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*Several Remarks on Intellectual Disability and the Ability of Intellectually Disabled  
Persons in the Context of Multiple Intelligence Theory*

The intellectual potential of individuals has become a significant attribute of their orientation in the world and creative existence. It is increasingly more often conceived not only in its intellectual dimension but also in the emotional and social ones since these elements condition success in almost all areas of activity. Yet clear diversification of people depending on the level of their intelligence is usually uni-dimensional and focused on logical, mathematical or linguistic aspects only. This in turn creates dilemmas deeply embedded in the educational and social contexts. Low level of narrowly defined intelligence has resulted, and still does although to a lesser extent, in social marginalization, limiting one's rights or neglecting human needs (Janiszewska-Nieścioruk, Maciarz, 2006). Yet it still remains a significant, and in the past the only one, verifiable psychometric criterion of measuring intellectual disability.

Changes in the way the essence, causes and social results of the disorder are conceived have positively verified the situation of people suffering from disability and highlighted other extra-intellectual or social criteria. Yet despite the criticism of the uni-dimensional and its traditionally test-based form, IQ still functions as a useful diagnostic tool. Due to its restricted nature which limits the criteria of assessment to the intellectual potential only, it excessively tends to 'categorize' people explicitly, mechanically or even rigorously (see Zakrzewska-Manterys, 2008). Yet in numerous situations in our lives, such rigorous classification is far from satisfactory since it reduces or limits the intellectual potential in other dimensions – linguistic, inter-, intrapersonal, spatial, musical etc. (see Gardner, 2002; Gardner, Kornhaber, Wake, 2001; Goleman, 1997, 2007; Albrecht, 2007).

Thus, according to H. Gardner (2002) instead of constructing tests which do not measure intelligence understood in its wider sense, and only categorize individuals in the way which limits their development, it would more advisable to create tools which might help discover their abilities and enhance their development in consideration of both educational and social contexts (see Gardner, 2002; Gardner, Kornhaber, Wake, 2001). This becomes

particularly important, since historical, social and cultural factors (direction and phase of the development of our civilization, prevailing ideologies, generally accepted systems of values) may, and do exert impact on the way intelligence is perceived, understood, defined and examined or tested (Firkowska-Mankiewicz, 1993, p. 19). What is more, the factors presented above shape views on intellectual disability and the ability of the disabled, and still in an excessively restrictive and at the same time unreflective manner, describe their educational and social reality.

This narrow and socially depreciating psychometric form of diagnosing intelligence, despite the justified criticism it has received, is still used as a significant criterion of intellectual disability (in ICD10 and DSM IV), practically in the way it was used in Binet's times (Binet-Simon Intelligence Scale, 1905) for the purpose of selecting persons suffering from intellectual disability (see Strelau, 2003). One might conclude that inadequately understood 'social needs', which at that time substantiated the use of the first tests, still justify the limited and uni-dimensional way of assessing the intellectual potential of such people. At the same broadly understood social and educational contexts perceived in the perspective of the pro-ecological forms of diagnosing intellectual disability (Luckasson and others., 2002; Kostrzewski, 2006) oblige us to look at human intelligence, and in particular persons with intellectual disability, from a much wider perspective.

That is why use and interpretation of the results of tests which aspire to diagnose the level of intelligence, and which according to H. Gardner (2001) measure only a peculiarly isolated fraction of human ability, require an in-depth consideration. Intelligence tests do not measure experience, knowledge or any other areas which allow people to function normally or solve everyday problems. They measure logical or logical and linguistic ability only and hence function as a reliable prognostic tool for diagnosing school achievement, yet do not go beyond the scope of formal education and hence offer little in terms of professional or social activity. Achievement or success outside the formal system of education depend on various other variables (e.g. motivation or the ability to maintain proper interpersonal relations), which are not measured / examined by commonly used tests (Gardner, Kornhaber, Wake, 2001).

A wider perspective on intelligence will undoubtedly better indicate the spheres of potential development of persons with intellectual disability and could aid the development and efficiency of pro-integration or rehabilitation activities planned for them (see Firkowska-

Mankiewicz, 1993). This issue deserves particular attention in relation to people with slight intellectual disability and the epidemiology of the phenomenon, its spread increases in the population of 0-6 year olds, reaches its peak at school age and falls rapidly in the period of early adulthood (Stein, Susser, 1967; Firkowska-Mankiewicz, 1974, after: Firkowska-Mankiewicz, 1993). Thus if we focus on school-like or academic aspects of intelligence, the educational process 'loses' those whose intelligence is stronger in other areas (Firkowska-Mankiewicz, 1993, p. 29). Entering adulthood, assuming new roles or performing new forms of actions activate other forms of intelligence, which if previously diagnosed and stimulated, could enhance the process of entering all spheres and levels of social life (rarely preceded by social rejection).

