.	Cronbach α : 0,81
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To what extent can you accept the compromise while solving problem situations with others?
 To what extent can you alone find solutions when solving a problem situation in a team?
 To what extent do you believe that more people can come up with a better solution?
 To what extent are you a team player?
 To what extent do you have the patience to look for mutual solutions?
 To what extent do you spend time with colleagues to find solutions good for everyone?
 To what extent do you approach problem solving looking for benefits for everyone?
 To what extent can you influence other people to cooperate?

COMMUNICATION Definition: I can clearly and courageously communicate my ideas.	Cronbach α : 0.80
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ComA – courageous communication and self-assertiveness
 To what extent can you stand up for your ideas although the others disagree?
 To what extent do you have the courage to argue?
 To what extent can you win the trust of others?
 ComB – comprehensible communication
 To what extent do you feel other people don't listen to you enough?
 To what extent can you express your views in a clear and comprehensive way?
 To what extent do people appreciate your ability to clearly communicate complex ideas?

SELF-RENEWAL Definition: I keep caring for myself to renew my energy.	Cronbach α : 0,82
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To what extent can you separate your professional and personal life?
 To what extent can you find enough time for your hobbies?
 To what extent do you praise yourself for your success?
 To what extent do you reward yourself for your success?
 To what extent can you relax?
 To what extent do you know which activities renew your energy?
 To what extent do you engage in a regular physical activity?
 To what extent do you eat regularly?
 To what extent do you eat healthy foods?
 To what extent do you find time for friends?
 To what extent do you meet with your family at the dinner table?
 To what extent do you love your life?

Sample

Questionnaires were administered online. Headmasters of basic schools (ISCED levels 1 and 2) were sent an email asking them to resend the questionnaire to their novice teachers. The criteria of sample selection were: novice teachers with teaching practice up to 5 years, levels of education ISCED 1 and 2 from schools in Liberec County. Gained sample can be described as nonprobability purposive sample with high homogeneity. 30%, of respondents completed and returned questionnaires, which counts for 50 cases of approximately 150 novice teachers in Liberec County (approximation made according to information collected from authorities in the County).

5 Results and Discussion

This chapter introduces results of the correlation analysis. The findings of significant correlations support our assumptions of deeper psychological interconnection among individual habits. We can reason that the constructs are independent but at the same time related. The majority of correlations are significant at $\alpha < 0,01$ or $\alpha < 0,05$ and at the same time Spearman coefficient r does not exceed the value of 0,75.

Table 2

*Spearman correlations (r); statistical significance $p < 0.01^{**}$, $p < 0.05^{*}$*

Variable	Pro	Vision	Time	Win	ComA	ComB	Self
Pro	1.00						
Vision	0.59**	1.00					
Time	0.52**	0.43**	1.00				
Win	0.59**	0.42**	0.34*	1.00			
ComA	0.25	0.43**	0.12	0.21	1.00		
ComB	0.27*	0.20	0.22	0.46**	0.29*	1.00	
Self	0.49**	0.15	0.25	0.38**	0.27*	0.22	1.00

Variables: **Pro** – proactivity, **Vision**, **Time** – Managing oneself in time, **Win** – attitude of solving problems in “win-win” manner, **ComA** – courageous communication, **ComB** – comprehensible communication, **Self** – self-renewal.

Our sample shows correlations of proactivity with vision, self-management in time, win-win problem solving and self-renewal. There are weaker correlations with communication. There, courageous communication correlates with vision and comprehensible communication correlates with the win-win problem solving attitude. We can also state that if a teacher in our sample has higher rate in one quality, he/she will dispose of higher rate in the other measured qualities.

These final figures correspond with Covey's assumption of the interconnectedness of the habits and their irreplaceability in the model. It is necessary to remember that Covey's model is a result of his long-term practical experience with resolving various problems of successful and unsuccessful people and on his sharp intuition, deep psychological knowledge and observing professionally successful people. Our results confirm his logical considerations. We want to see, if there would be similar results in a bigger sample which we want to verify in a whole-country research.

Conclusion

We focused on Covey's model with persuasion of its usefulness for personal and professional growth as well as enhancing life and work quality of (not only) Czech teachers. This model can, due to its complexity, serve as a base for orienting teacher students towards practical development of the habits and with them, and thanks to them, towards acquiring specific teacher qualities (knowledge, skills, competences, contextual understanding, etc.) Covey prepared a collection of activities and exercises which we can, directly or in a modified form, use during initial teacher education. We think we can relate the model to recognized theories, such as Erikson's theory of development in social contexts (Erikson, c2015), Bandura's Social learning theory (Bandura, 1970) and Self-efficacy (Bandura, 1997), Roger's person-oriented approach and others (Rogers, 1980/2014). Future theorizing or research design can be based on the named theories and their relations with Covey's habits. Last but not least, Covey's model is open to personal and professional diversity – subject orientation, level of education, uniqueness of teacher's personality, etc.

The questionnaire which we used can serve two purposes. The research can be repeated to support or reject the findings and, if appropriately modified for teacher students, it can measure effectiveness of educational programmes aiming at teacher student personal and professional growth.

We are aware of internal and external limitations which, to some extent, determine a human. These determinants will always be present, but there is hope in the phrase "to some extent". Student teachers will probably not be able to acquire all the habits to a very high level of practice very early in their career. It is not to be expected that all novice teachers will influence powerfully and early in their career the senior teachers or decision-making bodies. Nevertheless, we believe that if teacher students work with the model and practice the habits, it will be beneficial for them and especially for their future pupils/students. Teacher's professional growth can accelerate and, as we believe, teachers will have a powerful tool to educate their pupils/students – their mature and ever developing self.

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Leading Pedagogic Leadership in Schools Providing Compulsory Education: A Comparative Study of Head Teacher Between China and the Czech Republic

Danping Peng

Abstract

Pedagogic leadership has been increasingly emphasized in recent decades, in respect of improving teaching and learning as well as for ensuring high quality education reaches the classroom. Based on investigation of the theories surrounding pedagogical leadership, the main purposes of this study are exploring the role of head teacher as a leader of pedagogic leadership in schools providing compulsory education. And major influencing factors of leading pedagogic leadership. Semi-structure interview is used in this study, 4 head teachers from China and the Czech Republic participated in this study. 5 dimensions of the pedagogic leadership are included in the interview. Based on interviews with the study's subjects, discernible differences were noted between Chinese and Czech head teachers as leaders of pedagogic leadership.

Key words: Pedagogic leadership; compulsory education; China; Czech Republic; Comparative study.

Introduction

In modern times, competition among countries is intense in a country's economic performance, and the welfare of its citizens is related to the qualifications of its population. Education reforms have been pursued relentlessly in many countries with advanced economies (Fullan, 2000), which emphasizes the crucial position of education. An effective pedagogic leadership is essential if schools are to achieve the wide-ranging objectives set for them by their many stakeholders (Bush, 2011). Research shows that although cultural, capital, and socioeconomic conditions affect student outcomes (Mortimore et al., 1988), school leaders are still considered as the second most important school-level factor affecting student learning after classroom instruction, even if mainly indirectly through their influence on teachers (Leithwood et al., 2004; Leithwood et al., 2006). The current role of head teachers became more and more complex within the contemporary global situation. Beside, Harris (2003) claims that the challenges in education are numerous but the potential of leaders to influence schools still remains indisputable, and that the importance of head teachers and school improvement has been demonstrated in both theory and practice.

This study considers the research status of pedagogic leadership, including the various viewpoints of conceptualizing pedagogic leadership and its components. As learning centered leadership, three modes of pedagogic leadership are introduced in this study. Accordingly, the main purpose is thus to explore the head teachers' role as leaders of pedagogic leadership in diversity social culture.

1 Theoretical background

1.1 Pedagogic leadership

Most contemporary theories of leadership suggest that leadership cannot be separated from the context, in which it is exerted. At the core of most definitions of leadership there are two functions: providing direction and exercising influence. (Leithwood, 2003: 3). Various theoretical models have been proposed to account for the nature and impact of different leadership styles including transformational leadership (Leithwood, 1992), instructional leadership (Hopkins, 2003), and pedagogical leadership (Sergiovanni, 1998) etc. Plenty of literature about pedagogic leadership consider it as a learning-centered leadership or leadership for learning (OECD, 2013). For instance, Sergiovanni (1998: 38) claims that pedagogical leadership:

...invests in capacity building by developing social and academic capital for students and intellectual and professional capital for teachers. Support this leadership by mak-

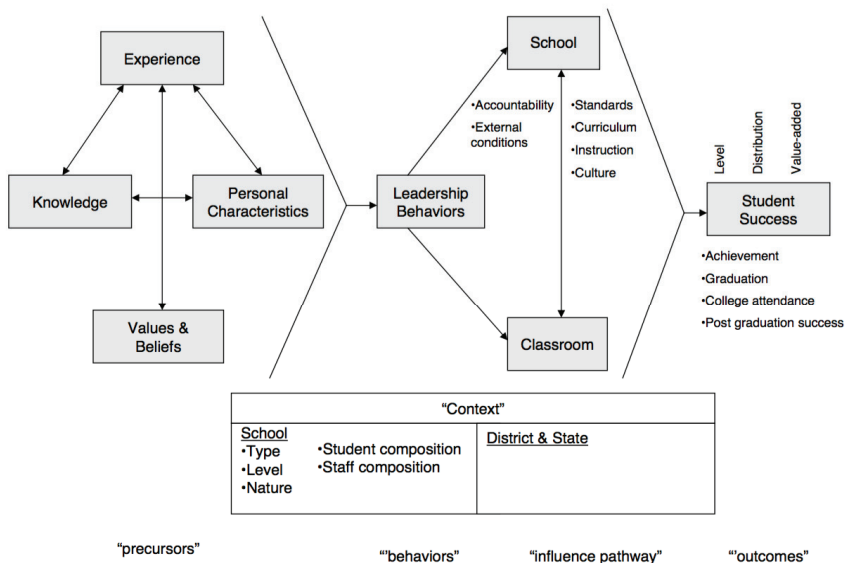
ing capital available to enhance student learning and development, teacher learning and classroom effectiveness.

Besides, some researcher stated, "in classical writings about pedagogic leadership, the role of learning in educational communities is emphasized" (Heikka & Waniganayake, 2011). Pedagogical leadership can be seen as a blend of supervision, staff development and curriculum development with the aim of improved learning (Their, 1994). Day and Leithwood (2007) argued that pedagogical leadership can be summarized in three main parts: creating conditions for learning and teaching, leading learning and teaching, and linking the everyday work of teaching and learning with organizational goals and results. Furthermore, "establishing clear educational goals, planning the curriculum and evaluating teachers and teaching" (Robinson, Hohepa & Lloyd, 2009: 172) has emphasized in pedagogic leadership, which not only including the teaching and learning but also the evaluation.

1.2 Models of pedagogic leadership

Figure 1

Learning centered leadership framework (Murphy et al., 2007)



As learning centered leadership, the models of pedagogic leadership (educational leadership) are shaped by four major conditions (Figure 1): the previous experiences of a leader; the knowledge base the leader amasses over time; the types of personal characteristics a leader brings to the job and the set of values and beliefs that help define a leader (Murphy et al., 2007). And the leadership behaviors influence the factors (standards, curriculum, instruction, culture etc.), in turn, influence the outcomes (e.g. student graduation).

In Figure 1, the model of pedagogic leadership, the function of context was emphasized, pedagogic leadership was analysed as a dynamic process. And it is highly related to personal experience and social culture. Besides, MacNeill's (2007) model looked inside of the pedagogic leadership instead of analyses the whole process. 11 dimensions of pedagogic leadership are included in this model (Figure 2). In this model, different roles of head teachers in pedagogic leadership were demonstrated.

Figure 2
Model of pedagogic leadership (MacNeill, 2007)

Direction setting
1. Discharging a moral obligation to students and society.
2. Establishing a shared vision and sense of mission.
3. Gaining commitment by expecting high standards from staff and students
Developing people
4. Facilitating the engagement and empowerment of staff
5. Establishing multiple, collaborative leadership roles
Re-designing the organisation
6. Leading change
7. Balancing administrative roles with pedagogic roles
8. Developing relationships and a sense of community
9. Applying a re-culturing approach to school improvement
Leading the pedagogic program
10. Developing expert knowledge about pedagogy and schooling
11. Creating and sharing knowledge throughout the school

Furthermore, according to S. Gento's (2002) study, a reference model is proposed for Pedagogical leadership and quality of education. Based on this conception, the educational leadership has been analysed through the following dimensions: charismatic, emotional, anticipatory, professional, participative, cultural, formative, and administrative leadership.

Researchers have given different models and dimensions of pedagogic leadership based on their professional background and structure of knowledge. In this research, combining the practical situation with the three models of pedagogic leadership, five dimensions of pedagogic leadership will be discussed: anticipatory, professional, participative, cultural and administrative leadership.

1.3 Pedagogic leadership in schools providing compulsory education

Based on the China Integrated Knowledge Resources Database (CNKI), the related research of pedagogic leadership in China can be divided into three categories. The first category focused on the conceptualization of pedagogic leadership. For instance, some researchers stated that pedagogic leadership is a kind of abilities to help teachers and students to achieve their aims (Zhang, 2015; Zhao & Song, 2014). The second category highlights the head teachers' pedagogic leadership in some specific area. For instance, in Li's study (2009), pedagogic leadership in the area of curriculum reforms and administration was emphasized. The third category is related to how to improve pedagogic leadership in China. Zhu (2008) put forward three suggestions: be intelligent and thoughtful, adhere to the school system construction, and insist on the right values.

In the Czech Republic, a decentralized and participative school system of three levels was established: the state, autonomy and the school. Czech schools providing compulsory school education became legal entities a decade ago. They can be regarded as relatively highly autonomous organizations: in the pedagogical as well as in management issues. This brings consequences for the schoolwork. The primary responsibility for school educational quality lies with Czech headmasters as each school has freedom to formulate and conduct its own (curricular) policy. The school management is expected to apply more participatory approaches from the school improvement perspective and to balance them with activities, which could support school accountability. The duty for quality assurance in the school is therefore spread across various actors, deputy head teachers and teachers too. Despite the fact that head teachers of Czech schools have a high degree of autonomy to manage teachers, many of them still lack preparation for their responsibilities, particularly in the area of leading teaching and learning (OECD, 2013), and the professional development opportunities often lack a focus on pedagogic leadership too (IIE, 2011).

