

## PEDOLOGICAL IDEAS OF STEFAN BALEY AND WAYS OF PRACTICAL IMPLEMENTATION OF THEM INTO THE UKRAINIAN EDUCATIONAL PROCESS

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**Abstract.** The article presents the general information about pedology development in the world and in the Eastern Europe as well. In this context, pedological ideas of the famous researcher, pedologist, psychologist Stefan Baley are presented. The article gives brief information about biography of the scientist and his conceptual ideas of pedology and educational psychology. The explanation of the term pedology according to Stefan Baley is given in the article as well as his researches of the physiological and psychological development of a child. The article present the famous table of age child psyche development compiled by the scientist. The article presents the research, conducted by S. Baley concerning the educational influence on children by different kinds of surrounding things, such as: book, film, animals, plants, radio etc. The educational role of family is mentioned in the article as well as the influence of a child origin on the psychological development and educational process is presented in the article.

One of the main idea of the article is to propose ways and methods of the usage of Stefan Baley's pedological ideas in the modern educational process. His ideas can be used mainly in schools, since he emphasized a lot on the educational processes in this institution. His ideas can solve different modern problems which faces modern society. For example, existence of so called "death groups" in Ukraine which affected children and teenagers between 12 to 17 y.o. They were spread through social networks, such as Vkontakte and their aim was to bring to suicide children and they should film the process. The article propose to use Stefan Baley's ideas in the educational process in school, since he did a lot of researches concerning methodology of syllabus compilation, attention of pupils, tiredness, methods of evaluation, teacher's behavior, processes of a child socialization. The article presents his great idea concerning introducing psychologists in schools and increasing their role in child's education and learning as well as teaching them.

Pedology — is a science, founded by the American psychologist and teacher G. Stanley Hall (1846-1924). Its aim is to unite such approaches as psychology, pedagogy, medicine and biology towards the study of a child. Thus, pedology — is a compound science that study not only psychological aspect of a child's development, but also physical or physiological.

The term pedology was introduced by the famous American psychologist, student of G. Stanley Hall, Oscar Chrisman in 1883. The first pedological works began to appear in the end of the 19<sup>th</sup> century, written by G. S. Hall,

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W. T. Preyer, E. Meumann, J. M. Baldwin etc. The term Pedology consists of two Greek words: pedos — child and logos — science. The central object of research of the pedology is a child, its physical, psychological and intellectual development, socialization of a child, child's hygiene and health, and all things and elements that influence the development of a child.

Pedology spread all over the world, starting from the US, then went to Europe, in particular it was researched in England, France and Germany. Its representative include such scientists as: W. T. Preyer, E. Meumann, W. A. Lay, W. L. Stern, A. Binet, T. Simon, J. Sully and others.

In Ukraine pedology appeared in the end of the 19<sup>th</sup> century. The most famous pedologists in Ukraine were Ia. Chepiga, V. Protopov, O. Zaluzhnyi, S. Ananiin, O. Popov, I. Sokolianskyi and others. In 1878 Ukrainian psychologists and pedagogue I. Sikorskyi founded in Kyiv Doctor-Pedagogical Institute the main task of which was the experimental research of a child. Ia. Chepiga introduced the researches and scientific works of S. G. Hall and W. Lay in Ukraine, emphasized on the complex research of a child. Ia. Chepiga was the founder of the Pedological Institute in Kyiv as well. O. Popov — is a lecturer on Pedology and the author of numerous pedological works.

After 1936, when pedology was banned in the Soviet Union by the special degree of Org Bureau of Central Committee of the Communist Party "About the pedological distortion in the system of Narkomos", from 04.07.1936. Since 1936, many prominent pedologists were made to emigrate or were imprisoned and repressed. Pedology was assigned as a pseudo-science that harms the Soviet Educational System. Teaching of the Pedology was forbidden in all educational institutions. Thus, the Pedology was killed at that time, both, in Ukraine and in Soviet Union [5].