Accomplishment of individual opportunities or realization of one's abilities may be hindered or even blocked by unreflective use and interpretation of tests measuring only a fraction of one's potential, which is of particular importance in the case of persons with intellectual disability. Thus approaching this potential from a multidirectional perspective and taking into account historical, cultural and social factors stimulating it, would be much more beneficial and creative. These issues as well as their multiple consequences are indicated by Howard Gardner (2001, 2002), the founder of the Multiple Intelligence Theory and an opponent of the monolithic approach to the analysis and traditional forms of measuring intelligence. H. Gardner offers an alternative approach based on a different perception of the human mind, one which is pluralistic in nature, since it recognizes the existence of multiple, not necessarily related to one another and hence autonomous, forms of cognition.

People manifest various forms of cognition abilities and use different learning styles. Assuming that intelligence is defined as the ability to solve problems or create products (outcomes of work) significant in particular cultural or environmental conditions, H. Gardner (2001, 2002) has differentiated seven, and at the later stage, nine forms of intelligence: linguistic, interpersonal, kinesthetic, logical, rhythmic, naturalist, spatial, intrapersonal, and existential. The first three are interactive in nature, the subsequent three analytic, whereas the remaining ones introspective (see McKenzie, 2005).

It worth stressing that H. Gardner stresses the multiple nature of intelligence and its relation to the social and cultural context, rather than the need to express intelligence explicitly by means of numerical labels. Achieving competence in some area or performing specific roles (e.g. that of a student, friend, employee etc.) requires a combination of various

forms of intelligence. Such combination, shows both the strengths and weaknesses of a particular person, and defines the profile of one's intelligence. Hence differences in the profiles which take into account both individual as well as the social dimension of intelligence, should constitute the major reason for which the monolithic approach to diagnosing intelligence and defining the scope of support offered to intellectually disabled persons have to be modified in order to offer them the best learning opportunities reflecting their intelligence as understood in the wider, rather than in the narrower sense (Kornhaber, 1994; Kornhaber, Krechevsky, 1995 after: Gardner, Kornhaber, Wake, 2001).

Complete examination of intellectual disability showing both 'strength and weaknesses' in the intelligence profile of persons with intellectual disability allows for full diagnosis and compensation of the weakest elements. At the same time the strongest points, not necessarily related to the academic performance, which are significant for functioning in the society can be identified. The type of intelligence measured by means of psychometric tools does not show the complexity of the phenomenon, which in case of people with intellectual disability is specifically described and dynamic in nature and should be subjected to permanent monitoring and stimulation. This narrow approach to testing, does not show the wide spectrum of the ability of the disabled and according to I. Obuchowska (1995, p. 202) covers only a limited range of their intellectual activity, which turns out to be much richer in their lives. Along with H. Gardner, several other authors stress that the range of ability is much wider (among others Salovey, Mayer, 1990; Goleman, 1999, 2007; Goleman, Bojatzis, McKee, 2002; Albrecht, 2007; Necka, 2003) and justify the existence and significance of social, emotional, practical or even spiritual intelligence.

Perception of human intelligence as a highly complex or a multi-dimensional phenomenon requires a new approach to education and rehabilitation of intellectually disabled persons – focused on the child/student/person and acknowledging various (even 'disorganized') cognitive styles and profiles. It stresses the need to adjust learning contents to the needs and abilities of students as well as teachers and therapists. The choice of the curriculum or teaching methodology should correspond to future choices in one's lifestyle or profession (Gardner, 2002).

Application of the multiple intelligence theory for the purpose of training intellectually disabled persons defines new tasks and roles for their teachers. Next to parents

or caretakers, they are the specialists involved in the widely understood process of rehabilitation of the disabled, and while performing this task, they should redefine their roles and the scope of actions taken. Individualization of syllabus contents as well as teaching methodology, adjusting instruction to the students' level of ability or skills will certainly constitute a challenge (Gardner, 2002). It requires a variety of skills and abilities on the part of the teachers and takes into account their own attitudes and the values they respect.

Axiological or practical and moral competences (interpretative, moral, and communicative) are considered by H. Łaś (1999) and A. Maciarz (2004) as prior to technical, those which formulate postulates or concentrate on realization. The priority of axiological competences results from their significant impact on the entire process of education and rehabilitation of intellectually disabled persons, which at present assumes a pro-ecological and permanent character. Hence those aspects of teachers' competence which are related to their sensitivity, compliance, sympathy towards others, the need to support students, understand their feelings and convictions as well as the ability to oppose the views expressing doctrinarism, intolerance, hostility and discrimination of the weaker, poorer or the disabled should no longer be considered as less significant.