2 Methodology

All research is interpretive and is grounded on a set of beliefs about the world and how it should be understood and studied (Denzin, 2006). Qualitative research takes an in-depth approach to the phenomenon it studies in order to understand it more thoroughly and needs greater awareness of the perspectives of program participants (Weiss, 1998). The roles of head teachers of pedagogic leadership in diversity social culture are related to personal behaviors (leadership behaviors), tendency or attitude; the qualitative method is appropriate for this study because of this manner. And the characteristics of pedagogic leadership in a different culture need to be researched in-depth approach as well. Accordingly, the purpose of this research is to increase the knowledge about the role of head teachers as leaders of pedagogic leadership in China and in the Czech Republic. The following three questions have guided the study.

1. What are the major factors influencing head teachers in their role as leaders of pedagogic leadership?
2. Are there differences between Chinese and Czech head teachers in how they look upon their role as leaders of pedagogic leadership?
3. What personal responsibility rests on the head teacher as a leader of pedagogic leadership?

2.1 Instrumentation: semi-structured interviews

In this research, data was collected by semi-structured interviews with head teachers in China and the Czech Republic. An initial conceptual framework was used to guide the research. Thereafter, a set of predetermined questions was formulated and captured on an interview schedule to ensure the interview questions were clearly structured and in a logical sequence.

The semi-structured interviews lasted between 30–40 minutes and were divided into five sections. According to the theoretical background of pedagogic leadership, five aspects of pedagogic leadership were selected in this research. In the first section, questions were focused on anticipatory aspect of pedagogic leadership. The respondents were asked what aims they set for their school and their vision of the school. The second section comprised questions regarding topic or themes related to the participate aspect of pedagogic leadership. How head teachers participated in the daily work. The third section is related to the professional aspect of pedagogic leadership. Most of the questions in this section focused on head teachers' professional development, and their works on the aspect of support the development of teachers and students. The fourth and last section of the semi-structured interviews included questions on the administrative and culture aspect of pedagogic leadership.

Selection of participants

The participants of the semi-structured interviews were purposively selected to fit the study criteria. The selected 4 head teachers represented a population that acted as the spokespersons for the topic of enquiry. To provide for various perspectives on the roles of head teacher of pedagogic leadership in diversity culture, the following two inclusion criteria were applied:

- a) A minimum of 5 years experience in compulsory school (primary school or lower secondary school) as a head teacher or director;
- b) School type and its location: public school in the normal second-tier cities (similar economy development condition).

Data analysis procedure

The interview data were analysed with five steps analytic process for analysing qualitative data set out by McCracken (1988). The first stage is reading and reviewing each interview transcript twice, to understand and identification useful comments noted as observations. The second stage involved forming preliminary categories (called codes) of the themes. The third stage involved identifying patterns and connections among the codes, thereby developing themes. The fourth stage of analysis involves a determination of basic themes by examining clusters of comments made by the respondents and memos made by the researchers. The final stage examines themes from all the interviews to delineate predominant themes contained in the data.

3 Findings

3.1 Major factors influencing leading pedagogic leadership of head teachers

Anticipatory dimension

Anticipatory dimension of pedagogic leadership related to the achievement of ultimate goal of the school, mission or the possibilities of change. And it is about the establishment of shared purpose as a basic stimulant for all stakeholders. The more specific practices in this category are building a shared vision, fostering the acceptance of group goals and demonstrating high performance expectations (Hallinger & Heck, 2002). Emphasis on the meaning of decision-making, sharing the understanding of core purpose and responsibilities was manifested during the interview. One participant said:

I have quite clear vision of ultimate goal of my school, but it's not enough, short-term of goal is important as well. And every Monday, we have regular meeting to dis-

cuss the aims of this week, teachers attending to the process of decision-making, and they agree with the new tasks. So they know what they should do in the new week...

Anticipatory is a basic dimension of pedagogic leadership, and it is the precondition of head teachers to leading the pedagogic leadership in school.

Professional dimension

In this research, the professional dimension of pedagogic leadership not only means the professional development of head teachers (for instance, attending professional projects and plans, training courses) but also includes the abilities to support the development of teachers and students (for instance, evaluation of a new teacher's lessons, encouragement to innovation). All the participates of this research agreed to consider the professional dimension as one of the most important factors influencing leading pedagogic leadership in schools providing compulsory education. Some participants explained:

As a head teacher, I never stop to explore the new knowledge. I went to specific training lessons last month, although it's not obligatory. And I learned transformational leadership from those lessons, and it really helps me to develop my school...

Most of time, teachers come to my office only for administrative works but I went to their lessons every month especially the lessons of new teachers. The knowledge and skills of evaluation lesson is really important for me...

Participative dimension

Similar to the professional dimension, the participate dimension including two aspects as well. One aspect is the head teachers' will to collaborate, other aspect is the atmosphere of collaboration in the school. The participants mentioned that the best way to foster harmonious school was to encourage teachers towards a collaborative work. In leading the pedagogic leadership, the participative dimension is the necessary and sufficient condition for a leader.

Teamwork is powerful, not only on collaboration of some project, but also on the debates on some educational topic. Agreement is important in collaboration, disagreement is crucial as well...

Administrative dimension

The results indicated that effective pedagogic leadership engaged in leadership behaviors. The participants' gender, ethnicity, and pedagogical beliefs did not make significant differences in leadership behaviors, but overall years as the current head teacher and overall years of administrative experience did make significant differences. For instance:

The administrative work is really heavy every day, I spent more than half of my working time to deal with it. Even though, I have to say after 8 years “training” by administrative work, I learned so many new skills and invaluable experience. It shows me the way of how to deal with different people and how to maximum the efficiency of work...

Cultural dimension

Feeling safe in school is fundamental for educators to be able to teach effectively and for to students to learn effectively (Thapa, 2012). Positive atmosphere is essential for head teachers leading pedagogic leadership. The participants mentioned two level of culture both affect the pedagogic leadership: social culture and school culture. However, the school culture has more significant effect on leading pedagogic leadership.

Half a year before, other primary school merged with our school, in that case, we built a new identity... I can feel the different school culture and atmosphere after that, so the most important thing for me now is, I think, the unification of the school culture, to let the teachers and students accept new circumstances.

Besides the five dimensions of pedagogic leadership, the changing educational policies and educational expenditure were reflected by participates. Which would consider as influence factors of head teachers' leading pedagogic leadership in schools providing compulsory education as well.

3.2 Different perceptions on leading pedagogic leadership of head teacher in diversity culture

Chinese head teachers

A head teacher's ability to use his/her power is based on two factors, namely legality and legitimacy (Rapp, 2010). However, in compulsory education level, public schools have almost same teaching content and instructional objectives. Head teachers do not have too much autonomy of their work, and the achievement of students is one of the most important norms for the evaluation of head teachers' work. During the interview, the Chinese head teachers expressed the view that to be a leader of pedagogic leadership, one should have a background as a teacher and/or have teaching experiences. One participant said:

I think it is important to be an educated head teacher. I can discuss pedagogical matters and the teachers know that I can deliver in a classroom.

Beside, the employment of head teachers is decided by the higher administrative departments of education, therefore, bureaucrat oriented consciousness was deep-rooted in the society. And head teachers paid more attentions on administrative dimension of pedagogic leadership in the Chinese context. For some of Chinese head teachers, having a good relationship with officers who came from a higher administrative department of education not only means convenient of their daily work but also considered as a guarantee of their jobs.

Czech head teachers

As in many other European countries, the education system in the Czech Republic developed during the 19th and 20th centuries as a centralised system, with the government in the decision-making role (Murden, et. al, 2006). As a concomitant of the 1990 Act, head teachers became full responsibility for the school. For instance, the teaching plan and curriculum, the school's professional and educational standard and students' learning achievements etc.

During the interview, Czech head teachers felt quite confident about their professional dimension of leading pedagogic leadership. They were willing to share the experience of educational training. Being the leaders of pedagogic leadership, they are seeking a better way to corporation, and the participative dimension of pedagogic leadership is highlighted.

Conclusion

This study has investigated the role of head teachers in leading pedagogic leadership. And major factors influencing leading pedagogic leadership of head teachers. Head teachers' perception on their roles is different in various cultures, they are seeking different aims for the development of school or their self-development. However, most educational leaders will experience failure, disappointment, frustration, rejection and hostility at some time during their professional lives (Day & Sammons, 2013). A successful and effective pedagogic leadership requires a long-term study.

The further study of pedagogic leadership would relate to the approaches of improving the teaching and learning. Beside, more works need to be done on the aspect of evaluation pedagogic leadership as well.

Acknowledgement

This paper has been funded by Palacký University Olomouc (grant number IGA_PdF_2015_021).

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Joint Custody in Families and its Pitfalls (from a research Perspective)

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Abstract: The divorce of their parents is a fundamental event in the lives of many children. This is a very difficult time for all those involved. However, society still tends to see divorce as a “normal thing”. For parents and children, however, it is not, as it disrupts their day-to-day lives. The parents are immersed in their feelings and deal with “practical matters”, while the children can be overlooked. The question of joint custody and the impact this model has on children of pre-school age is presented through the results of research carried out in 2013 and 2014. The research was qualitatively oriented. This study presents our findings, obtained through in-depth interviews with the parents of pre-school children who have requested joint custody.

Keywords: joint custody, pre-school children and younger schoolchildren, divorce, parents, family

Introduction and theoretical background

If parents split up and get divorced, their rights and duties in relation to their child or children have to be defined. The parents start to find out information about possible types of upbringing. It is clear from the statistics that parents often request the form of joint custody. Joint custody is one form of caring for children when their parents live separately after the divorce or break-up (Amato, 2010). Joint custody has been in place for a long time, particularly in the countries of Western Europe, Scandinavia, Canada and

the USA (since the mid-1980s). In this form of case the parents still have an influence over the child's upbringing and are in close contact with the child. However, does the media show all the sides of joint custody? Are children happy in joint custody, or is it just that the parents are satisfied that they have got their own way? Are parents adequately informed about the essence and conditions of joint custody?

Children are always affected by their break-up of their parents. Children notice tension or strife between their parents and are aware when one of them leaves. In the midst of a divorce parents can often be wrapped up in their emotions and have to deal with a lot of different problem (e.g. job, housing, finances, etc.). In this situation they have less time to devote to their children and can be less empathetic to their children's needs.

The Civil Code states that when decisions are made concerning custody, the court should ensure that the decision made is in the interests of the child. The court should take account of the child's personality, talents and abilities in relation to the development potential and living situation of the parents. Each parent may have differing income, housing options, etc. The court should also take the child's emotional stability into consideration. A child is an individual, so should be treated as such. Some children, for example, do not like changes, while others have no problem accepting them. The court should also explore each parent's ability to bring up the child, and should monitor the current and anticipated stability of the family environment in which the child is to live. The child does not only live with its parents, but also with siblings, grandparents, other relatives. Therefore, the court should also take an interest in the emotional ties the child has with these people. It should also ascertain which of the parents has done a proper job of looking after the child up to that point, including the child's emotional, intellectual and moral education, as well as which parent offers the child better potential for healthy and harmonious development. In cases of joint custody the child's opinion should always be sought. The court's decision should not be a concession for one of the parents in cases of rivalry.

It is primarily down to the parents to prove that joint custody can work in practice before the court makes its decision. According to Klimeš (2009, pp. 13–14), it is best if the custody intervals are as similar to a normal way of life as possible. It sees half-day intervals as being most suitable, but in most cases this is not practical. In the case of pre-school children and younger schoolchildren, where the intervals tend to be weekly, family meetings during the week are suitable. This, however, calls for mature communication between the parents.

Before the joint custody decision is issued, the parents should answer a few of the following questions (compiled according to Zakouřilová, 2014, pp. 176–178):

Where will the child be registered as living?

What will change with a new partner, how will that partner get on with the children, what will that partner's attitude to this specific form of upbringing be?

Is there adequate information about joint custody, is it clear whom I need to contact for assistance in reaching an agreement with the other parent?

Is the child adequately adaptable, more sensitive, prone to anxiety, closer to one particular parent, at the right age, is the child's health good enough for joint custody or could this have an adverse impact on the child's health?

Who will buy the child's clothes, pay for hobby groups and other activities?

What will happen with the child during the school holidays, on public holidays and birthdays?

How can the parents cope financially with paying for housing?

Who will communicate with the (nursery) school?

Who will claim tax benefits for the dependent child?

According to Hrušáková and Novák (1999, pp. 32–34) it is essential that the parents show their ability to cooperate with the other parents. Words are not enough. They also claim that sufficient attention should be given to the opinions of the child.

Housing conditions should be comparable, so that the child does not have the sense of being "bought".

On the subject of joint custody there is also much discussion over the age of the child. According to Klimeš (2009, p. 2), the lowest age for joint custody is 3, i.e. an age when the child is ready to attend nursery school. Klimeš also states that until that time the child should fall asleep with the same parents and in the same environment.

In the case of pre-school children it is essential bear in mind the fact that joint custody should not be approved if we know that it will not be possible for us when the child is of school age.

Joint custody has its opponents as well as its supporters. Špaňhelová (2005, pp. 4–5) states that when joint custody is set up properly, when the parents cooperate well and when the child is well adapted to the situation there is a good chance that the child's emotional development will not be slowed or distorted. Children can learn from their parents how to deal with their emotions, they do not lose their sense of certainty, they still have a mutual relationship with their mother and father and still experience both male and female roles and elements of their upbringing. The child also sees behavioural models in both parents.

