



1. НАУКА – ПРАКТИЦІ



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THEORETICAL AND PRACTICAL PROBLEMS OF EARLY TRAINING OF GIFTED

Summary.

In the article the analysis of researches devoted to the actual pedagogical and psychological problem of the involvement of gifted children at an early age, in particular pre-schoolers and pupils of junior school age, is carried out. At the beginning of the analysis, it is concluded that for the gifted preschoolers, in addition to involving them in the formal educational process, a number of special educational programs have been developed. Such programs, in some cases, differ significantly from one another in the direction, content of educational activities, the form of their implementation, etc. It is also noted that today there is no single lasting theoretical basis for the construction of these programs. Differences concern both the structure and content of child giftedness, and the methods of detecting gifted preschoolers. At the same time, examples of efforts by psychologists and teachers aimed at building the theoretical foundations of gifted children of preschool age, organization of their education and upbringing, and their involvement in special educational programs are given. In general, it is concluded that the involvement of preschool children in special educational programs is an effective and not a substitute for the development of their intellectual potential. Moreover, the earlier gifted children feel such a burn by the teachers, society as a whole, the more efficient they develop and are more likely to realize the birth-born potential. However, early education conceals the danger of the intellectual overload of gifted preschoolers. As a result, special educational programs for preschoolers should be games of character with well-defined but not overestimated educational guidelines. Examples of special educational programs for preschoolers that meet the specified criteria are given. On the basis of the analyzed literature, a conclusion is drawn about the current challenges encountered by the developers of special educational programs for preschoolers. Among other things, it is continuity with similar programs for elementary, junior and high school students. Ideally, guidelines are set for the development of cross-cutting special educational programs for gifted from pre-school age to their education in higher education institutions.

Key words: gifted preschoolers; special educational programs; theoretical foundations for the construction of special educational programs for preschoolers; positive and negative signs of early education of gifted.

There are a lot of very important questions in the support of the gifted. One of them is their early education.

C. Blair [1] examines the relation of scientific research on intelligence to issues of public policy. Early

intervention research with children at risk for mild mental retardation (MR) is considered and found to have a key role in resolving debate regarding the inherent immutability or modifiability of intelligence. The logic and



scientific progress of early intervention research, however, are not well understood. As a specific example, the Baumeister and Bacharach critical analysis of the Infant Health and Development Program (IHDP), an early intervention program for low birth weight (LBW), preterm infants, is reviewed. The critique's assessments of both the public policy relevance and scientific importance of the IHDP are found to be inaccurate. Failure to consider the IHDP as a controlled efficacy trial, as distinct from an effectiveness trial, led the authors to incorrect conclusions concerning the policy relevance of the study's findings. It also led the authors to misinterpret the meaning of individual level and group level variance estimates in their analysis of IHDP data. The authors say that early intervention research can serve an important role in shaping public policy and in furthering scientific understanding of intelligence. The need for psychobiological theorizing in the study of MR and the role of early intervention research in the empirical validation of psychobiological models is also discussed.

Cronbach described the division of scientific psychologists into two disciplines: (a) experimental psychologists, who perform laboratory experiments in which they manipulate variables to generate changes in group or individual performance in order to derive general laws; and (b) correlational psychologists, who study existing variations among species, social groups, and individuals. Early intervention (here, early education) researches share the experimentalists' interest in manipulating variables, but without their careful control. They share the correlationists' interest in group differences, but not their restriction against intruding on the groups. In limbo between the two disciplines, they have, on occasion, turned their research into a crusade [2].

Early intervention programs designed to increase intelligence and prevent mental retardation have long been a mainstay of pedagogical ideology. The paramount objective is to overcome intellectual disadvantage that some children experience because of unlucky draw from the genetic deck, adverse environmental exposure, and social misfortune. A number of "premier" projects completed over the past two decades have commanded wide professional and public attention. The most thorough and methodologically sophisticated is the Infant Health and Development Program (IHDP), a comprehensive preschool program to avert health and intellectual impairments sometimes associated with premature low birthweight. Despite claims that IHDP successfully raised intelligence and prevented mental retardation, close examination of project data reveal that these assertions are without foundation. IHDP failed to produce any enduring and meaningful effect on cognitive development. Among others, two primary reasons for this unsuccessful outcome are failures to consider genetic influences and to individualize intervention in terms of etiological specificity at biological and psychological levels. Prevention of premature low birthweight is more biologically plausible, more effective, and more cost-efficient. These issues are discussed [3] in the context of broader issues concerning the nature of intelligence and its mutability. It is now time to design spe-

cific interventions that are commensurate with individual differences and the distinctive complexity of myriad problems that give rise to intellectual disadvantage.

