pedagogical conditions: 1) providing priority of education among pedagogical priorities; 2) consideration, understanding and realization of new educational paradigm by a pedagogical staff; 3) creation and purposeful usage of educational environment; 4) providing regional peculiarities, specific conditions of educational establishment activity in the process of project making.

Keywords: projecting, management, educational process, principles, general school, projecting technology, education, pedagogical conditions.

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Morska L. I.*

WHAT SHOULD TEACHERS DEVELOP IN THEIR STUDENTS – COMPETENCIES OR INTELLIGENCES?

The article investigates the notions of the competence and the intelligence in their relatedness and interdependence. The approaches to the study of student's intelligences have been analyzed. It has been proved that there exist three main approaches to understanding the essence of the intelligence: nature approach which treats intelligence as a brain quality of inherited character; the nurture approach explaining the intelligence as the personal quality gained through individual experience and learning; the compromise approach which suggests the inborn qualities of intelligence but enhanced and developed through learning. The term «competence» has been viewed as a more complex phenomenon which needs specific pedagogical procedure based on the developed intelligences.

Keywords: intelligence, competence, competency, nature approach, nurture approach, student's behaviour, intelligence theories.

When a child is seen spending a great deal of time playing some musical instrument, there usually goes a comment concerning a great deal of interest that a child has got, implying here an inner condition by which the behaviour is accounted for. But when a child is reluctant to do something no matter what kind of pressure the parents or teacher would put him/ her under, we say that this happens because he has got a «strong will», and as a result we believe that the behaviour has received appropriate explanation. When we see that the child copes pretty comfortably with any social situations with complete readiness and looks for such relationships, we say that it is because he possesses a strong «sociability» trait, which is also considered to be some internal personality process.

Thus, a child who learns very well, who displays verbal capacity, who can solve problems easily, and the like, is believed to be able to do all these actions because he seems to be very intelligent. Similar to other cases, it is generally agreed that the observable behavioural skill of the child is a function of some kind of internal personal quality – the intelligence of the child.

Thus, concepts such as «will», «intelligence», «talents», «traits», and so on are viewed as merely terms in our language – but whether they can explain the peculiarities of a person's behaviour needs to be proved since to explain behaviour one must be able to state the conditions that lead to such behaviour, the condition under which it will be evident or visible and expressed.

Our concepts of human behaviour help determine the way we behave toward people in many different situations. Our conceptions actually constitute a social theory from which we derive our social actions towards social problems, our rules of everyday social intercourse, as well as our scientific actions in the study of human behaviour.

Speaking generally, it should be debated whether the fundamental aspect of the common conception of intelligence is a personality process of organic origin or the one that can be developed or learned. As far as in our common language the organic events are left unspecified and it is simply assumed that people have inherited in some measure an internal,

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personal, mental quality, and depending upon the nature of their inheritance, it enables them to do certain things better or less well in comparison to others.

Thus, the goal of the article is to determine the term «intelligence» in relation to «competence» and clarify the educational objectives in developing a child's intelligences and competences.

The analysis of recent research and publications. Although there has been a long and extensive research and debate, there is still no common or unique definition of intelligence in scientific papers. This has triggered a thought that intelligence may be approximately described, but cannot be defined to the fullest essence of this term. Let's look whether such claim sounds true to reality.

The term intelligence is not used merely to label the differences we see in the behavioural skills of any person to differentiate him/her from the other individuals. The term is used to explain why there are variations. The schoolchild's «explanation» of why he performs relatively poor in school as compared to his classmate is also connected with the claim that his friend is more intelligent. The parents are happy to accept this explanation as well. The concept is believed to be part of the commonly understood phenomenon. As another example, the teachers also believe that discrepancies in their students' performances appear because of their inherited intelligences – some pupils are fortunate to possess them and some not. Education in general accepts the concept, and the major effort is to discover the child's personal quality of intelligence. Once discovered, through testing, the children are then grouped into streams and given training appropriate to their supposed tested intelligence. The child is considered to possess this low-level personal, inherited, and static or non-changed intelligence, and as a consequence is grouped with other low-level schoolchildren.

Furthermore, in this general area there are closely connected concepts, which similarly are thought to be explanatory. Thus, exceptionally skilled behaviour in some intellectual or artistic area – mathematics, art, music, writing, dancing, and the like – is explained by reference to a special talent. Talent is generally believed to be again a personal quality of inherited origin.