The mother and father are the most important people in a child's life. The mother and father's influence on the child is wholly irreplaceable. Each parent generally has a different style of upbringing, from which the child absorbs a certain model of behaviour. From their mothers children learn how to be a woman and how to communicate with women, while their fathers can teach them how to communicate with men and how to be a man. This teaches children how the opposite or same sexes communicate with one another. Research has also shown that both parents are irreplaceable, as the child develops a completely different relationship with both parents. Warshak (1996)

even claims that children should grow up in the case of same-sex parents. Research carried out in the USA has shown that boys who grow up with their father do not have the same problems with integrating into society as boys raised by their mothers do. Of course, this information cannot be generalised and it is not always necessary to place boys in the care of their father. However, if a boy is placed in the care of his mother, it is essential that he retains regular contact with his father. This opens up the option of joint custody, where each parent has an equal right to care for their child.

The pitfalls of joint custody can be seen when joint custody is applied with very small children. Problems with this type of upbringing also include the fact that children can end up feeling more tired from travelling between one parent and the other.

Joint custody should not be a “victory” for one parent over the other when settling their disputes. The early stages of joint custody are difficult for all the members of the family.

Our study presents the experiences of parents who have opted for joint custody.

1 Research methodology

The aim of the research is to get an insight into parents’ thoughts when choosing joint custody and clarify their reasons for choosing this system both when filing the proposal with the court and during the actual process of joint custody itself.

Previous research into joint custody has mostly been quantitatively oriented, and used questionnaires. It has focused mainly on the advantages and disadvantages of joint custody, on determining the professional experience of people with an interest in proceedings concerning children placed into the custody of both parents (Luňáčková, 2011, Špaňhelová, 2005). The aforementioned research gives us less of an insight into the motives of the parents themselves, i. e. what led them to opt for joint custody, how they manage it in practical terms, and what pleasures and pitfalls they have encountered. We were interested in how parents see the system of joint custody after entering into it. We were also interested in why parents file an application for joint custody and how they subjectively view the changes that occurred after commencing joint custody.

Due to the aim of the research, we collected the data through unstructured interviews. We did not have the questions prepared in advance, or the order in which they were asked.

The interviews were recorded on a dictaphone and then transcribed. In the next phase of the research we analysed the data and then continued by designating codes, sorting and systemizing subcategories and categories using open coding.

In order to be better prepared for interviewing the selected participants, we held an initial interview outside the research group. This was held with a pre-arranged participant who met the conditions. Joint custody had to have been approved by the

court. Then, we arranged a place and time for the interview. At the beginning of the interview the participant was informed about the aim of the research and that the interview would be recorded. The interview started with an initial informal conversation, which was not recorded on dictaphone. We saw this part as being important, as it built a sense of trust and a good atmosphere. The interview itself lasted for roughly one hour. After interview was over, there was then another informal interview, which was again not recorded on the dictaphone. In this part the participant had the chance to ask the researcher questions, was interested in the researcher's practical experience of other families with joint custody. This part lasted for around half an hour.

In the research itself we then contacted several pairs of parents-participants, always a father and a mother, the condition being that the parents had joint custody approved by the court and that both parents agreed to the interview. Three pairs of parents agreed out of all the potential participants we contacted. We let the participants choose the place and were flexible to their needs as far as the location and time were concerned. The interviews were held in the participants' homes, as well as in quiet cafés. The research set comprised a total of 6 participants, 3 women and 3 men. All the participants were formerly husband and wife and had a court-approved agreement placing the children into the joint custody of both parents.

1.1 Characteristics of the research set

Family 1

The parents started to live together after knowing each other for four months, and got married after three years. Their daughter Ema was born after their first year of marriage. The mother had a miscarriage once before her daughter was born. According to the mother, the parents started to have disagreements around 2 years after their daughter was born. The parents longed to have another child, but the mother had two miscarriages. The mother told the father that she was unhappy in their marriage in around February 2012. The father tried to keep the marriage going, and started to visit a marriage counselling centre. The mother went once, but did not see it as important. The parents did not communicate well together, and did not talk about their problems together. The mother was afraid to express her feelings to the father. For the father it was a surprise that the mother wanted to leave; he could not understand it. Both parents agreed that they had never imagined they would one day get divorced.

Father 1 was 33 years old, university educated, a designer-electrical engineer by trade. He came from a complete family, and had younger sibling. The father tried to hold the marriage together and started to visit a marriage counselling centre. After the mother left the family home he met a new partner, who also had children in joint custody, although the father says that relationship was on the rebound, and only lasted for 9 months or so. The father now has a new girlfriend, who has not children and gets

on well with his daughter. The father is happy in the relationship, and longs for another child. He keeps in contact with the mother's parents, but only formally. He lives in a flat in the town.

Mother 1 was 29 years old, with a secondary school leaving certificate, and was self-employed. She came from a complete family and had a brother 3 years younger than her. The mother and the father started to live together after knowing each other for around 4 months; she had wanted to move away from her parents, start a family and have children. She built her relationship with the father on practical things – the father's ability to provide for the family, his easy-going nature, etc. The mother now knows that a relationship cannot be built on these things alone. Miscarriages were psychologically demanding for the mother, and she had no support from the father. The mother did not want to go back to her original job, which she felt was too time-consuming for a mother with a child. The father had the opposite opinion. For the mother this sequence of events was probably what made her decide to end her relationship with the father. The mother found another partner, with whom she has lived in a family house in a village since May 2012. The mother maintains formal contact with the father's parents.

Ema was 5 years old. She attended nursery school in the town. She used to go to a pottery group. She was looking forward to having a sibling, and got on well with her father's partner and her mother's partner. According to the mother, she is more sensitive, while according to the father she is livelier. Each parent's style of upbringing is different.

The parents agreed on joint custody, which they followed from May 2012 at short intervals (2–5 days) and a long week (5–2 days). The mother moved out of the house she had shared with the father and started to live with her partner, who had two children that visited them for the weekend once every two weeks. There were no major problems with the joint custody. The parents filed a court application for joint custody, which was approved in February 2013. The parents had also entered into a property settlement agreement. The court decision on joint custody stipulated that custody of the child be shared at 1-week intervals. In July 2013 the mother informed the father that she no longer saw joint custody as being suitable for their child. She had already informed the father about changes in the child's behaviour (nightmares, unwillingness to go to nursery school, a tendency to cry when leaving her mother, etc.), although the father did not see any of this in the child.

Family 2

The parents got married after being together for a year, during which time they lived together. After a year of marriage their first son, Jan, was born, followed by their second son, Šimon, 21 months into the marriage. According to the mother the parents would have split up during her first pregnancy, if she had not been pregnant. The parents found it difficult to bring up their children, particularly during their first two years of

age, which led to quarrels between the parents, a lack of communication, and complete alienation. The parents lived for the present and only thought about the situation in hand, and had not time for one another. This naturally led the parents to decide to get divorced. The father made an effort to save the marriage and wanted to visit a marriage counselling centre, but the mother refused.

Mother 2 was 36 years old, university educated, worked as a general practitioner for adults, now on maternity leave. She came from a complete family, had a brother 5 years younger than her, who had Asperger's Syndrome. She never really experienced a proper sibling relationship. At the age of 14 the mother left home to study at a foreign-language grammar school, where she met other peers and had the chance to compare herself against them. She claimed that her family environment offered little in the way of stimuli, was not very sophisticated, and her childhood was very short. Her mother had always supported her. She did not mention her father during the interview. The mother was on parental leave for 5 years, and saw this as an exhausting and demoralising time. In retrospect, she sees her break-up with the children's father as the right decision, one which has benefited both parents. The mother has a new partner, with whom she is expecting twins. The mother's partner does not live with the mother, and stays with the mother and children a couple of days a week. The mother was obliging and communicative during the interview.

Father 2 was 38 years old, and was unemployed. He came from a complete family, which had always given him a lot of care and support. Nobody was divorced in his close or extended family. The father had an older sister, who had her own children; he got on well with them, and they lived on the same estate. He does not have a partner. He sees joint custody as a form of active parenthood, and has learnt a lot of skills (washing, cooking, ironing, etc.). The father is now happy. With the benefit of time, the father thought his divorce from the mother was a good thing.

Jan was 8 years old, attended the third class at elementary school. His period of defiance was a challenging time. Jan was a self-confident lad, able to express his opinion and had the tendency to manipulate others. The parents sometimes went to class meetings together. Matěj went to a swimming group.

Šimon was 7 years old, attended nursery school, and had been there at his enrolment, as had both his parents. According to his parents he was a very raucous child. He had less self-confidence than his older brother, but was cleverer, according to his parents. Šimon attended a gymnastics group.

Family 3

The parents moved to live with the father's mother after knowing each other for six months, as the mother, who was pregnant, was still studying. The mother was 20 years old when she had her first child – a girl. While studying daily the mother then had another child – a boy. Both children were unplanned. While the mother was studying,

her mother helped out with looking after the children. The parents tried to live by themselves, but for financial reasons moved back the mother's father's house, where they lived for around 3 years. However, while they were living together they all (the mother, father, the father's mother) disagreed over various matters, and the mother even physically assaulted the father's mother. After this, the parents decided to go and live with the mother's parents in a family house in a village. The parents got married after being together for six months. The mother hoped that the father would change after the wedding. The mother did not want to get married, but the father did. Both the parents gave different reasons for the break-up of their marriage. The mother claimed it was because of differences over their sex life, when she was jealous of the father, while the father forbade her from doing various things and wanted to have control over the mother. The father believes that the reason was that the mother was unfaithful to him and was pregnant by someone else. There was also a lack of communication between the parents. After six months of marriage the parents got divorced, and the father moved into the town.

Mother 3 was 28 years old, trained as a chef-waiter. She came from a complete family, had no siblings, and was adopted. At the age of 15 she started to trace her biological family, although only managed to find out where she had been born, not whether she had any siblings. During puberty the mother had problems with her parents, but did not go into detail. The mother's parents were afraid that the mother would leave home. The mother realised that her parents were those who had brought her up. After her divorce she remarried, as she was expecting a baby – a little boy. The mother and her new husband shared a joint household in her parents' two-generation house. The mother is happy in the relationship.

The father 3 was 27 years old, and worked as a labourer. The father came from an incomplete family, and was raised by just his the mother. He knew his father, but had no contact with him. He had one brother, whom he saw regularly, and two sisters. He was not in any contact with one of the sisters. The father is the youngest of the siblings. He has no partner. He shares a home with his mother. He expects that the situation with the children will be sorted out by others, but has no suggestions of his own.

Anna was 6 years old, and attended nursery school in the village her mother lived in. She attended an art group. The mother took the child to a child psychologist because of her increasingly impulsive behaviour and the child's inability to sustain attention. The mother had informed the father about the visits to the psychologist, and the father was against it.

Bedřich was 3 years old, and was looked after all day long by his mother. He did not visit any hobby groups.

In February 2013 the mother filed an application with the court to obtain sole custody of the children. The father also wanted to have custody of the children himself. The court recommended that the parents visit a marriage counsellor, which they

did, and made a joint custody agreement. Owing to the fact that the father worked shifts, the parents agreed on custody intervals of 4 and 4 days. The parents made an agreement concerning the court hearing in March 2013; the court ruled to approve the custody intervals proposed by the parents, with the proviso that as soon as Anna started school, the custody interval would be one week, and the school would have to be halfway between the parents' houses. Apart from some minor difficulties, joint custody worked well until Christmas 2013. As the father had changed his job, and due to his working hours on shifts, the joint custody agreement could not work as it had done previously. Care is now provided for both children mostly by the mother, and the father has contact with the children just one weekend every two weeks, which is what the parents agreed on. For this reason the mother filed an application with the court to have the arrangement changed and to obtain sole custody of the children.

2 Interpretation of research findings

2.1 Joint custody agreement between the parents

Parental agreement between the parents about joint custody is one of the most comprehensive rules made between the parents. We therefore believe that this is crucial, as it is during this phase that the parents make decisions, clarify their motivation, the reasons for and against, and try to obtain more information about joint custody.

In the case of family 1, it was the mother that obtained information, mostly from the internet; during the interview the father said nothing about searching for information about this form of care.

I'd read lots of smart articles about how joint custody is great. Of course, some disagree, but I was also trying to work it so that I didn't take him away from his dad... I used to get so annoyed when I read the website "Where are you Dad" That this kind of website, you see... and I also used to read "Strídavka.cz" and tried to get a grasp on it. But it's just that I think that it can't help unless people can understand the situation you're in. You can't be helped by someone from outside. It has to come from yourself. And that only thing that helps is not to stir up any conflicts, which is what all these organisations do. They all tell you: Protect and fight for your rights!" But that's not what it's about, and the child gets lost in all this. But most of all, both parents have to forget about ideas like: "I have rights." (M1)

Information was important for family 2 when setting up joint custody. The mother especially sought out examples of good practice, which encouraged her and strengthened her determination to opt for this type of upbringing. She was also aware of the individuality of each particular family.

I tried to find some positive examples to show how it could work. I was always looking into it, and was attracted to those servers, where I searched for experience shared by people who eventually went through with the divorce and joint custody, to see if it could possibly work. I started by searching on the Rodina site to find stories about people who have joint custody and what they had to say about it. I really appreciated it, I guess I was just hungry to hear about stores where it worked. I also went through a time when I was always reading about what the best age is to get divorced. (M2)

In the interview the father again stress the importance of filtering and verifying information from various different websites. This information helped him to better prepare for joint custody. Individuality was also crucial for the father.

You see, I believe in common sense, as several times I've seen information on the internet that isn't very serious... it's good to check claims out and substantiate them somewhere else. You still have to look everything up for yourself, so you don't get swindled. What was probably most important at the beginning was that we read something about it, found out some information about what we were going into, we knew that where we were headed was a really individual thing. And this is the case with the information that I say should be filtered and analysed, as this information is not correct. (F2)

Family 3 had not found out any information about joint custody, and had not looked for it.

No, because I don't know, like... that you have to go to the social and they should tell me where to find out, but at the moment I don't want to stick my nose in too much. (F3)

No. We were somehow told that we'd be having joint custody. (M3)

As can be seen from the answers given by the research participants, information was important for the university-educated parents. What was interesting about the interview was discovering what parents expect from joint custody.

This can be summed up as follows:
expectations that the situation will calm down,
resolving formal errors in property settlements,
faith that joint custody works.