Pedological movement has touched Stefan Baley, prominent Ukrainian and Polish scientist, pedagogue, psychologist and philosopher. He was born in Ukraine in 1885. Professor S. Baley studied in the Lviv University. He was a student of the famous polish philosopher K. Twardowski and under his scientific supervision presented doctoral thesis on psychology. Stefan Baley studied not only philosophy and psychology, but also medicine in Lviv. Having graduated Faculty of Medicine, he began working in hospital. After obtaining the grant for study abroad from the Austro-Hungarian government, he went abroad to France, Germany and Austria to study there. He moved to Warsaw in 1928 and became a head of the department of Educational Psychology at Warsaw University. Stefan Baley is considered as one of the founders of the pedagogical psychology in Poland. He was head and members on numerous Polish scientific circles and Polish Academy of Sciences as well. He died in 1952.

Stefan Baley left a great scientific heritage, written in many languages, which included: books, manuals, articles, recommendations etc. The most important among them are: "Osobowosc" (1939), "Zarys psychologii w związku z rozwojem psychiki dziecka" (1935), "Psychologia wychowawcza w zarysie" (1938), "Wprowadzenie do psychologii wspólcznej" (1959), "Über den Zusammenklang einer größeren Zahl wenig verschiedener Töne" (1915), "Versuche über den dichotischen Zusammenhang wenig verschiedener Töne" (1915), "Філософія Ляйбніца", "Нарис психології" (1922), "Нарис логіки" (1923), "З психології творчості Шевченка" (1916) etc.

Stefan Baley approaches the study of a child comprehensively, from a pedological point of view, since he researched not only psychological development of a child, but also physical. He researched different forms of influence of social groups and pedagogical institutions on the development of a child as a whole. Pedological concept of Stefan Baley consists of physical, social and psychological development of a child.

Child and childhood become one of the main object of scientific research and works of Stefan Baley. He used such sciences as: pedagogics, psychology, sociology, philosophy while researching child and elements of its development. The scientist tried to research child comprehensively, its mental abilities, psyche, analyze methods of educational influences on a child for normal and appropriate development. In his researches and publication author researched child's psyche in general, elements and features of its development and also such important elements of child's psyche as: temperament, character, morality, child's lies, communication with other children, processes of socialization etc. Stefan Baley tried to analyze behavior of a child in different situations and environments and provide methods of effective influence on it with the aim of education. Not only did he use publications and researches, but also he did his own researches, for example, author very often used Stanford-Binet intelligence scale to determine the level of intellectual development of a child.

The publication of Stefan Baley contain the description of main psychological and physiological stages of child's development on a certain age. He used age aspect in his researches of child's development, for example, he compared volume and weight of a heart of small child and adult and provided the quantity of its increasing. The same way he described and researched other phenomena of child's physiological development. One of the most important scientific statements of Stefan Baley is that psychological development of a child is closely interconnected with physiological and thus, they can influence on each other. Owing to this, Stefan Baley, while researching psychological development of a child, paid great attention to its physiological development, which he divided into the following types: development of body, physiological changes, development of movement of a child. He researched the development of speech, hearing, sight and smell in a child as well.

Psychological aspect consists of different and numerous researches of the author concerning psychological development of a child. Great importance has a table, compiled by Stefan Baley, with the division of children's life into age and describing peculiar psychological features that occur in a child's psyche, during certain periods of life. The scientist described characteristic features of child's psyche, starting from the child's birth and ending with the age of 24 years old. Stefan Baley provides the detailed description of every age period, gives them names and describes peculiar features that can be observed [3, 318-333]. He conducted researches not only in the age psychology, but also in the development and notion of child's character, temperament, intellect, sense of will, behavior etc. More detailed S. Baley described the development of psyche in children of the period of maturation, which he published book on: "Psychology of maturation age" (1932).

Stefan Baley paid great attention to researches of social element in a child's development and education. He investigated influence on a child's de-

velopment and education such kinds social institutions as: family, school class, society, social groups, origin of children etc. His ideas can be used by modern social institutions in the process of child's development and education.