In a wide-ranging critique of compensatory education, Baumeister and Bacharach focus most specifically on the Infant Health and Development Program (IHDP), an intervention program lasting from birth through age 3 for low birth weight (LBW) preterm infants. In response [4], the authors identify logical, methodological, and analytical inconsistencies in their critique of early intervention research and offer a balanced assessment of IHDP findings to date. Specifically, they note that Baumeister and Bacharach overinterpret null findings, selectively review the early intervention literature, engage in an inappropriate analytical appeal to variance partitioning, and evidence limited understanding of the ways in which individual differences among program participants and controls may be related to early intervention outcomes. Careful examination of the IHDP study design and database provides a clear indication of what the study accomplished and why. The author also proposes alternative explanations for the absence of long-term IHDP effects.

There are a lot of preschool programs. Buddhist teachers use the story of four blind men who fell into an argument about what an elephant was like [5]. To settle the matter the four men had themselves led up to an elephant, and each man put forth his hands to feel the animal. The first man got hold of one of the beast's huge legs and said that an elephant must be like the trunk of a giant tree. Another man climbed up on the back of the elephant and found the animal to be like a little hill. The third took hold of the tail and insisted that the elephant was like a *hossu*, a duster made of hair. The fourth felt the trunk and concluded that the elephant must be much like a snake. What can we conclude from this? We are all like a blind man when we look at the world at the only angle. To increase our knowledge and develop our intelligence we must try to see all the sides of things. And we must do it as soon as possible.

Early childhood teachers are faced with many more choices and decisions regarding the development of their curriculum than ever before. The development of state standards for young children in prekindergarten (pre-K) programs not only provides guidance but also places demands on content that must be addressed. Recommended practices from national associations also shape the classroom schedule, pedagogy, and curriculum. At the same time, the diversity of children enrolling in preschool, childcare, and pre-K programs is increasing as states and local communities expand access for children considered at risk for later schooling problems. The number of children in formal programs continues to increase as families view a preschool experience prior to kindergarten as the norm and in many cases as a way of meeting childcare demands. Many preschool classrooms are characterized today by the diversity of students and families, who may vary by race, ethnicity, religion, language, values, economic conditions, and family composition [6]. The analysis of the literature demanded to this question shows that teacher often use weekly stories to develop children's creativity and other important abilities.



Recognising and nurturing giftedness in young children presents an important challenge to educators. The study [7] sets out to identify and support gifted children through the provision of a rich learning environment in the Nursery (Kindergarten) setting. Practitioners in the Nursery aimed to provide cognitively challenging activities appropriate to children's needs. Learning Journeys (or stories) were developed as a way of recording and then responding to children's interests and motivations. Learning journeys can be described as observational narratives which are more systematic than an anecdotal daily record. They include everything the child does and says whilst involved in an activity. The authors concluded that gifted children's Learning Journeys allowed insights into the types of provision which presented both challenge for them and other children in the Nursery.

In some cases we have to deal with twice-exceptional preschoolers. The article [8] addresses considerations for assessment and intervention planning in serving twice-exceptional preschool children. The authors propose blending recommended assessment practices in early childhood gifted education and early childhood special education in a comprehensive assessment process. In doing so, unique needs of twice-exceptional preschool children may be better met. Interviewing family members and other caregivers to determine strengths and needs in daily routines and observing young children in play are two practices that provide critical information about the preschool child's developmental status, family priorities, and daily life. The authors conclude that routines-based assessment (RBA) and play-based assessment (PBA) provide perspectives that standardized assessments alone cannot provide and that RBA and PBA may be especially effective in identifying and subsequently meeting the needs of twice-exceptional preschool children.

Special educational programs for elementary and middle school students are spreaded enough. Most researchers agree that special educational programming is advisable for academically gifted students, although the best type of programming is a matter of controversy. But evidence suggests that effective programs combine ability grouping with curricular modification, but little research has addressed the extent to which high-ability students receive special services in their schools. Here [9], third through sixth graders scoring at or above the 95th percentile on standardized achievement tests reported on their educational experiences. The most common experience was the pull-out program, but many students stated that they were involved in no special programming. Separate analyses for mathematics instruction yielded similar results. Gender, grade level, type of school (public vs. private/parochial), and above-level EXPLORE scores explained little of the variance in special accommodations. The lack of services reported by many participants is particularly surprising given that members of the sample were both highly able and highly motivated.