2.2 Changes in the father and mother's new living situation

This study presents a look at the position of the father and that of the mother in cases of joint custody. One does not imagine getting divorced when one gets married. Almost all of the participants said this.

I would never have thought that it would go so far that I'd end up getting divorced. (F1)

One parent was surprised that the other parent left, but that parent had lived with the other for some time, had dealt with it emotionally, had thought about ending the relationship, and had weighed up the options involved in remaining in the marriage or leaving.

... I was unhappy... but I still wanted to do something to save that relationship. I never thought I'd get divorced. (M1)

... I was sorry about it, and also because of the children... (M3)

All the participants were shocked and surprised that their marriage had ended and one of them had left.

Both the fathers' and mothers' lives changed, and these new situations had to be dealt with:

a new partner,

other children with a new partner,

orientational family.

In our research it was the mothers who decided to end the marriage. Half of them already had **another partner** while still married. Finding a new partner was the culmination of their marital problems, when they were searching for something their husband did not give them or lacked, or had other expectations.

... I didn't get anything out of that relationship intellectually, as we were both different and had different educations, and both needed to talk about other things and other interests... You generally get over the fact that you don't have anyone, or it can be hard to get over, but that's what I did. (M2)

He's kind, all that, I love him and he loves me, too. (M3)

During their marriage the participants had thought about ending it, but were always prevented from doing so by health issues, the mother getting pregnant, or rashness.

... I had a miscarriage. And that was really the last straw. It was like destiny was telling me that it wasn't to be. I had my third miscarriage. And that's very hard, psychologically. (M1)

I can well remember the breaking point, when I was about 4 months pregnant with Jan, and I and the father had a talk, after which we split up, as if I wasn't pregnant. There were various breaking points, really. We probably wouldn't have been together if we hadn't had the child. (M2)

All the participants (mothers and fathers) who are in a relationship with a new partner are satisfied. They did not want to be alone, and wanted to spend their lives with someone. Therefore, divorce can be described as the culmination of a crisis, but did not signal a desire for an isolated, single life.

I'm completely satisfied as far as my relationship goes. I didn't want to be alone and I know that I wouldn't be in such a hurry to get divorced now. (F1)

Of course, if a parent had a new partner, the children also had to get to know them. All the participants saw their children's relationships with their new partner in a positive light.

And the children say nice things about him, her boyfriend. (F2)

Ema likes my new girlfriend, they get on well, and are fond of one another. (F1)

Uncle plays with them, when he can, he's kinder. He's never raised his hand to them. The first time will be the last time. He's fine, he plays with them and we go out. (M3)

The participants did not mention the influence their new partner has on the children's upbringing. At the time of the interview all the mothers had **another child with a new partner or were pregnant**.

Often featuring in our interviews were **the parents' orientational families**, i.e. the families in which the parents grew up and were raised. The participants had various different role models in their families, identified with them, and adopted certain forms of behaviour into their own family life.

... I'm adopted, so I don't know... but if I have a sister or a brother, I have no idea. (M3)

... I just don't get on with my family... I left home at 14, I'm different, and it's great for a visit once a month or so. My mum's always supported me, I suppose... my childhood was awfully short. (M2)

2.3 Position of the child in joint custody

The participants perceived **their children's feelings and behaviour** differently, some with more sensitivity, others with less.

We present a borderline opinion, voiced by families 1 and 3.

In family 3, for example, the father was unable to comment on his child's feelings and behaviour, as they had minimal contact.

I don't know, really, I can't say, as when I see them, I see them once a month. If I get to see them twice in a month, I'm happy. It's not a problem for me, as I live with my mum, I brought her to live with me because of the children. I call, when I have time, but I've not phoned them for ages, that's true. (F3)

Mother 3 spoke about how her child expressed herself.

No, I was playing with the ball, let's say, and it rolled it away, and dad saw it and little Běďa got hold of it and I wanted to take it back and dad had a go at me, saying it was Běďa's ball, but it was me who was playing with it and it's all my fault. I don't want to go and stay with him, he's a horrible dad. (M3)

In family 1 the participants tried to take account of their child's feelings and behaviour. As mother 1 mostly looked after the child when she was ill and during the school holidays, she spent more time with the child, so she assumed that this closer and more frequent contact with her triggered a number of changes in the child.

... I'd say that she (the child) started to see it that she didn't want to go and visit him... (M1)

As we've already mentioned when discussing communication, the mother tried to describe their child's feelings and behaviour to the father, but the parents disbelieved one another's claims.

So I sent him an email, describing what she'd said. She was as afraid of her dad as I was. Now, she's more sensitive than I think she would be if it hadn't been like that. So it had to be really difficult for her. (M1)

We can see how the mother's feelings are transferred to the child, but also how communication between the parents is perceived by the child.

Ema was aware of a tense atmosphere. (F1)

2.4 The real form of joint custody

After hearing the descriptions of the real situations in these families we have extracted several important incidents and events. We focused on:

- a) extraordinary situations,
- b) the running of the household,
- c) disharmony over upbringing.

Extraordinary situations primarily included situations where the child falls ill and the parents have to agree who will remain at home with the child. Illness can also disrupt the custody schedule. In the case of family 1, the parents said that, when ill, the child was looked after by the mother when the father asked her to do so and she did not refuse. This however, subsequently led to misunderstandings between the parents. For the father, joint custody meant a certain order and system. The father used to go away on business trips, but said that his girlfriend could look after the child instead, an idea that the mother did not agree with.

As my wife had more free time, more flexible working hours, I always asked her if she could stay. Most of the time when Ema was ill, she used to stay at home, so I used to take one day time off in lieu, say. My ex-wife was mostly very accommodating to me. Little Ema likes my new girlfriend... And when I'm on a business trip, as I have that Tuesday, we agreed that my girlfriend would pick Ema up from nursery school and would take her there on Wednesday morning. That was before, and only very rarely, maybe once or twice (when the child was taken to the mother because she missed her during joint custody). Something like that did happen, but I backed down. The child, little Ema, can't just say "now I want to be

there” – and we all then go crazy, reorganise our schedules and take Ema there. That week I had to somehow plan my work and other activities. (F1)

The mother stated that it was difficult in financial terms to stay at home with her child.

(M1) ... her dad never had her during the school holidays, when she was ill, and so on. And money was sometimes tight for me, as I couldn't go to work. (M1)

In the case of family 2 the parents coped with the difficult situation very well, according to the father. The grandparents also helped out looking after the children when they were ill.

(F2) He perhaps gets a bit better when he's with my wife, and then I get him with a cough, and that parent actively helps out, with everything – like illnesses and growing up... we get granny involved. My mum helps with the babysitting. But luckily those children aren't ill... When he has the 'flu, then sure, she stays with whoever she's with, he's got a temperature, so we don't bother about it, either I'm at home with him or my wife's at home with him. (F2)

The father and the mother from family 3 did not say much about care for the children during a time of illness. The father stated that he had asked the paediatrician about the children's health.

I sometimes go to see the paediatrician to ask, as I'd never hear it from her that they had the 'flu or something. (F3)

As far as the running of the household is concerned, we focused on where the parents lived, payments, the parents' jobs and incomes, passing on clothes to the children, the parents' visits to the homes of the other parent, cooperation with school, learning new things, more planned activities, etc.

Family 1 had agreed to split payments while they had joint custody.

I used to pay for the nursery school and fees, and my ex-wife paid for lunches or whatever was needed, so we used to go half and half, something like that. ...when someone wants to have a child, they should have the money for it, or... I'm not saying that the child has to grow up in luxury, like, but a bloke should have some sort of secure job. I earn pretty good money, and my partner has a normal wage. (F1)

Well, at the beginning we tried... ..he had a hundred thousand in the bank and I didn't have the money to buy washing powder. (M1)

In the case of family 2 both parents were actively involved in the child's upbringing and had a system for passing on clothes. However, both parents lived on the same housing estate, which is an important finding.

... it's not far. The estate's the same, and the route is pretty much the same, too. Of course I had a better income, so I paid those bills for the children. Although now that income has changed for both of us. I'm on maternity leave and he's becoming self-employed, so I don't know, I suppose we'll always come to some sort of an agreement. We've got this handover bag, a clever thing, that you carry on your shoulder... The change means that one parent picks them up from nursery school, you see, while the other drops them off. And that bag contains what he took off them when he had them last time. So there are dirty clothes, which can just about fit into that bag, or some other things they had with them. But not jackets or boots, as they've only got one set of those, since why should we have everything twice? It's no problem at all for the kids and we just sling the bag over our shoulder when we leave with them. When they had more presents, bigger things, like when they got skis for Christmas, a satchel, and so on. So the father wrote and told me what he was buying and I gave him half for it. So for those bigger shared things, like skis, which you can obviously only have one pair of, we arrange it and we buy them. I appreciate it, and I'd say he does too, that we finally have some days to ourselves, which we never used to have. (M2)

The father made similar claims as the mother.

... me and my wife have everything twice. But expensive stuff like winter jackets, we've just got two. You start to plan more, I learned to plan my time so that the children spent the time actively. I learned to cook, and it works out cheaper. And they've got something at both of our places – they've got rabbits at my wife's, and construction kits at my place. It's more active for us, too, the parents, and easier to get an idea of what they're learning at school. I'm not talking about how I see it, how, but more how it is for the kids. Like we tell them well in advance. They know what they've got planned for the next fortnight or so. It's sort of more organised. And we keep each other informed, of course... So we know what's going on and where, and then there's the reading, so yeah, we read, we see that we have to like push those kids forwards. When I go and visit them, say... the lads want to show me some toys, so I go, like, I admire their crane, I fix a wheel here and there so that they can see I know my way around that second household... and that's kind of how it works. It's just a visit, after all. With her partner it's like the kids can see that their parents know about one another and aren't as sassy. We call it "swapping round", to kind of generalise it, so he'd understand. There has to be a mum and a dad, so that obviously puts me in the role of the mother. So, kiss it better, cuddle, have a snuggle, like... So yes, of course. You have to learn to cook, you know you have to rely on yourself. Whatever needs doing, do it. You learn some new recipes, don't you. And then you dish it up and: "I'm not going to eat that, I don't like it!" (F2)

The primary issue for family was the difference in the parents' incomes. The parents did not disagree about clothes.

... as he had more money, he had more opportunity to buy her things, and he spoiled her, basically. So Anna was number one. Bédá wasn't, Bédá was still in nappies. At the beginning I used to give him things, as he did the shopping, wrote their names on the things so

they wouldn't get confused. If it happen that he dressed them in clothes he'd bought, I used to wash them and put them on one side, so I didn't get confused. When he (the older child) has to go to his dad's, he takes off my glasses and wears his at his dad's. It worked, sometimes there were ups and downs, and so on, but that way it worked well." The father lives with his mother in the town, while the children's mother lives in a village. (M3)

It's not a problem for me, as I live with my mum, I brought her to live with me because of the children. I call, when I have time, but I've not phoned them for ages, that's true. (F3)

There were significant **disagreements between the parents during joint custody**. The parents disagreed over clothes, school attendance, diet, and the age at which children should be in joint custody, but also over financial matters. In the case of family 1, disagreements mostly concerned how the child was being raised, i.e. when the child was placed in the mother's care. The parents present their views of joint custody where the father was worried about the lack of influence he had on the child's upbringing.

The saddest thing about it is that Ema didn't try to stop that joint custody. It didn't seem to trouble her, she was used to it. ... it bothers me, I don't know, that my wife is bringing Ema up alone and takes no notice of what I think. ... Ema could be at nursery school in town, at school, so it wouldn't be a problem. And then there was the money, too. There were like three reasons why she wanted that care, to have custody of Ema. Yes, sometimes it makes me sad. And then there was that scene, I thought it was pretty childish, that I was accused of having his overalls at home. And she (the mother) explained that I had to return everything, socks and all that, dirty. I told her it was normal for me to wash them. ... I wasn't above doing it. I just wanted everything to work out amiably and normally, I guess. I realise now that that's the way it has to be, that she has her in her care. Joint custody, what a thing. There's always some perks and that to joint custody. (F1)

The mother mentioned disagreements over caring for the child when she was ill, during the school holidays, and was also dealing with the child's current upbringing. So, she regretted agreeing to joint custody.

When I can, when I don't have to put her in nursery school (laughs), so I don't put her there. If I can have her after lunch, then I do, so she's not away somewhere so much. ... it used to bother me that I was always at home with her and he didn't give me anything extra, not even when she was sick, or during the school holidays. And he really took everything for granted. I was always at home, so of course I didn't tell him that I can't. Obviously the most important thing for me was that I could be with her and I was so happy that I at least had more chance to spend time with her. So she was really little for joint custody, I think that's the most important thing. ... her dad didn't have time to look after her during the school holidays and I just got annoyed... joint custody can work either with children that are old enough (emphatic) or when the parents communicate normally and live just across the street and can see each other on a normal basis. But I think it was a big mistake, what I did. (M1)

Joint custody worked the best for family 2. The parents had agreed on clear rules and everything worked. The mother spoke about possible problems that could arise. The mother predicted disagreements in their relationship in the future due to the change in both parents' incomes.

Money's such a potentially explosive topic with us. So about those real options, it's not going to be down on paper any more, it's been clear up to now, but it won't always be. It'll be about how well we trust one another. (M2)

The father from family 3 had not seen his children in almost a month; he and the mother disagree about the older child's school attendance.

So she said I'm going to put the little one in nursery school in the village, and I have no idea how I'm going to manage to get her to school in another village. It can't work like that. It used to work, when I was out of a job, it worked. And it worked when I was working, at the beginning anyway, at least until that September when she gave birth. ... just think, I've not had them for a month. Now I'm going there on Friday and I'll have them for Friday, Saturday and Sunday, the first time in a month. I wanted to see them last week, as Anna had a performance on the Saturday, so I said fine, I'll take the little lad, anyway, and then yesterday I found out that they'd gone away. ... she takes him away and then says you never go for him, and I don't, because I go to work, and you're supposed to give them to me when I've got some free time. (F3)

The mother was not convinced that joint custody was a suitable form of upbringing. The mother insisted on handing over both children to the father, and if not both, then he wouldn't have any contact with one of the children.