The first and the most important social institution in the child's life is a family. It plays the crucial role in the educational process of a child. While analyzing the family structure, professor Stefan Baley focused on the forms of the educational influence on a child in the both, families with one and more children. The biggest influence on a child, according to the scientist, has its mother. Such influence can be educational and teaching character, since many parents teach their children how to walk, sit, eat etc. [4, 482]. Parents have great educational influence on a child, since they create some rules of behavior for children which their child should obey and stick to them. Stefan Baley noted, that small children see in their parents persons that are stronger and cleverer than they are and try to follow their parents. Sometimes they can identify their parents as God, that protects and teaches them [4, 486]. This information can be of great use for parents, since they can educate children through the example of their own behavior. Parents can focus on some features of character of a child, which they want to be present in their child, and try to develop it, using information that kid tries to follow behavior of his/her parents.

The important factor, that influence the child's development, is the number of children in a family. Family, according to Stefan Baley, is a social group, that are guided and ruled by parents, has its own members that influence each other a lot. Children, living in the family with one or more brothers can develop social abilities faster than ones, that are unique child in a family. This information is important, because the presence of more than one child in a family will facilitate the socialization processes of a child. Of great importance is not only the number of children in a family, but also the house, state of its cleanness or tidiness, origin of families and their welfare and social position. Children from rich families, according with the researches of Stefan Baley, has more developed intelligence and poorer children are more developed physically [1, 42]. The same way is with children of city and countryside origin. Children from cities are more developed in the intellectual sphere, while children from countryside — in physical [4, 291].

Family, according to Stefan Baley, is ideal social unit, every member of which consecrate himself to other member. Thus, parents, as organizers of a family, should take into account this notion of the researcher. Parents also should take into account sincerity and kindness of parental influence on children, since Stefan Baley stated that parents who treat and educate children with sincerity and kindness have greater influence on psyche development of a child than trained educational specialists, teachers or school. Parents should also not be afraid when a child starts to become more distant from them. According to Stefan Baley this distancing take part when child is in the period of maturation, between 13 and 20 years old. This period, according to researches of the scientist, is characterized by opposition of a child towards adults opinion as well and thus, parents should take into account this information.

Stefan Baley highlighted the importance of the social environment, in which a child lives, on its development. In this case, the scientist divided

society into several elements and described in detail their role and influence on the educational process. One of the important elements in the child's education and development is social group. The important feature of such group is the presence of a leader and the very group should be united and collected [3, 420]. Professor Stefan Baley provides the peculiar features of a group, while distinguishing and comparing it with the crowd of people. He introduces the notion of "group soul", like the "class soul", has peculiar features, such as: common traditions, pronunciation, nicknames, norms of behavior that exist only in that group and are known only to its members [3, 422]. Stefan Baley listed the major psyche elements, which a group can influence, they are: sense of will, believes, formation of thoughts and intellectual sphere. The important fact is that work in group, according to Stefan Baley, is done mainly better than the work done by its members alone [3, 427]. Thus, this information, provided by researches of Stefan Baley, can be used in schools, since the educational process take place in groups.

Of great interest is the research, conducted by Stefan Baley concerning the educational influence on children by different kinds of things e.g. geographical, technical, biological etc. Professor Stefan Baley emphasized the importance of surrounding that is around a child on his/her educational process and development. Thus, the scientists includes a book, film, radio to the cultural environment that has some influence on the child's psyche development. The peculiar educational influence on a child, according to Stefan Baley, has a book, since it is very important mean of spreading and transferring culture [3, 462]. Concerning a film, Stefan Baley researched and described mainly the importance of documentaries and scientific films on the child's development. Practical implementation of films lies in the visual example of teaching material, concretization and facilitation of the educational process and understanding and this can have positive effect in the modern education. Childrens' toys professor Stefan Baley divides according to the child's age. The important influence on the child's psyche development has flora and fauna, in particular — pets. A child treat home pets as equal to himself/herself and is very interested in them and tries to make contact with them. However, a child can be afraid of pets. Child began to show interest to plant on the later stages of its development [3, 471-472].