Empathy as well as the ability to understand the needs of other people, will allow the teachers, as a highly professional group, to offer support which can enhance and develop their students' abilities and aid self-realization of what is the best for individuals and their environment (Maciarz, 2004). Axiological competences constitute a perfect basis for those which are related to the ability to comprehend students' abilities and interests i.e. apply appropriate forms (or tools) of assessing intelligence. Yet measuring one's intelligence or ability should be direct, and should not be conducted, as was the case in the past, from the linguistic or logical and mathematical perspective only – a perspective which is 'unfair for other types of intelligence'. While considering appropriate tools and the immediate context, it would not favor any forms of intelligence and hence could allow for the manifestation of a much wider range of ability. This kind of assessment requires "adjusting teaching styles as well as syllabus contents to cognitive profiles of students, their aims and interests in particular subject areas" (Gardner, 2002, p. 29), and identifying such forms of social activity, which could give them the opportunity to develop their individual abilities. This approach is primarily practical and strictly related to the future professional career of persons suffering from intellectual disability (Gardner, 2002).

This new qualitative enrichment of the teachers' competence which constitutes a significant link in the process of education and rehabilitation of intellectually disabled persons, both conceived in terms of its ecological focus and multidimensional character (including the intellectual potential), could make the process more efficient in terms of its functionality and efficiency. In the context of the popularity of pro –integration and pro – ecological actions undertaken in favor of the disabled, realized mainly within the system of formal education, the multi-aspectual or multi-dimensional approach to intelligence may have a significant impact on the optimum form of integrating intellectually disabled persons into the diversified offer of the educational system. It may verify previous as well as generate new forms of instruction.

The success or failure of integration as experienced by intellectually disabled students in one or several educational organizations (including the option of undertaking various forms of education at the same time) are not conditioned by the level of the psychometrically measured linguistic or mathematical ability only, but equally, or perhaps first of all, by the potential of inter- and intra-personal intelligence (strictly corresponding to emotional and social intelligence) as well as kinesthetic, spatial, musical or even natural intelligence. Highlighting both strengths as well as weaknesses of intellectually disabled persons, which usually means a fairly diversified intelligence profile, should constitute the basic reason for which diversified forms of support should be offered to such persons which in turn might compensate for the lack in more 'academic' forms of intelligence. Undoubtedly, various forms of intelligence as well as relations between them, play a significant role in the process of development and learning of intellectually disabled persons, but social (SQ) and emotional (EQ) intelligence <sup>1</sup> are of particular significance in the context of pro-integration activities. They may link with the intellectual aspect (Śmieja, 2008) perceived in its narrow form and influence their functioning within the society or support and compensate for the deficits. Such links show that emotions constitute an inseparable element of relations with other people and shape their quality.

Four areas, which fairly precisely identify the sphere connecting emotions and the intellectual ability have been identified. The first concerns perception of emotions i.e. the ability to observe and express emotions, the second – assimilation i.e. the ability to assimilate

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<sup>1</sup> IQ (Intelligence Quotient), EQ (Emotional Quotient) and SQ (Social Quotient) (Albrecht, 2007).

cognitive processes, the third – analysis, i.e. the ability to subject emotions to conscious analysis, the fourth managing emotions manifested both in emotional self-control as well as in coping with emotions of other people, which brings the ability fairly close to assertiveness. Compensation of intellectual deficits involves the ability to assimilate emotions i.e. using them for solving everyday life problems. That is particularly important when emotions are not distortive in nature, but rather enhance cognitive and creative processes. Such issues are vital for the process of education and rehabilitation of intellectually disabled persons since activities directed at widening the repertoire of their emotional ability and social behavior increase the efficiency of the process (Salovey, Mayer, 1990; Karwowski, 2005).

The doubts as well the criticism presented above bring out the following question: should we verify and perfect commonly used tests (including those introduced at later stages) and create their more recent versions, better and more useful according to their writers, or should we take into account the criticism and doubts and choose a completely different route – the one which theoretically broadens the scope of the human potential by new dimensions indicated in the works of Gardner (2001, 2002), Goleman (1997, 2007), Albrecht (2007), Sternberg (triarchic theory of intelligence), Ceci (bio-ecological theory of intelligence) as well as others and oppose the tradition forms of examination / measurement. At present the choice of the second route occurs to be much more rational and developmental in nature. It indicates that IQ tests, which merely predict school performance (Goleman 2007), have lost their credibility in its present form and new concepts of intelligence encourage the use of various forms of influence in support of the development of intellectually disabled persons, while always taking into account widely understood social and cultural contexts.