(M3) ... So many times I wanted to cancel it... ... he remembers that he wants the children. So I tell him: "Why don't you write me one or two days beforehand? Because I have something planned for us and I can't cancel it now, as we're on the way." But, I'd forgotten that on February 14th we were supposed to go to a ball with my husband, but I got the dates mixed up, and had agreed to go to the carnival. And so if I could give him Kuba. I told him: "Yeah, Kuba, sure, but you've got two children, not just one." And so I didn't give him to him. ... he wanted it, too, that was twice he just wanted Kuba. ... so he owes me 4 thousand. ... and I want to change the rate for that money, too. I'd want to cancel joint custody and have them just with me. (M3)

Family 1 in particular mentioned differences in the parents' style of upbringing.

... It's me that has to take the strong hand with Ema and I feel that he's too free in her upbringing. (F1)

... he (the father) is a stickler... My mum's very bossy too, so I'm completely the opposite, as I know there's no point to it. (M1)

Parents 2 share the same main ideas about upbringing, where unity between the parents is important.

So when we both have the feeling that one child needs pushing, against his will, as it's for his own good, I still know that I always have to discuss it with the father. ... we're different people, so we don't have the same ideas about how to treat the children. (M2)

You need to tell the children what's what sometimes, and stand up for the other parents, so that those kids can't take advantage of it. We're always working with them, actively. Well, we wanted children, we got them, so we have to look after them. ... that conflict in our upbringing, it was always kind of a problem. My wife's really liberal in how she raises the kids. We both know that it's bad to make threats, that that's not how we should bring them up. (F2)

In families 1 and 3 there was a possible influence exerted by those in the vicinity as regards how the parents brought up their children. This was not the case, however, with family 2.

... the way it is in the village these days, and pressure from people around you... they don't really understand joint custody, they think that if someone has joint custody, it means you're a bad mother. I think the pressure around has made them change their views... Otherwise, I think that there's no sense in forced joint custody as such. She was fine at nursery school, and then they told me she was a lot more cheerful, I don't know. She seemed the same to me, anyway. (F1)

I tried to back it up for a while in the eyes of the people we know. ... he cares so much about what the neighbours think. (M1)

As, you know the way it is, otherwise he approves everything, not her. When he says no, she says no. (F3)

Oh, and it also bothered me that she (the father's girlfriend) bursts into our lives, says her piece. My husband did nothing about it, in fact, you two have to sort it out between yourselves, he said. He didn't get involved. He didn't like it, but he didn't get involved in it. (M3)

It may also be said that the most significant problems between the parents lie in the differing influences and views of upbringing the parents have, a fact which was also reflected in the testimonies of the research participants. Where there are precise rules governing joint custody, and where communication between the parents is positive, the parents also tend to have similar styles of upbringing (family 2).

Summary and conclusions of the research

Joint custody is one of the options for caring for children following a divorce. If this option is chosen, both parents still have as much contact as possible with the child, as was the case when the parents lived together. Both parents thus have a say and an interest in the upbringing of the child with this form of custody. However, this interest is not a weapon to be used against the other parent, nor should it be a concession on the part of one of the parents. Analysis of the significant findings presented in this research has resulted in the creation of the joint custody model we present below.

Chart 1

Joint custody/upbringing model

<i>Child's position in joint custody</i> <i>Opinions</i> <i>Feelings</i>	<i>Real form of joint custody</i> <i>Practical working of joint custody</i> <i>Changes in behaviour</i> <i>Needs</i>
<i>Mother's position in joint custody</i> <i>Other children</i> <i>New partner</i>	<i>Joint custody</i>
<i>Father's position in joint custody</i> <i>Preserving the family</i> <i>New partner</i>	<i>Parental agreement about joint custody</i> <i>Communication</i> <i>Information</i> <i>Rules</i> <i>Divorce</i> <i>Expectations</i>

Just when thinking about potential suitable forms of custody there is the need to answer some important questions and find the necessary information, or to know how to ask for that information. When looking for information, a great deal of which is available on the internet, for example, it is essential to filter that information. Examples of good practice can be found in the mire of negative stories about joint custody. It is these examples that should be given more attention in the media, and people should hear more about them. It is essential to always consider this form of custody on an individual basis.

There are several conditions stipulated for joint custody. Ideally, the parents should sit down together and consider whether they are really able to meet those conditions, always with the child's interests in mind. The parents in particular should be aware of the child's opinion, as should other institutions that come into contact with the family, such as social workers and the court. What might work well in one family could prove to be a problem with another. Boundaries and rules play an important role, and should

be clear and comprehensible to everyone involved in joint custody (the father, mother and the child). Other close family members and relatives should also be informed of those rules so as to prevent any adverse impact on the children and, thus, on the family as a whole. Rules may also be set out in writing.

Open communication between the parents and the children forms the basis for other relationships to work better in the future. Unity between the parents gives a feeling of certainty to the children, as well to the parents themselves. Children and parents have need for certainty and certain stereotypes. The parents pass their upbringing and behavioural model on to their children. For most parents communication is an important aspect, and works better for some than it does for others. If any disagreements arise, they should be resolved as soon as possible, or professional help should be sought (e.g. counselling, mediation centre, etc.).

After carefully considering whether the model can work, an application may then be filed with the court requesting its approval of an agreement to place the child into the joint custody of its parents. Depending on its workload, the court should base its decision not only on the agreement made between the parents, but also after thoroughly questioning them and speaking with the child, where appropriate.

The research also showed that in order for joint custody to work it is essential for the parents to agree on rules they will both follow, such as financial matters (allowances for the child, tax rebates), living (the child's registered address, the parents' living in the vicinity), and exceptional situations (if the child is ill, Christmas holidays), etc. It is not in the court's power to cover all of these issues in its final decision.

The research showed that one reason for the failure of joint custody was poor communication between the parents. Various changes also occurred in the families we researched after the introduction of joint custody. In particular there were changes in the children's behaviour, such as a fixation on their mother, impulsiveness, heightened sensitivity, a tendency to cry, etc.

Joint custody cannot be assessed in general terms; it is always necessary to take into account all the circumstances in that particular family in order to decide what is in the best interests of the child and not the parents.

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Researching Students Gifted in Science Using the Method of Eye Tracking

Jana Škrabánková, Eva Trnová

Abstract

Eye Tracking is a modern diagnostic method which has been recently applied in several studies. This method is based on observing human eye movement, monitoring a spot an eye is focused on, its distance, or the time duration of such focus. The course of the look, the sequence of eye fixations and movement can be widely used in cognitive sciences. This is where we class the area of pedagogical-psychological research of gifted students.

A recent pilot study of gifted students using the Eye Tracking method aimed to answer the question regarding whether it was possible to monitor the text and image processing of students gifted in science. Students participating in the study were given texts and images on a screen and asked to solve various learning tasks. Meanwhile, the processes they used to perceive the text and images were recorded. The goal of our research was to analyse the way students worked with the text, including details like whether they return to certain spots and how many times they do it within one line or one page, which words need to be focused on more than once, or how the size of their pupils changes when students think. The obtained information presents a basis for the eye movement reconstruction of individual students. Our pilot study verified that it was possible to use Eye Tracking as an experimental method even in pedagogical-psychological research of gifted students. The above mentioned also implies that there are numerous opportunities to use Eye Tracking as an experimental method in

pedagogical-psychological research and that no research has so far been done on gifted students. The researchers of the Research Centre for Education of Gifted Students of the University of Ostrava have the device serving for the presented study on gifted students in science for disposition.

Keywords: Diagnostics, eye movements, Eye Tracking, students gifted in science.

Introduction

Eye Tracking (hereinafter ET) is an advanced technology method that can nowadays be applied in many kinds of research. The principle of this technology is tracking the movements of human eye, monitoring places where the eye is looking at a given moment, distance to where the eye is focusing or a period of time that an object is monitored.

During viewing an image human eye captures about 4–5 discrete perceptions per second from which the brain then composes the image. In the pilot research the author used this technology to investigate how ET can be used to monitor the work with text and picture of secondary school students gifted in science. The important thing was how students acted during the monitoring of a given text and image, which they were presented on the ET-monitor and how they were subsequently able to solve the related tasks.

Patterns of eye movements (gaze patterns) are ways in which a person progresses when reading a text. It is because we do not perceive a text or an image at once. Our brain creates them on the basis of a set of immediate and discrete sensations that arise when stopping the eye (fixation). However, during the fixation period we are able to sufficiently sharply perceive only a very limited area (e.g. when reading a text from the common distance we see with the utmost precision only about 4–5 letters. The fixations normally range from 150–600 ms according to Duchowski (2007). In average the fixation last from 250–300 ms. Fixations usually last from 100 to 500 ms (but usually about 200–250 ms) and are then followed by a series of rapid jumps to the next position of the eye fixation. These vaults, known as saccades, last about 20–40 ms and during that time the eye does not capture any information. Therefore it can be stated that the human eye captures about 4–5 discrete perceptions per second during viewing an image, from which our brain consequently puts together the final image.

The hypothesis that the place where the subject's view is aimed is also perceived by that person was outlined by Just and Carpenter (1976) thirty years ago. Currently, it is obvious that this hypothesis cannot be completely received and the focus can be directed to other areas.

Recording and analysing the course of view, the sequence of fixation of the eye and eye movements also have extensive use in cognitive sciences. The pedagogical-

psychological research of gifted students in science can also be included into this type of research.

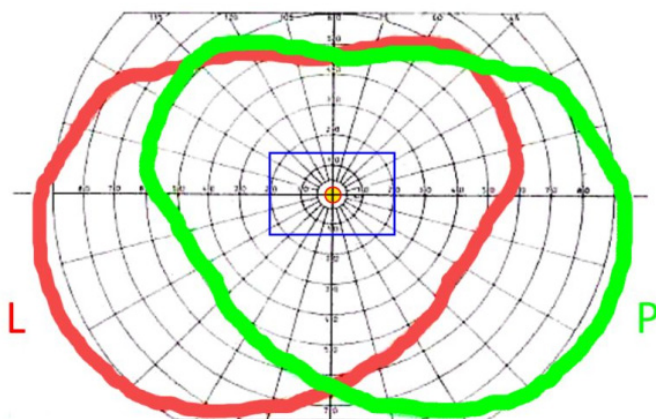
1 Method of Eye Tracking

For assessment of the application of the ET research method in science education of gifted students it is necessary to carefully describe its essence. The ET enables tracking the movements of the human eye, then allows identifying the place where the eye is focused and other measurable quantities. We will try to describe this method in more detail.

The angle of view is often determined as an angle from the axis of the rearmost effectively observed point in a given direction. However, the viewing angle also means the angle between the two extremities of the range of observation, which brings us to the concept of visual field. The field of view is the space that an eye is able to capture. In fact, we can say that the two values are equal, even though it does not seem so. The field of vision of one eye extends slightly beyond 90° off-axis of the head and in the opposite direction about 50° in the horizontal axis. Overall, one eye can see the range of over 140° of ambient image and both eyes together are able to accommodate the image at an angle of 208° in the horizontal axis. Thus we see a bit of what is behind us (see Fig. 1).

Figure 1

The range of image perception in both eyes in the horizontal axis. Available under Creative Commons licenses (author not available)



In theory, the intersection of the visual fields of both eyes is the total field of vision that we see. Everything that is out of a total field of view is referred to as peripheral vision. Practically, however, peripheral vision starts at an angle of 10° and more. Para vision is located within the range of $2-10^\circ$ while the real image as well as the viewing angle of an eye is within 2° (see Fig. 2). So the real picture looks like the picture with a black background. The residual image and its sharpness is provided by the brain. The eye, however, focuses only the point at an angle of 2° which is approximately the width of the erect thumb at arm's length (about 2.5 cm to 60 cm in length).

Figure 2

The actual image perceived by both eyes. Source Tobii.com



The narrow angle of vision in the macula of the retina results in the narrow angle of vision where there is the largest quantity of light-sensitive elements (rods and cones) that are able to capture the image. There are about 130 million rods that provide black and white vision and approximately 7 million cones whose function is to capture colours.

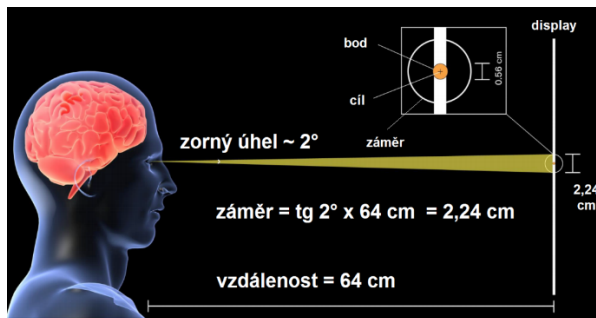
According to the previous theory it can be stated that in practice exact focus on black and white objects is better than on coloured ones. For the initial focus of the eye so-called calibration is used which is best done shortly before testing. Ideal calibration points are black and white in the largest possible quantity.

For the research presented in this paper we employed the device Eye Tracker TX 300. Its accuracy is significantly better than the accuracy of the human eye and the actual number of fixations for scanned data recording is 300 per second, which greatly exceeds the number of fixations for common scanning of the human eye in focus. The device Eye Tracker in its basic mode includes an integrated monitor which was initially used for measuring and from which was then determined and recommended viewing angle and a distance. The ideal distance from the monitor determined by the manufacturer is about 64 cm. At this distance, the human eye is able to focus on a point as large as

2.24 cm which is the size of about 2° (see Fig. 3) of the viewing angle. The device Eye Tracker is then able to target a centre point of the visual angle as large as 0.56° that is 0.5° at a given distance.