Basically, these views are held also by professionals and scientists in the behavioural and social sciences as well as in the health sphere. Thus, for example, assuming there to be an internal, organically determined intelligence, many individuals have devoted their careers to the construction of tests with which they intended to measure the internal quality of the person. They were not interested in the human behavioural skills, but only in the extent to which the skills would provide an index of the internal intelligence. This is not a criticism of the practical function of tests in comparing the relative skills of people. But the practical value of intelligence tests, it should be stated, does not violate the conception of intelligence held by the professionals in the field.

Other investigations of a similar orientation spent their scientific careers attempting to prove an organic conception of intelligence, by showing that behavioural skills are not learnt.

Thus, it should be indicated that the common organic-mental conception of intelligence assumes that the internal quality has some unitary status. Intelligence is in this view considered, at least in part, to be a general quality that determines how well the individual will behave in many different specific situations. A frequent definition has been that intelligence is the individual's general ability to learn.

However, there exists another view on the conception of a person's intelligence.

Aristotle has been said to have begun the empiricist or nurture (environmental) approach to the development of the human «mind». According to one of his statements, the mind is in the beginning a tabula rasa, an empty tablet. The tablet of the mind is then written upon by the experience of the individual. What the individual becomes is thus the function of his experience.

The competition between the organic (nature) and experiential (nurture) conceptions of intelligence have occurred in one form or another as long as men were concerned with explanations of human behaviour.

A very organically oriented interpretation of intelligence was given by A. Jensen that has attracted a great deal of attention because of its important social implications [7, p. 51]. The author sees intelligence as being 80 % or so inherited. Moreover, he interprets the data to support this conception for racial differences as well as for individual differences. Thus, he accepts the poor performance of Afro-Americans on intelligence tests to be a very suggestive index of biological difference from Caucasians.

The main material of research. Though, there are some experiential factors involved that have not been considered. For one, the experiences that a child has are to some undetermined extent a function of his physical appearance and physical characteristics such as beauty, strength, speed, stamina, and so on. A child who is short and fat and homely will not have the same social environment as a child who is very pleasingly built and very handsome. A boy who is robust and strong and large and who does not wear glasses will have a very different social experience from a child who is thin and small and weak and who does wear glasses. The first type of child will systematically if not invariably experience much more reward for physical performances of various kinds, including physical aggressiveness. Such a child as a consequence will tend to have greater opportunity for social interactions, and for the experience of positive social response in others. Children who are small, thin, weak, and wear glasses will systematically experience less reward for such behaviours. The closing off of these behaviours will tip the scales in the direction of the development of other behaviours, which will result in a differing experience for the children.

This suggests that there are physical characteristics that statically will tend to produce behavioural characteristics in people. This is not to say that the action is invariable. A small, weak, thin child, for example, may be raised by a father who because of these characteristics provides the child with extraordinary training experience that reverses the characteristic development. But, other things equal, physical characteristics are important for the social conditions they produce and for the learning experience they thus provide for the individual.

At the same time, many individuals who would attribute differences in the intelligence to organic factors also interpret intelligence to be the ability to learn. If it is so, then learning must be important to the development of human behaviour. This fact promotes the nature (environmental) approach to intelligence which has been quite convincing as well. Such environmental variables as social class, education of parents, and so on have been related to intelligence as well. This point of view is clearly supported by the definition given by U. Neisser, G. Boodoo i.e.: «Individuals differ from one another in their ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought» [8, p. 96]. Environmental dependence of intelligence formation is emphasized by A. Anastasi who claims that «Intelligence is not a single, unitary ability, but rather a composite of several functions. The term denotes that combination of abilities required for survival and advancement within a particular culture» [1, p. 610].

The mentioned approach is more or less supported by V. A. C. Henmon who credits knowledge to the development of a person's intelligence, defining the latter as «The capacity for knowledge, and knowledge possessed» [6, p. 152].