Multiple intelligence develops throughout the entire life and specific conditions stimulate its development, thus it is not a permanent and constant feature and hence should be approached and diagnosed as such. Multidimensional, thorough and functional diagnosis of intellectual disability obliges us to construct and use tools which could show the full picture of one's intellectual potential in natural everyday situations. Natural situations and systematically conducted observation will present a wide spectrum of intelligence, specify areas of potential development and define the scope of necessary help (Carson, Butcher, Mineka, 2005).

**References:**

- Albrecht K. (2007) Inteligencja społeczna, Gliwice, Wyd. Helion
- Carson R. C., Butcher J. N, Mineka S, (2005) Psychologia zaburzeń, Gdańsk, Gdańskie Towarzystwo Psychologiczne
- Firkowska-Mankiewicz A. (1974) Epidemiologiczne i socjologiczne badania nad upośledzeniem umysłowym, Zeszyty Naukowe PIPS, Warszawa, PIPS
- Firkowska-Mankiewicz A. (1993) Spór o inteligencję człowieka, Warszawa, PAN IFiS
- Gardner H. (2002) Inteligencje wielorakie. Teoria w praktyce, Poznań, Media Rodzina
- Gardner H., Kornhaber M. L., Wake W. K., (2001) Inteligencja. Wielorakie perspektywy, Warszawa, WSiP
- Goleman D.(1997) Inteligencja emocjonalna, Poznań, Media Rodzina
- Goleman D. (1999) Inteligencja emocjonalna w praktyce, Poznań, Media Rodzina
- Goleman D. (2007) Inteligencja społeczna, Poznań, Dom Wydawniczy Rebis
- Goleman D., Bojatzis R., McKee A. (2002) Naturalne przywództwo, Warszawa, Wrocław, Wyd. Jacek Santorski, tłum. D. Cieśla, A. Kamińska, K. Drozdowski
- Z. Janiszewska-Nieścioruk, A. Maciarz (2006) Współczesne problemy pedagogiki osób z niepełnosprawnością intelektualną, Kraków, Oficyna Wydawnicza „Impuls”
- Karwowski M. (2005) Konstelacje zdolności, Kraków, Oficyna Wydawnicza „Impuls”
- Kornhaber M. (1994) The theory of multiple intelligences: Why and how schools use it. Cambridge, MA: Harvard Graduate School of Education
- Kornhaber M., Krechevsky M. (1995) Expanding definitions of teaching and learning:Notes from the MI underground. In. P. Cookson, B. Schneider (Eds.) Transforming schools, New York, Garland Press
- Kostrzewski J. (2006) Niepełnosprawność umysłowa: poglądy, metody diagnozy i wsparcia (w:) A. Czapiga (red.) Psychologiczne wspomaganie rozwoju psychicznego dziecka. Teoria i badania, Wrocław, Wyd. WTN
- Luckasson and others. (2002) Mental Retardation. Definition, Classification, and Systems of Supports, 10-th Edition, Washington, D. C. American Association on Mental Retardation
- Łaś H. (1999) Ocena funkcji pełnionych przez początkujących w zawodzie pedagogów specjalnych (w:) J. Pańczyk, W. Dykcik (red.) Pedagogika specjalna wobec zagrożeń i wyzwań XXI wieku, Poznań
- Maciarz A. (2004) Wywiad z Profesor Aleksandrą Maciarz zamieszczony w miesięczniku społeczności akademickiej Uniwersytet Zielonogórski, nr 10/1 (118-119)

- McKenzie W. (2005) *Multiple Intelligences and Instructional Technology*, Second Edition, ISTE
- Nęcka E. (2003) *Inteligencja*, Gdańsk, Gdańskie Wydawnictwo Psychologiczne
- Obuchowska I. (1995) (red.) *Dziecko niepełnosprawne w rodzinie*, Warszawa, WSiP
- Salovey P., Mayer J. D. (1990) Emotional Intelligence, "Imagination, Cognition, and Personality", 9, 185-211
- Stein Z., Susser M. (1967) The Social Distribution of Mental Retardation, "American Journal of Mental Deficiency 67, s. 811-821
- Strelau J. (2003) *Inteligencja człowieka*, Warszawa, Wyd. „Żak”
- Śmieja M. (2008) *Inteligencja emocjonalna i nie tylko*,  
[http://www.fzpep.com.pl/pracodawca/01\\_06/biznes.htm](http://www.fzpep.com.pl/pracodawca/01_06/biznes.htm), dostęp 10.01.2008
- Zakrzewska-Manterys E. (2008) *Pomoc społeczna i my*, „Bardziej Kochani”, nr 2