Figure 3

Calculation the distance of the eye from the monitor. Source Jedlicka, L. *Eye Tracker and Tobii Studio manual*

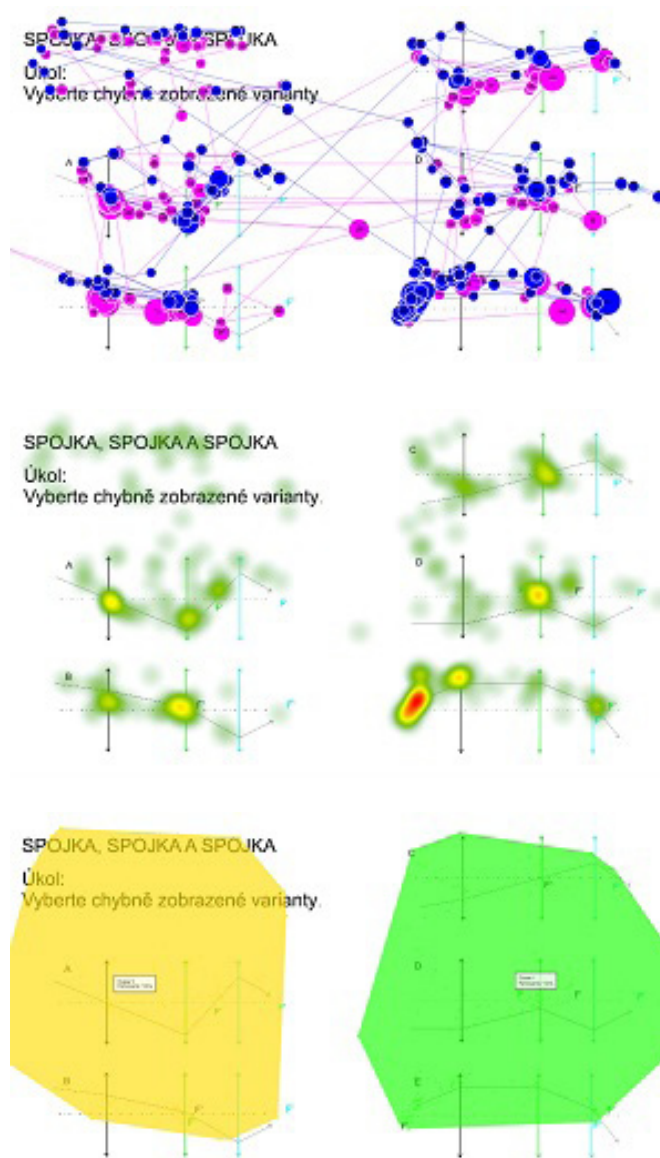


The unit records so called gaze patterns – sequential eye movements when viewing text, images, videos, etc. The movement is recorded as eye fixations (circles) and saccades (the lines between them). Taking this fact into consideration – we do not perceive the whole image, but only a part of it while the brain is calculating and making the complete picture, we can therefore say that e.g. when reading a text, we see roughly a few letters for an average of 200–250 ms and then we go on through a series of saccade lasting approximately 20–40 ms to the next fixation. During saccades the eye does not capture any information. Thanks to the fact that the device is able to record each fixation and evocate saccades among them, it subsequently displays the monitoring procedure of the scene, from which you can make additional findings (Jedlička, 2014).

The device Eye Tracker provides three basic types of view (see Fig. 4): classic view fixation/saccade, using heat maps or clusters. In this paper we used mainly fixation/saccade and heat map display.

Figure 4

Types of display of fixation clusters (gaze plots, heat maps, and clusters)



The theory used in the article has been already published (in Czech) because the text is important for understanding the research (Škrabánková, 2014).

2 Research problem and method

In our pilot study we focused on the possibility of detecting students' characteristics (variables) by the ET in solving learning tasks, assigned especially graphically. We also focused on individual differences in patterns of eye movements of different students, which can according to recent research be related to different ways of handling text and image, with problems in their understanding, etc. However it also depends on the nature of the task. Our research is primarily focused on the use of the ET for the exploration of activities of students gifted in science in text and image processing. The aim of the research was to analyse how students read given text, whether they return to certain places and how many returns within one line or page they do, which words and diagrams they stay on longer, to which words they get back to or how (at constant illumination) the size of their pupil changes when they think. This information provides the basis for the reconstruction of the eye movements of individual students and examines the possibility of using the ET as an experimental research method in educational and psychological research. The learning content which was used was the optics.

Research presented in this paper was carried out on respondents/students of upper secondary school (aged 18) which focuses on teaching mathematics and science. For our pilot study we selected a group of students gifted in science who were asked to solve a set of learning tasks. In this paper you can find as example some outcomes from one of the students gifted in science, who has been already studying the subject matter of optics. The following are not only images of fixed gaze patterns but also graphs expressing the width of the eye pupil versus time (at constant illumination). This dependence illustrates the degree of concentration of the examined student.

As the Nobel laureate in economics Daniel Kahneman (Kahneman, 2012) states in his publication entitled "Thinking – fast and slow": *"The calculation itself did not happen just as the action in your mind, the body was also engaged. Muscles were tensed, blood pressure and the heart rate increased. If someone had looked in your eye at that very moment, they would have found out that your pupils are dilated. The pupils drew back to normal size immediately after you have finished the work – whether you found the answer, or gave up your effort."* This fact is demonstrated by our measurements as well.

As it was already mentioned above, the device Eye Tracker records the gaze patterns of the eyes (sequential eye movements) when viewing text, images, videos, etc. The movement is recorded as fixations of the eyes (circles) and saccades (lines between them).

The following are examples of outcomes of our research. There are basic texts, task assignments, observation tasks that were being solved by gifted student observations.

Learning tasks displayed on the ET monitor

For our research we have compiled three learning tasks:

The Figure 5 presents the research form of learning task 1 on the ET monitor, which has been investigated and will be complemented by data from the ET.

Converging lens (also joint or a convex lens) is an optical lens which converts the collimated beam to converging.

Task: the converging lens is illuminated by a parallel light beam. Select the correct option of how the rays will proceed in passing through the convex lens.

Figure 5

Research form of learning task 1 on the ET monitor

SPOJKA
Spojná čočka (též spojka, nebo konvexní čočka) je optická čočka, která přeměňuje rovnoběžný svazek paprsků na sbíhavý.

Úkol:
Na spojnou čočku dopadá rovnoběžný svazek světelných paprsků. Vyberte správnou variantu pokračování chodu paprsků po průchodu spojnou čočkou.

The Figure 6 presents the research form of learning task 2 on the ET monitor, which has been investigated and will be complemented by data from ET.

Diffusing lens (also diverging lens or concave lens) is an optical lens that converts the collimated beams to divergent.

Task: the diffusing lens is illuminated by a parallel light beam. Select the correct option of how the rays will proceed in passing through the lens.

Figure 6

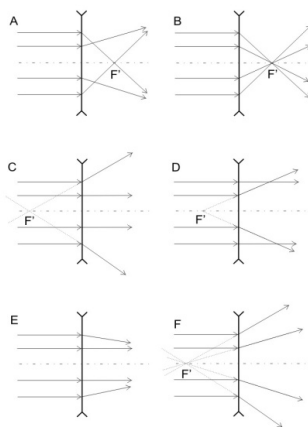
Research form of learning task 2 on the ET monitor

ROZPTYLKA

Rozptylná čočka (též rozptylka, nebo konkávní čočka) je optická čočka, která přeměňuje rovnoběžný svazek paprsků na rozbíhavý.

Úkol:

Na rozptylnou čočku dopadá rovnoběžný svazek světelných paprsků. Vyberte správnou variantu pokračování chodu paprsků po průchodu rozptylnou čočkou.



The Figure 7 presents the research form of learning task 3 on the ET monitor, which has been investigated and will be complemented by data from the ET.

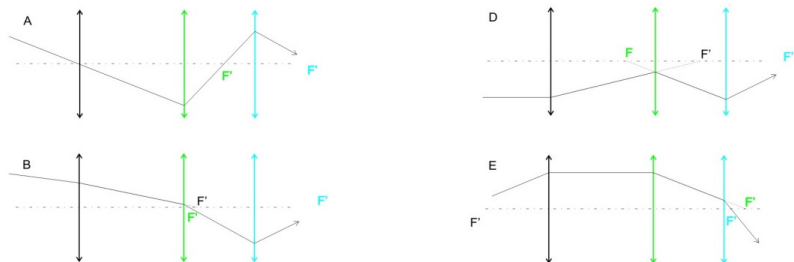
Task: identify incorrect image of the rays passing through the lenses.

Figure 7

Research form of learning task 3 on the ET monitor

SPOJKA, SPOJKA A SPOJKA**Úkol:**

Vyberte chybně zobrazené varianty.



3 Results and discussion

Using the ET we performed monitoring of eye movements and diameters of eye pupils of the gifted student with assigned tasks and we analysed them.

LEARNING TASK 1:

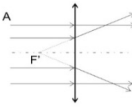
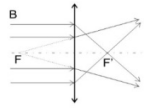
Figures 8 and 9 intentionally present another possible form of how to display measurement results obtained from the gifted student. We selected only two intervals close related to the discovery of the learning task solution.

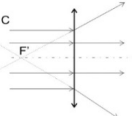
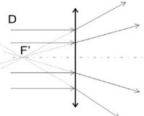
Figure 8

Sample task solutions – task 1 – interval 1

SPOJKA
 Spojná čočka (též spojka, nebo konvexní čočka) je optická čočka, která přeměňuje rovnoběžný svazek paprsků na sbíhavý.

Úkol:
 Na spojnou čočku dopadá rovnoběžný svazek světelných paprsků. Vyberte správnou variantu pokračování chodu paprsků po průchodu spojnou čočkou.

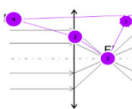
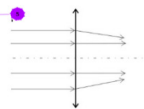



Figure 9

Sample task solutions – task 1 – interval 2

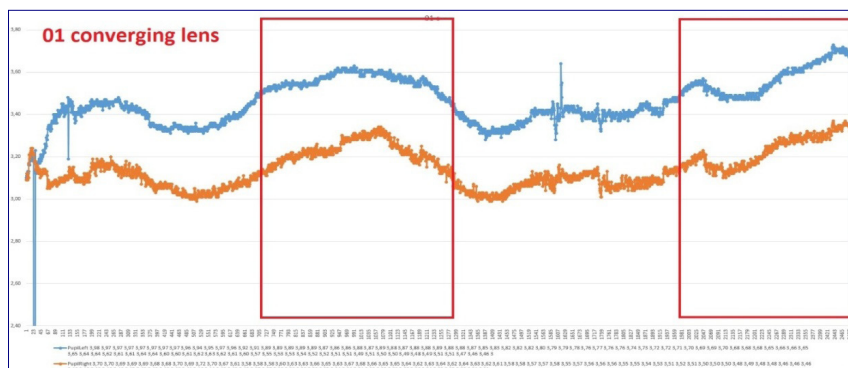
SPOJKA
Spojná čočka (též spojka, nebo konvexní čočka) je optická čočka, která přeměňuje rovnoběžný svazek paprsků na sbíhavý.

Úkol:
Na spojnou čočku dopadá rovnoběžný svazek světelných paprsků. Vyberte správnou variantu pokračování chodu paprsků po průchodu spojnou čočkou.

The gifted student chose the correct solution to the assigned task (option E), which has been entered in the graph in Fig. 10. When comparing the Fig. 8 and 9 with marked areas in the graph of Fig. 10 it is apparent that in given intervals the student's eyes widened. His attention and concentration increased. These relations clearly show the link between the degree of concentration of the student and the discovery of the correct solution to the task.

Figure 10

Graphical representation of changes in pupil size during the solution of task 1



The same parallel can be observed also in the results of the learning task 2 that student was dealing with (Fig. 11, 12 and 13).

LEARNING TASK 2:

Figure 11

Sample task solutions – task 2 – interval 1

ROZPTYLKA
Rozptylná čočka (též rozptylka, nebo konkávní čočka) je optická čočka, která přeměňuje rovnoběžný svazek paprsků na rozbíhavý.

Úkol:
Na rozptylnou čočku dopadá rovnoběžný svazek světelných paprsků. Vyberte správnou variantu pokračování chodu paprsků po průchodu rozptylnou čočkou.

Figure 12

Sample task solutions – task 2 – interval 2

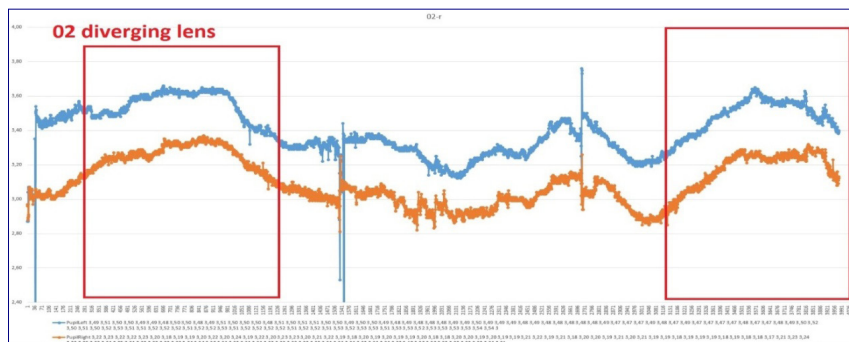
ROZPTYLKA
Rozptylná čočka (též rozptylka, nebo konkávní čočka) je optická čočka, která přeměňuje rovnoběžný svazek paprsků na rozbíhavý.

Úkol:
Na rozptylnou čočku dopadá rovnoběžný svazek světelných paprsků. Vyberte správnou variantu pokračování chodu paprsků po průchodu rozptylnou čočkou.

There is also (see Fig. 13) a demonstrable link between the discoveries of solutions during intervals of high concentration (the highest concentration of attention).