In the Clio Club program [10] students traveled to the Lincoln Boyhood National Memorial and learned what Abraham Lincoln's life was like when he was their age.

Students visited the Lincoln living history farm, the site of the Lincoln cabin and the Nancy Hanks Lincoln burial site. When they entered the cabin, they felt the heat from the fire and smelled the smoke. They realized their room at home might be the same size as the whole Lincoln home that housed eight people. Students climbed the pegs in the wall to peer into the loft. Rangers demonstrated spinning and cooking, and the students examine the crops and the animals on the farm. Students tried pounding corn into corn meal and smelled the cottage cheese curds hanging from the tree to drain the whey before making cheese. The National Park Service ranger identified the tools the Lincoln family used on the farm and let the students try their hand with a wedge and a maul to split the logs into rails. Students used a frow to split a wood shingle, a river to break out the shingle, and the shaving horse with a drawknife to smooth it. Edward Thorndike may be counted on to say in few words what amounts to a highly complex idea. He once said that, with learning as with any activity, ability must be supplemented by interest or desire. "If we wish to learn a certain thing, we must arouse adequate interest ... we must transmute this general wish into an interest that will carry us to and through the detailed activities necessary". His straightforward conclusion was that, in planning any educational endeavor, it is important to account for the level of student interest. "It is important know whether the student has it, how strongly he has it, and when and how he has it".

The current trend of cutting and slashing funding for gifted education from state budgets is a call to action for all educators of the gifted. This watershed moment must be addressed with a proactive grassroots vision because the greatest effects will be felt at the most basic level: the local schools. Sternberg warned that cutting a program is much easier when few supporters advocate for its existence. Thus, in order to stem the tide of the reduction of gifted education services, educators of the gifted must become advocates and employ public relations strategies within their own school buildings [11].

One can agree that in gifted education there are both financial and scientific problems. Five questions were answered [12] by 64 authorities in the gifted field: (a) What do you see as the three greatest *identification, assessment, and/or definitional* issues in the gifted field? (b) What do you see as the three greatest *curricula, instruction, and/or program* issues for the gifted student? (c) What are the three most pressing *unanswered questions* in the gifted field? (d) What have been the three most important *research findings* in the last 5 years in the gifted field? (e) What are the three most significant *developments or innovations* in gifted education in the last 5 years? Responses were coded and sorted according to an analytic strategy that permitted the descriptive data to be grouped into a small number of categories. Most frequent categories included a need for consensus on how to define, conceptualize, and identify giftedness; new procedures to increase the under-representation of gifted minority students; and the importance of translating research on educational innovations into practice.



To fill a gap in the literature, P.A. Zirkel [13] provides a comprehensive, concise, and current overview of the case law – specifically, published hearing/review officer and court decisions – concerning gifted education for K-12 students. This case law represents two distinct groups: “gifted alone”, designating students whose legal status is based solely on their gifted status, and “gifted plus”, designating students who not only are gifted, but also have special legal status typically in terms of disability (i.e., “twice exceptional”) or race. The outcomes of the case law in both categories have generally favored the defendant school districts. The results also show that the absence in many states of strong and specific legislation or regulations for gifted-alone students and the lack of judicial sensitivity to the complexity of the gifted-plus category likely contribute to the overall district-friendly trend of the case law to date.

Today we can say of some theoretical bases in the construction of special programs for the gifted. To plan gifted education in the XXI Century, one must first consider the relatively brief history of the field. Until the 1957 Sputnik launch and the resulting fear that Americans were not globally competitive, there were limited opportunities for bright children. Competition with the Soviets greatly influenced the increase in formal programs for gifted learners. The rise of these programs, comprised mostly of acceleration for bright students in the areas of mathematics, sciences, and technology, began a trend in each state toward legislative mandates to benefit gifted students. Emphasis on gifted education waned in the 1960s, perhaps due to the cultural shift towards desegregated schools, retreatist responses to the Vietnam war, and the cultural devaluation of science. The 1970s brought the National/State Leadership Training Institute (N/S LTI) principles of differentiation for gifted and talented students that shifted the collective thinking beyond curriculum as “more” and “faster” to qualitatively different programs for gifted learners incorporating global themes, authentic problems, and requirements for complex thinking. The recommendations from this innovative team served as a springboard for many of the program models developed since that time [14].