A third position or conception regarding intelligence has taken a middle course. This position, called an interaction approach, declines the unproductive controversy concerning whether nature or nurture produces the greatest effect upon intelligence. Interactionism simply accepts that there are determining conditions in both of the major areas. It presents a compromise, and states that both heredity and environmental events contribute to intelligence. This approach may be seen in the definition provided by many experts in this vein, which sound as follows: «Intelligence is a very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly,

comprehend complex ideas, learn quickly and learn from experience» [4, p. 14]. Very clear interaction is seen in understanding intelligence by psychologists who claim that «…a person possesses intelligence insofar as he has learned, or can learn, to adjust himself to his environment» [10, p. 34].

Quite clear-cut viewpoint in this «third» dimension of intelligence is seen in D. Perkins attempt to provide a structural model of intelligence as a complex phenomenon. He suggests that a person's intelligence consists of three components: neural intelligence (which refers to the efficiency and precision of one's neurological system), experiential intelligence (a person's accumulated knowledge and experience in different areas), and reflective intelligence (broad-based strategies for attacking problems, for learning, and for approaching intellectually challenging tasks; it also includes self-monitoring and self-management). The idea of interaction between neural and experiential intelligences has been proved by the author by providing the evidence that a child can be adversely affected by the mother's use of drugs such as alcohol and cocaine during pregnancy, vitamins, or the lack thereof, can affect neural intelligence. At the same time, D. Perkins claims that experiential intelligence is based on years and years of accumulating knowledge and experience in both informal and formal learning environments. People who live in «rich» learning environments have a significant intelligence advantage over people who grow up in less stimulating environments. Experiential intelligence can thus be increased by such environments. The compromise is suggested by the idea of reflexive intelligence which is considered as a control system that helps to make effective use of neural intelligence and experiential intelligence. A person can learn strategies that help to make more effective use of neural intelligence and experiential intelligence. The habits of mind included under reflexive intelligence can be learned and improved. Metacognition and other approaches to reflecting about one's cognitive processes can help [9, p. 133].

Let's now have a look at the relation of intelligence to competence.

In his scientific research D. Perkins claims that «We can become more intelligent through study and practice, through access to appropriate tools, and through learning to make effective use of these tools» [9, p. 52]. If we look at the understanding of competence by the same author we might see that he suggests the existence of human intellectual competence which may help differentiate the mentioned three dimensions of intelligence.

We can see competence and competencies used as part of the everyday language of teacher education, further education, community work, youth work and community education. It appeared to 'solve' various problems – of relevance, of access, of privilege and of comparability and transfer. In much current usage this notion has been whittled down to the ability and certain knowledge to undertake specific tasks; it has been largely stripped of its social, moral and intellectual qualities [2, p. 77]. Doesn't this definition sound similar to what we have quoted about intelligence? Moreover, the «experiential» part of the competence that is stressed by a number of Ukrainian scholars [12] proves such coincidence to a greater extent.

Conclusions. To sum up the mentioned above debate on whether the educators need to bother about the development of competences or the development of intelligences in their students we may possibly provide the answer of their interrelatedness and interaction. A minor distinction might be draw upon which verb we have to use to which term. We suggest that competences are to be formed rather than developed, while intelligences (due to their partial biological, behavioural and natural character) are supposed to be developed rather than formed from the very «clean/zero» beginning.

Here it is significant to mention that intellectual development may be largely influenced by a child's interactions with others: a child sees others thinking and acting in certain ways and then internalizes and models what is seen. An elaboration of this view is the suggestion by the Israeli psychologist Reuven Feuerstein that the key to intellectual development is what he called «mediated learning experience.» The parent mediates, or interprets, the environment

for the child, and it is largely through this mediation that the child learns to understand and interpret the world [3, p. 115].

The role of environment is particularly evident in studies across cultures. In her research on the cultural contexts of intelligence, P.M.Greenfield, while studying indigenous Mayan people, found that the Mayan conception of intelligence is much more collective than the conception of intelligence in European or North American cultures. To the Maya, much of being intelligent involves being able to work with others effectively [5]. In addition, the psychologist Elena Grigorenko [11] and her colleagues found that rural Kenyans have a broad conception of intelligence that emphasizes moral behaviour, particularly duty to others. Children who grow up in environments that do not stress Western principles of education may not be able to demonstrate their abilities on conventional Western intelligence tests. These findings suggested that in some cultures, academic skills may not be particularly valued; as a result, the brighter children invest more effort in acquiring practical skills.