Figure 13

Graphical representation of changes in pupil size during the solution of task 2

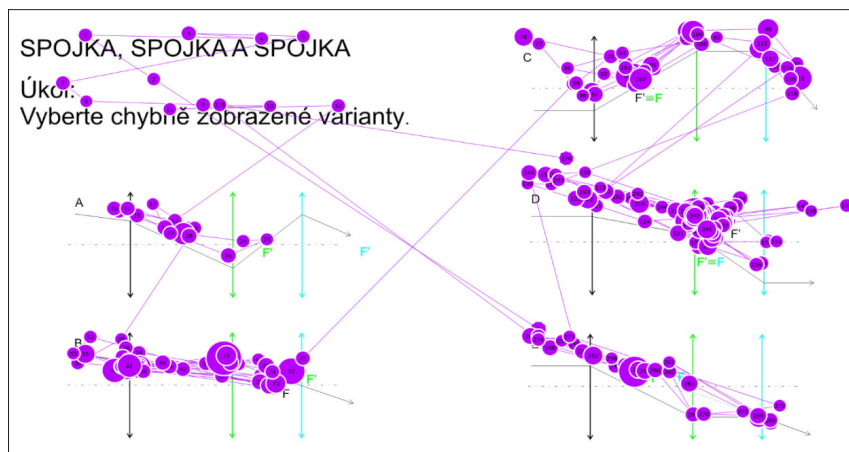


The gifted student also solved more complex tasks that required their greater focus and concentration. The following Fig. 14 shows how the student proceeded in finding the right solution to the learning task 3 with three connected lenses (correct solutions are found in the options A, B and D, he erroneously omitted option C).

LEARNING TASK 3:

Figure 14

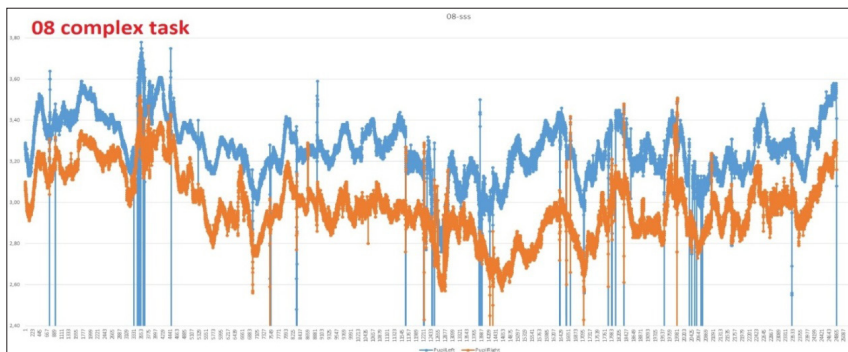
Sample task solutions – task 3



The procedure also corresponds with the graph in Fig. 15, where it is possible to trace the long-term concentration of the student during this task solution without significant downtime of the concentration. It is clearly visible that his attention in about halfway decreased, but in the end it increased again.

Figure 15

Graphical representation of changes in pupil size during the solution of task 3



Conclusion

Individual differences in patterns of eye movements can according to recent research be related to different ways of handling text and images with problems in their understanding, etc. However it also depends on the nature of the task. We found some interesting facts from the results we measured with gifted students, and we could read a lot of information from our findings. On the basis of fixations we measured the length of time that gifted students pay attention to solving the given task. We compared the times we measured at individual students both in relation to the way they worked with the text and the correctness of the result. We also described the process of monitoring text or image together with the subsequent solution and we have revealed the ability of our gifted respondents to concentrate on work.

There is also the possibility to estimate the extent of their concentration, which can possibly depend on the pupil diameter versus time (at constant illumination).

Thanks to our findings, it can be concluded that the ET is a suitable method for the research of gifted students. We will use it in the future to study how gifted students work with video, texts and their approach to problem solving or to be able to structure study materials for them. Our study shows that the possibility of using the ET as an

experimental research method in educational and psychological research are extensive and for the gifted individuals still unexplored. The device Eye Tracker, which was used for the research of gifted students is a part of the Research Centre for educational and evaluation processes and it is an excellent research centre of the Faculty of Education, University of Ostrava.

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The Role of Physical Activity and Performance Orientation on the Scale of Subjective Preferences to Personal Values of Romany Pupils

Ondřej Ješina, Tomáš Vyhlídal

Abstract

The article focuses on subjective preferences in Romany pupils with an emphasis on physical activity and performance orientation. One of the most important determinants of physical activity in children and youth is their social environment and ethnical background including persons with social disadvantages. However, we find a lack of research on this topic. **OBJECTIVES:** The aim of the research is to analyze the structure of the scale of subjective preferences to personal values in Romany pupils and their relationship to physical activity and performance orientation. **METHODS:** To determine social skills indicators, we used the technique of incomplete sentences and three wishes. We created the scale of subjective preferences to personal values. In total 70 respondents of Romany ethnicity participated in the research. They were attending elementary school, and there were 38 boys and 32 girls among them. The sampling was non-random. They were 11.9 years old (11.6 in boys, 12.2 in girls) on average. **RESULTS:** The respondents in the age group between 9 and 13 years regard the following categories as most important: performance orientation (17.98 %); common activities are on the second position

(15.71 %); material focus at things is also noticeable (13.69 %); ideals (11.79 %); however, physical activity also plays an important role in their lives (10.83 %). The subjects put almost no emphasis on categories related to dislike for school (0.36 %), weather (0.48 %), hurting of themselves or another person (0.71 %) and animals (0.83 %). **CONCLUSION:** Physical activity has a relatively significant role in the value orientation of Romany pupils (5th position). Focusing on performance is even the most significant preference in both the genders. Moreover, interesting, although not surprising is the finding related to the Romany girls who do not emphasize physical activities (including dancing) as much as it might be expected. Unlike the girls, however, the boys evaluate sport activities as the fourth most important value, right after the common activities.

Key words: adapted physical activity; quality of life; multiculture education; inner motivation.

Introduction

From the point of view of the Czech law, Romany pupils are included in the same way as pupils with impairment – pupils with special education needs. The principles of education are similar (Jesenský, 1995; Rybová & Kudláček, 2010; Válková, 1998; Vítková, 2006). Taking into account the aims of the research, especially the social skills of Romany pupils are important in relation to their psychology. According to several authors (Bakalář, 2004; Horňák, 2005; Říčan, 1998; Sekyt, 1998; Ševčíková, 2003; Šotolová, 2001; Žáková, 1976), the psyche of Romany people is in some aspects different from the others. Ján-sky (1995) states that the differences of the Romany ethnic group are caused by the distinct ethnographic development, a different way of thinking and problem solving (traditional cooperation with the community), different manners and value orientation, tradition, emotionality, aspiration levels, language variability in distinct social groups etc. Ševčíková (2003) described the archetypes of time and space experience, preference of pleasure, dream interiorizing, social communication, and individualism negation. According to the author, the experience of time and space represents especially the fact that the Romany people limit the perception of time only to the currently experienced situations. They are less likely to consider the future. A great number of the Romany people express the necessity to primarily satisfy their needs as well as univocal preference for strong experience even when risking future loss (Ševčíková, 2003). The material aspect of the culture is not preserved. The Romany people did not pay much attention to it; perhaps because they were getting the material things from the rest of the majority population. Dream interiorizing represents a smaller ability to distinguish one's private wishes and desires from the reality. As a result, the Romany people put their desire over the reality. Also, they are often reluctant to believe something that

did not go through the process of interiorization (Horváthová, 2002). These people do not have any need of fulfilling personal ambitions by e.g. developing their career at work (Ševčíková, 2003).

Value system or individual preferences are one of the essential prerequisites of human behavior. According to our opinion, it is difficult to make any generalized statements about this phenomenon. Nevertheless, some authors (Bakalář, 2004; Ševčíková, 2003) state the order of the preferences are as follows – independent life, acknowledgement of the family hierarchy and tradition, heritage of the ancestors, love to children, and money as a basic need for survival. Some authors (Horváthová, 2002) believe that living at the expense of the majority, whose approach has been mostly restrictive over the history, gradually became a common and natural phenomenon. The preferences are related to the sense of human life and its fulfillment. *“Each community creates its personal value system taking into account its history and social position”* (Balvín, 2004). Davidová (In Balvín, 2004) analyzed the value system of the Romany people and created a model of the relationship structure within their community. The author focuses, above all, on the individual, material, social, and spiritual aspects.

Physical activity represents such actions, in which people more or less freely participate, express themselves, learn and verify their knowledge, skills and ideas (Ješina, Kudláček, et al., 2011; Kudláček & Ješina, 2008). It allows us to work with individuals in a relatively natural environment, where people usually take off their social masks. Therefore, assessments can be done and personalities or preferences influenced in a positive way. Physical activity is considered a necessary part of any strategy and implementation of multicultural education of socially disadvantaged pupils (in our country these are mostly Romany children) (Boyce, 1996; Butt & Pahnos, 1995; Harrison & Worthy, 2001; Hodge, 1997; Hutchinson, 1995; Chepyator-Thomson, 1994; Kahan, 2003; King, 1994; McCollum, Civlier, & Holt, 2004; Sparks, 1994; Sutherland & Hodge, 2001; Sutliff, 1996; Sutliff & Perry, 2000; Wessinger, 1994). Block (2007) however pointed out that there is a lack of research of multicultural education, and that there are no sources focusing on multicultural education and differences in connection with adapted physical activity. Regular physical activity is very suitable for maintaining one's health and improving the quality of lives in any age (Freedson, 1991; Trost, Pate, Saunders et al., 1997). To a certain degree, physical activity is a good predictor of health in children and youth (Sallis & Patrick, 1994; Baranowski, Bouchard, Bar-Or et al., 1994). Sallis, Prochaska and Taylor (2000) stated that one of the most important determinants of activity and inactivity in children and youth in this age group is their ethnical background. These findings confirmed the previous research (Sallis, Patterson, Buono et al., 1988). However, there are a few studies not confirming the importance of ethnicity (Pate, Trost, Felton, et al., 1997).

1 Research design

The aim of the research is to analyze the structure of the scale of subjective preferences to personal values in Romany pupils and their relationship to physical activity and their performance orientation.

Based on this aim we specified the following research questions:

What is the structure of subjective preferences to personal values in the studied Romany pupils?

What are the differences between the subjective preferences to personal values between boys and girls?

What is the position of physical activity and performance orientation within the general subjective preferences of Romany boys and girls?

1.1 Methods

To determine social skills indicators we used the technique of “incomplete sentences” according to Váľková (1996, 2000) that is considered a projective method, and we created the scale of subjective preferences to personal values. the test was translated, transformed from English to Czech, and standardized in 1995 (Váľková, 1996). The original technique of “incomplete sentences” was inspired by Fischer et al. (1963 In Váľková, 2000) and created by the Special Olympics board in 1995 (Váľková, 2000). The method that we used included nine incomplete sentences and three “wishes”.

Incomplete Sentences Technique

I would like to

I wish that I.....

If only I.....

I hope that.....

I am

I would like most to

It is the best when.....

People think that I.....

Sometimes I think about

If I had three magic wishes that would be fulfilled, I would wish:

1

2

3

Instruction

Please, read each stem out loud to the client and record their answers verbatim. To avoid bias, and to prevent the client from giving answers that he (she) thinks you want to hear, please do not give your respondent any feedback as they offer their answers. If your respondent says “I don’t know”, encourage them to think about it for a moment. If they are still stuck, go on to the next one, and then go back to that one at the very end and try the stem again. Start with telling the respondent: “I’m going to read the beginning of a sentence out loud, and I want you to finish it with whatever you think or feel, whatever comes to mind. Any answer that you give is the right one because it is your opinion, your thoughts or feelings. I will write your answers down. Ready? Here is the first one”.

When summarizing the content of the utterances, a category analysis was carried out. The responses were classified in 15 categories (see the following text). Such classification made it possible to determine the amount of respondents who scored in the given category (absolutely and proportionally in the total number of respondents in the sample). We could also determine the amount of category units – i.e. the number of the same responses, e.g. in the category “animal”, out of the maximum amount of answers – and their percentage in the maximum possible amount of category units (category units = individual responses classified in categories.) The maximum number of category units for each subject was twelve (nine sentences and three wishes). The categories were translated to the Czech language by Válková (1996) and used in another research (Válková, 1998, 2000). According to our findings, the categories are applicable for our focus group but we added the category distaste for school and hurting of oneself or another person. We replaced sport activities by more general physical activities.

1.2 Description of Categories

animals: own them, play with them, look after them.

detestation oneself or another person: suicidal tendencies, kill or beat somebody

common activities: mainly drawing – painting, working (in general and in a specific position), singing, embroidering, gardening, listening to music, activities related to daily routine, care for oneself and entertainment, relaxing, sleeping.

performance orientation: having tendency to achieve something, accomplish, learn something, manage to do something, be successful, not to fail.

things (own them, want them): things of daily need, toys, more expensive things (recorder, car, motorbike, satellite television, playstation, mobile).

home: be at home, partake in activities related to home and siblings, activities typical for close family life (be with the family members), have close friend.

weather: weather, season of the year, time of the day: the weather is nice, it is sunny, spring etc.

hypercriticism: negative (hostile) evaluation of the person by the environment or the person himself/herself: silly, ugly, fat, dirty, I lie, they don't like me.

indiscrimination: positive or even exaggerated evaluation of one's person: smart, skilful, hardworking, beautiful, fast, good friend.

behavior: I am nice, obedient, naughty, I can behave, think about myself.

physical activities: participating in sport activities including dancing, traveling, going fro trips and walks, preparing for contests, have sport equipment.

ideals: help others so that there is peace, people don't argue, have a good life, satisfaction, unrealistic ideals, be aware of the value of health (of the person and of others).

abstract contents: unclassifiable responses: stating one's name, incoherent and repeated utterances, sentences mostly without any context with the initial thought – George, I am, I am pleased, I am here.

I don't know.

RESISTANCE TO SCHOOL: escape from the school, avoid test.

1.3 Description of the participants

Determining the ethnicity of the Romany pupils becomes problematic once we focus on the individual as a "subject of study". To establish the criteria determining whether it is a Romany pupil or not we followed the standards of the Ministry of Labor and Social Affairs (Gabal analysis and consulting, 2006, 4). The standards define a Romany as *"a person who perceives himself/herself as a Romany although he/she does not have to declare it in all circumstances (e. g. census), and/or who is perceived to be a Romany by a great part of his/her environment based on real or deemed anthropological features, family manners and other indicators"*.