As a result of having the theoretical bases mentioned above there were done a lot of investigations. In particular, the study [15] investigated the effects of a creativity training program, New Directions in Creativity, on students' divergent thinking abilities and self-concept in monolingual and bilingual elementary classrooms. The sample included 8 monolingual and 6 bilingual classrooms from a school in New England. The bilingual classrooms consisted of Brazilian students. Descriptive discriminant function analyses were used to investigate differences between treatment and control groups with respect to divergent thinking abilities and self-concept. Qualitative procedures were used to analyze data from interviews with teachers and students who participated in the program. The findings indicated that the creativity program slightly improved the divergent thinking

abilities of students in the treatment group. The results also indicated that the effect of the creativity program on the self-concept of students in the treatment group was small, and the control group students experienced a decline in self-concept between pretest and posttest. Placement in monolingual or bilingual classrooms was not related to students' divergent thinking abilities and self-concepts. Qualitative analyses generated 3 core categories that help explain how the creativity training program and the school environment influenced students' divergent thinking abilities and self-concept: (a) the implementation of the creativity training program, (b) the degree of bilingualism of Brazilian students, and (c) cultural issues.

There are some reasons for concluding that every special program for the gifted has both positive and negative characteristics. The largest study designed to ameliorate adverse effects of premature low birth weight (LBW) and to prevent mental retardation is the Infant Health and Development Program (IHDP). This was a randomized, multisite intervention: home visits for 3 years, parents meetings, and intensive preschool education for 2 years. IHDP reported results alleging the program significantly influenced intelligence and prevented mental retardation. The authors conducted an independent analysis of the original computerized database (at 3 years). Five-year follow-up data were obtained from the journal publication and from data on file with the National Auxiliary Publication Service. The intent was to determine the magnitude, durability, and clinical significance of purported intervention effects and how these are mediated. Methods used were primarily multivariate correlational analyses and examination of the logic underlying the conclusions. Results suggest alternative interpretations of claims regarding IHDP. Effects are explained by confounding variables, questionable analytical procedures, distorted interpretations, and data inconsistencies. Effect sizes and specificity of effect reported by IHDP do not survive scrutiny either in the original database or at 5 years. Given the vastly complex nature of premature LBW, IHDP was poorly conceived, failing to produce meaningful and enduring effects on IQ. Policy conclusions for interventions with LBW infants stemming from IHDP are misleading [16].

Conclusions. One of the ways to create the right conditions for the learning and development of gifted is the introduction of special educational programs for them. In most countries, such programs are designed for gifted from pre-school age to education in higher education institutions. Such programs are not substitutable in situations where gifted learning can not be accelerated or enriched. As a rule, this is when they are studying in an environment of ordinary peers. Each special program is in its own way original, built on its theoretical basis, calculated on a specific category of gifted. It has both positive and negative attributes. However, as the analysis of the theoretical foundations of their construction and dissemination shows, the future is for them.



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Волощук І.С., Рудик Я.М. Теоретичні та практичні проблеми раннього навчання обдарованих дітей.

Анотація.

У статті здійснено аналіз досліджень, що присвячені актуальній педагогічній і психологічній проблемі долучення до освітнього процесу обдарованих дітей у ранньому віці, зокрема дошкільників і дітей молодшого шкільного віку. На основі здійсненого аналізу зроблено висновок стосовно того, що для обдарованих дошкільників, окрім долучення їх до формальної освітнього процесу, було розроблено спеціальні освітні програми, що є ефективним і незамінним засобом розвитку їх інтелектуального потенціалу, формування необхідних якостей для його реалізації.

Ключові слова: обдаровані дошкільники; спеціальні освітні програми; теоретичні основи побудови спеціальних освітніх програм для дошкільників; позитивні та негативні ознаки раннього навчання обдарованих дітей.

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Аннотация.

В статье проведен анализ исследований, посвященных актуальной педагогической и психологической проблеме привлечения к обучению одаренных детей в раннем возрасте, в частности преимущественно дошкольников и детей младшего школьного возраста. На основе выполненного анализа делается вывод относительно того, что для одаренных дошкольников, кроме привлечения их к формальному образовательному процессу, разработаны специальные образовательные программы, которые являются эффективным и незаменимым средством развития их интеллектуального потенциала, формирования необходимых качеств для его реализации.

Ключевые слова: одаренные дошкольники; специальные образовательные программы; теоретические основы построения специальных образовательных программ для дошкольников; положительные и отрицательные признаки раннего обучения одаренных детей.