As a final remark we should mention that depending on what kind of intelligence the educators want their children to develop such social educational environment conditions have to be created and the appropriate pedagogical measures and procedures are to be applied. The problem of choice of the latter in formation of a person's competences and intelligences will be discussed in our further research.

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Морская Л. И.

ЧТО ДОЛЖНЫ РАЗВИВАТЬ УЧИТЕЛЯ В СВОИХ УЧЕНИКОВ – КОМПЕТЕНТНОСТИ ИЛИ УМСТВЕННЫЕ СПОСОБНОСТИ?

В статье исследовано понятия компетентности и умственных способностей в их взаимозависимости и взаимосвязи на основании исследований зарубежных научных трудов. Проанализированы подходы к исследованию понятия умственных способностей в контексте

трех теорий развития способностей. Доведено наличие трех подходов к пониманию сущности развития умственных способностей: природный подход, подход развития и смешанный подход. Понятие компетентности рассматривается как сложный феномен, который требует специфических педагогических процедур с использованием развитых умственных способностей учеников.

Ключевые слова: умственная способность, компетентность, компетенция, природный подход, развивательный підхід, поведение ученика, теории развития умственных способностей.

Морська Л. І.

ЩО СЛІД ВЧИТЕЛЯМ РОЗВИВАТИ В УЧНІВ –
КОМПЕТЕНТНОСТІ ЧИ РОЗУМОВІ ЗДІБНОСТІ?

У статті досліджено поняття компетентності та розумових здібностей у їх взаємозалежності та взаємозв'язку на основі досліджень зарубіжних наукових праць. Проаналізовано підходи до дослідження поняття розумових здібностей учнів на основі відомих у психолого-педагогічній науці теорій розвитку здібностей. Доведено наявність трьох підходів до розуміння сутності розумових здібностей: природний підхід, який трактує розумові здібності як якість мозку спадкового характеру (як генетичного, так і особистісного), яка виявляється у відповідній поведінці особистості та детермінує подальший життєвий успіх особистості; підхід розвитку, відповідно до якого розумові здібності є особистісною якістю, яка досягається через особистісний досвід і навчання; змішаний підхід, який передбачає вроджений характер розумових здібностей, однак їх розвиток відбувається завдяки свідомому навчанню. Поняття компетентності розглядається як складніший від здібностей феномен, який потребує здійснення специфічних педагогічних заходів на основі розвинутих здібностей особистості учня. Водночас поняття компетентності протиставлене вужчому поняттю компетенції.

Ключові слова: розумова здібність, компетентність, компетенція, природний підхід, розвивальний підхід, поведінка учня, теорії розвитку розумових здібностей.

УДК 373.011 ***Рибалко Л. М.****

ФОРМУВАННЯ СВІТОГЛЯДУ МОЛОДОГО ПОКОЛІННЯ ЯК ГЛОБАЛЬНА ПРОБЛЕМА СУЧАСНОСТІ

У статті схарактеризовано різні типи світогляду (екологічний, ноосферний, синергетичний тощо) та науково обґрунтовано доцільність і необхідність формування в молодого покоління еколого-еволюційного світогляду як такого, що забезпечує наявність у особистості екологічної освіченості, свідоме ставлення людини до природи і практичну участь у покращенні природокористування. Розкрито залежність гармонізації стосунків людини з природою, гармонійного розвитку людства від світогляду особистості, осердям якого є ставлення останньої до світу, у якому вона живе й діє. Доведено, що предметом світогляду є відносини людини зі світом, природою зокрема, а його інтелектуальними компонентами – знання, цінності, переконання, бажання, погляди, принципи та життєві орієнтири.

Ключові слова: світогляд, еколого-еволюційний світогляд, еколого-еволюційний підхід.

Актуальність проблеми формування світогляду молодого покоління у ВНЗ пов'язуємо з утвердженням в освіті нової екологічної парадигми, побудованої на ідеях глобального еволюціонізму, коеволюційного розвитку природи, людства та суспільства, філософії розвивальної гармонії та синергетичного пізнання. Вважаємо, що ядром нової екологічної парадигми й екологічної культури людства має стати еколого-еволюційний тип світогляду, результатом наявності якого є сформовані в особистості екологічна компетентність, екологічна свідомість і екологічне мислення.

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