The respondents were the pupils of basic school with the majority of Romany pupils with social disadvantages. We select the schools on the bases of recommendation by the official Regional Council. The respondents were selected by non-random sampling. We focused on the good cooperation schools. 100 % of addressed pupils were included into research. The teachers of the schools obtain the written agreement by legal representative (most often the parents) at the parents meetings. The respondents were interviewed individually at the presence of a third person (mostly the teacher's assistant). The respondents were given the beginnings of the sentences and they were supposed to react immediately. The examiners recorded all authentic reactions of the subjects including agrammatism, displayed behavior, need of stimulation during the interview etc. The examiners were unknown persons for respondents. They were be instructed by main examiner and they know about official instruction according to original (Válková, 2000). All the subjects successfully managed this form of activity. In total 70 respondents of the Romany ethnicity (see above) participated in the research. They were attending elementary school, and there were 38 boys and 32 girls among

them. Because of the organization of data collection, we focused on Romany localities in Brno, Ostrava and Vsetín. The overall average age is 11.9 years (11.6 boys, 12.2 girls). On average they were 10.5 (boys) and 12.2 (girls) years old.

2 Results

When summarizing the content of the utterances, a category analysis was carried out. The responses were classified in 15 categories (see the following text). Such classification made it possible to determine the amount of respondents who scored in the given category (absolutely and proportionally in the total number of respondents in the sample). We could also determine the amount of category units – i.e. the number of the same responses, e.g. in the category *animal*, out of the maximum amount of answers – and their percentage in the maximum possible amount of category units (category units = individual responses classified in categories.) The maximum number of category units for each subject was twelve (nine sentences and three wishes). The categories were translated to the Czech language by Válková (1996) and used in another research (Válková, 1998, 2000) among pupils, students and adults visiting the same type of the school such as the pupils of the Romany ethnic minority group. According to our findings, the categories are suitable for our target group but we added the category *distaste for school* and gave the category *hurting of oneself or another person* instead of *food*. We realized minimum differences in comparison with the original (Válková, 2000) – for example, we added physical in sport activities, because not all the answers were in relation to elite sport.

An overview of the research findings can be found in Table 1. For better arrangement, we also present the results in a chart. The respondents in the age group between 9 and 13 years regard the following categories as most important: *performance orientation* (17.98 %); *common activities* are on the second position (15.71 %); *things* is also noticeable (13.69 %); *ideals* (11.79 %); however, physical activity also plays an important role in their lives (10.83 %). The subjects put almost no emphasis on categories related to *distaste for school* (0.35 %), *weather* (0.48 %), *hurting of oneself or another person* (0.71 %) and *animals* (0.83 %).

Table 1

The scale of subjective preferences to personal values in Romany pupils

n = 70		subjects	%	categories	%
1	Animals	6	8.57	7	0.83
2	Hurting	4	5.71	6	0.71
3	Common activities	58	82.86	132	15.71
4	Performance orientation	60	85.71	151	17.98
5	Things	48	68.57	115	13.69
6	Home	45	64.29	82	9.76
7	Weather	4	5.71	4	0.48
8	Hypercriticism	37	52.86	47	5.6
9	Indiscrimination	32	45.71	45	5.36
10	Behavior	14	20	16	1.90
11	Physical activities	42	60	91	10.83
12	Ideals	40	57.14	99	11.79
13	Abstract contents	28	40	32	3.81
14	I don't know	7	10	11	1.30
15	Distaste for school	3	4.29	3	0.36

Subject – number of persons replayed the content category

Subject % – percentage of those persons

Categories – frequency of categorical units in determined content category

Categories % – percentage of these units

With respect to the variation of the findings among Romany boys and girls the most significant difference seems to be in the category of material preference for things (boys 17.1 %, girls 9.64 %). Similarly distinct is also the difference in stressing the importance of physical activity (boys 14.47 %, girls 6.51 %). Ideals in life are emphasized especially by girls (14.58 %) when compared to boys (9.43 %). Several indicators showed very similar results for both boys and girls (focus on performance – 17.32 %, 18.75 %; uncriticalness – 5.04 %, 5.73 %; behavior – 1.97 %, 1.82 %).

Table 2

The scale of subjective preferences of Romany pupils – boys

n = 38		subjects	%	categories	%
1	Animals	1	2.63	2	0.43
2	Hurting	1	2.63	3	0.66
3	Common activities	32	84.21	67	14.69
4	Performance orientation	34	89.47	79	17.32
5	Things	28	73.68	78	17.10
6	Home	24	63.16	38	8.33
7	Weather	3	7.89	3	0.65
8	Hypercriticism	18	47.36	20	4.38
9	Indiscrimination	17	44.73	23	5.04
10	Behavior	9	23.68	9	1.97
11	Physical activities	28	73.68	66	14.47
12	Ideals	19	50	43	9.43
13	Abstract contents	20	52.53	21	4.61
14	I don't know	2	5.26	3	0.70
15	Distaste for school	1	2.63	1	0.22

Subject – number of persons replayed the content category

Subject % – percentage of those persons

Categories – frequency of categorical units in determined content category

Categories % – percentage of these units

Table 3

The scale of subjective preferences of Romany pupils – girls

n = 32		subjects	%	categories	%
1	Animals	5	15.62	5	1.3
2	Hurting	3	9.36	3	0.78
3	Common activities	26	81.25	65	16.93
4	Performance orientation	26	81.25	72	18.75
5	Things	20	62.5	37	9.64
6	Home	21	65.63	44	11.46
7	Weather	1	3.13	1	0.26
8	Hypercriticism	19	59.38	27	7.03
9	Indiscrimination	15	46.88	22	5.73
10	Behavior	5	15.63	7	1.82
11	Physical activities	14	43.75	25	6.51
12	Ideals	21	65.63	56	14.58
13	Abstract contents	8	25	11	2.86
14	I don't know	5	15.62	8	2.09
15	Distaste for school	2	6.25	2	0.52

Subject – number of persons replayed the content category

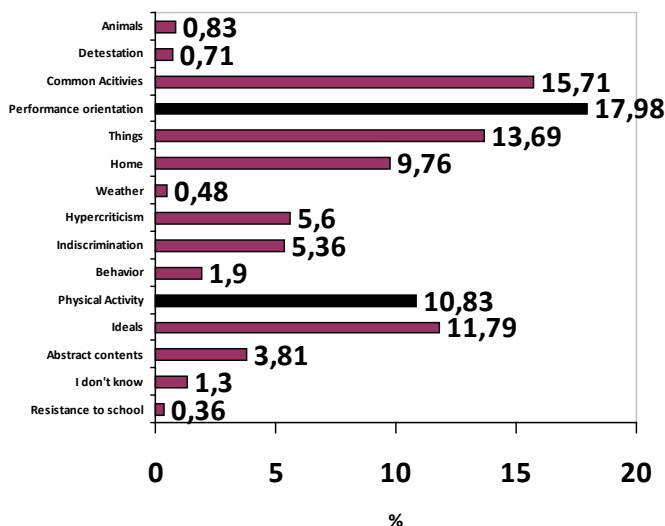
Subject % – percentage of those persons

Categories – frequency of categorical units in determined content category

Categories % – percentage of these units

Chart 1

Preference of physical activities and performance orientation



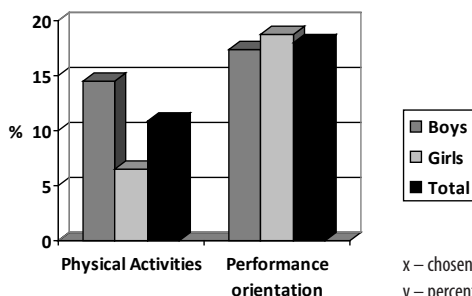
x – percentage of categorical units in determined content category

y – categories

Unlike the *performance orientation*, however, the focus on *physical activities* is markedly different for boys and girls of the Romany ethnicity. The girls do not regard physical activity as an important life preference as the boys do.

Chart 2

Categories of physical activity and performance orientation



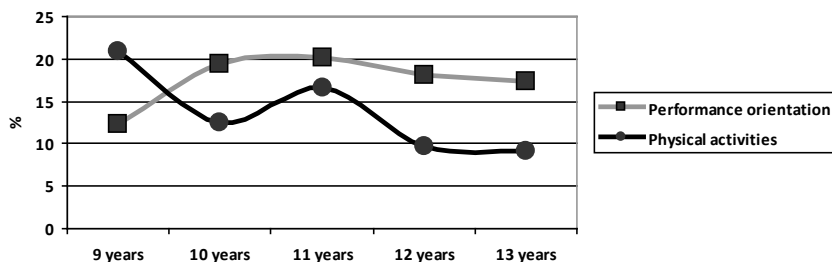
x – chosen categories

y – percentage of categorical units in determined content category

The development of the focus on physical activity and performance is depicted in Chart 3. Both indicators play an important role in the general subjective preferences of the Romany pupils between 9 and 13 years of age. Especially for boys, these preferences are stabilizing once they come to the second year at the elementary school. The interest of girls in physical activity as such is on the other hand gradually declining. Because of a small number of respondents, we cannot generalize the results.

Chart 3

Focus on physical activity and performance orientation in different ages



2.1 Discussion

Subjective preferences for physical activities could be one of the key prerequisites for the Romany pupils to actually participate in sport activities. Unlike the opinion of some other authors (Horváthová, 2002), our findings did not confirm greater preferences on spirituality rather than material things. Focus on things (meaning material sources) reached the third top position in the order of preferences. In compliance with Nečas (2002), we can conclude that in the area of material orientation the historical identity described by numerous other authors (Daniel 1994; Fraser, 1995; Jánský, 1995) was lost.

With respect to the preferences, the focus on performance orientation is the most important subjective preference for the Romany pupils. This confirms the general situation in the society that univocally requires performance orientation from people. However, Romany pupils often direct this focus to things that are not acceptable by the majority society. Frequently, the performance does not relate to e.g. knowledge at school but rather to the activities improving one's position in the social group. This finding is in contradiction with e.g. Ševčíková (2003) who stated that there is a general lack of interest in one's career among Romany people. The results of our study suggest that such indifference correlates with the value orientation only of girls but not boys.

What was also interesting were the results related to ideals that especially for girls play a very important role. Our findings show that as the children are getting older their

emphasis on ideals is even greater. Such a tendency indicates a certain type of escape into the realm of spirituality that however does not correspond with any decreasing importance of the material world. The results rather suggest that there is a maximalistic effort to gain something in both of these areas.

Also their awareness of a need of home is increasing with the age of the respondents. This tendency is connected with the growing awareness of the security provided at home (also in the sense of a community). Furthermore, we found only a minimal emphasis on behavior, hurting of oneself or another person, distaste for school, and surprisingly (taking into account the historical context) also on animals. These points have permanent changes of the Romany people's social environment in the Czech Republic.

Physical activity has a relatively significant role in the value orientation of the Romany pupils. We did not find any marked decline of interest in sport activities as the age of the respondents increased. Moreover, interesting, although not surprising, is the finding related to the Romany girls who do not emphasize physical activities (including dancing) as much as it might be expected. Unlike the girls, however, the boys evaluate sport activities as the fourth most important value, right after the common activities.

Conclusion

Our research shows the focus on performance is even more stable than the focus on physical activity. When reaching the second year at the elementary school the focus on performance is stable especially for boys. On the other hand girls lose their interest in physical activities. Although it is empirically well known, we did not expect such a marked difference between boys and girls.

Based on the results of the study we can answer the postulated research questions.

1. What is the structure of subjective preferences to personal values in the studied Romany pupils?

Our findings show that the most important preference seems to be the performance orientation (17.98 %), common activities (15.71 %), focus on things (13.69 %), ideals (11.79 %) and physical activities (10.83 %).

2. What are the differences between the subjective preferences to personal values between the boys and the girls?

We discovered significant differences especially in the focus on things (boys 17.1 %, girls 9.64 %). Also, the difference in stressing physical activity is quite significant (boys 14.47 %, girls 6.51 %). Ideals are emphasized mainly by the girls (14.58 %) in comparison to the boys (9.43 %).

3. What is the position of physical activity and performance orientation within the general subjective preferences of the Romany boys and girls?

According to our findings, physical activity and especially focus on performance play a very important role in the subjective preferences of the Romany pupils aged 9 to 13 years. Mainly thanks to the boys' preferences, physical activity reached the fourth position, and focus on performance is for both sexes even the most significant preference.

If physical activities have a positive influence on the personality of the person in the age of adolescence then it is necessary to promote the participation of pupils of the Romany ethnicity. Due to the specific wishes of these pupils, it is necessary to find the preferred physical activities that appropriately shaped his personality. Physical activities realised by the Roma population of pupils should serve as a tool for overall development of personality in its psycho-social integrity. The emphasis is not possible only on performance but, on the contrary, performance should be used as a motivational element for maintaining in the physical programmes. Only under these circumstances it can be used as material orientation on (things) and gradually change external motivation into interior motivation, which lasts longer and is even better due to the positive effect of motional activities. It is possible to use the motivational elements associated with the ideals of beauty, nice-figure games "on something" for girls. These physical activities, most of the game with a story, can act as an incentive to them and allow you to keep the girls in the physical activities longer.

Although the physical activities for older pupils lose its position they still play a major role in their preferences. Suitably chosen intervention programs then open the possibility to transfer the trained models behavior with games and sports activities into real life. Organised physical activities enable you to develop certain skills that are relevant for life today – overcoming obstacles, respect for opponents or teammates, digestion of victory and failures, to allow pupils to be leaders, the response of the around help to real self-evaluation, compliance with the rules and the general rules of the group, humility, certification authorities, team spirit, identification with the group, etc.

Acknowledgement

The report was written with the support by the project of Centrum podpory integrace, CZ.1.07/1.2.00/08.0117, supported by the European Social Fund the and Czech national budget.

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An independent scientific journal for interdisciplinary research in pedagogy

Volume 2015, issue IV

Ev. No. MK ČR E 13459

Published and printed by Palacký University, Olomouc

Křížkovského 8, 771 47 Olomouc

www.upol.cz/vup

Registration number 61989592

Olomouc 2015

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Žižkovo náměstí 5, CZ-771 40 Olomouc

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E-mail: e-pedagogium@upol.cz

Four issues published a year

On-line journal site: <http://www.upol.cz/fakulty/pdf/e-pedagogium/>

ISSN 1213-7758

printed version

ISSN 1213-7499

electronic version