The important and interesting is the research of Stefan Baley in the sphere of psychology of self-education. The notion of self-education he explained as follows: "...it is a case, when educator and fosterling, object and subject of education process is the same person." [3, 456]. Person can do self-education only after dividing its personality into small pieces and compare them with the same pieces of a personality of his/her ideal person. Self-education is a conscious process of improving person's own personality to the standards of his/her ideal personality. The process of self-education cannot happen in a small child. However, in young people, according to Stefan Baley, there are some tendencies to self-improvement and self-education [3, 457]. Thus, this information can be used by teachers and parents who can try to set or present good and positive ideal personalities for children to follow. This will result in acquiring positive features of character in children.

School and school class is one of the most important socio-educational institution that has great influence on a child. Child spend so much time in school that it can have great influence on it educational process. While researching educational influence of school, Stefan Baley noted that the normal age for children to go to school is 6-7 years old. This is the time, when the intellect of a child is mature for learning. This is the age when child should be able to keep to the schools' rules or teacher, should be able to concentrate attention and keep to the demands of systematic study [3, 369].

While researching the importance of study in school, Sefan Baley describes and analyses such notions as the state of activity and interest of a pupil during a lesson. Scientist stated on the importance that any child should be able to use obtained knowledge on practice, in real life [3, 509]. Since a child is learning in a group, which is school class, it is important to conduct such activities, participant of which will be all group, not some single pupils. This information has peculiar importance in Ukraine, because very often teachers do not make pupils with poor knowledge participate in the learning process. Teachers often leave such children alone and do not touch them and the reason is not to waste time for them. Such kinds of thoughts are mistaken and can have negative effect on child's education in class. Therefore, modern teachers should take into account this idea of Stefan Baley about planning lesson and using such kinds of teaching methods for each pupil to obtain equal attention of teacher and knowledge from lesson.

Interesting and useful is information about the tiredness of pupils in school, which was researched and described by Stefan Baley. Tiredness comes after continuous physical or mental work, performed by a person. Thus, tiredness can be physical and psychological or intellectual [3, 571]. Tiredness can be observed on certain changes in the behavior of children and some physiological features, such as: change in blood circulation, change in respiration etc. [3, 575]. Tiredness, according to Stefan Baley, negatively influence a child by decreasing the level of attention or will to work or study, low level of brain activity etc. All these features makes the process of learning and education more difficult. Therefore, the scientist propose to change activities, i.e. learning and then some physical activities. Teachers can use modern technologies, for example, computers or wall projectors to show children some interesting and developing movie about the subject. This interchange will facilitate education and make it easier for children to understand.

One of the main elements of the educational and learning processes in a school is a school class. Stefan Baley singled out and presented some peculiar features that any class should have, for example: school rules and norms, subordination to one teacher or class monitor and the unity of all pupils in a class [3, 590]. The process of class formation is long and need a lot of efforts. Class in forming, usually after all the children get to know each other or after passing over some common life moments. Class is one of the form of a society in which children live and learn. Teacher plays great importance in class formation. According to Stefan Baley, any teacher should know its pupils very well, so the professor emphasized on the detailed observation and examination of the teacher of its pupils. Any teacher should conduct psychological ward on pupils and evaluate their work correctly. This is very important factor, since pupils

evaluate the very process of evaluation and often compare his or her mark for the same work with the marks of other pupils in the class and sometimes it can have negative results. Psychological ward on pupils has great importance and it should be done together with school psychologist. While evaluating pupils' works, teacher should take into account such principles: sources of a mark, to what relates mark and formulation of mark [3, 651]. Evaluation, according to Stefan Baley, can be done not only by marks or numbers, but also by different kind of promotions or compliments or punishments or restrictions. Teacher should take care of the educational process in school and rise the interest to study in children. He or she should closely cooperate with school psychologist with the aim to better knowledge about pupils, their interests, hobbies, experiences and emotions to simplify and better the educational and study process [3, 649].

Professor Stefan Baley did a number of researches concerning school educational programs, which resulted in a couple of methodical recommendations about the process of educational programs composing. These practical recommendations can be useful for teachers and school psychologists in modern schools, though they were mentioned by Stefan Baley more than 70 years ago.

The first such recommendation is that the process of school educational program composing should take part together with the work of school psychologists. Their task, according to Stefan Baley, lies in the selection and ordering of material proposed by teachers. In case a psychologists does not take part in school educational program composing, he should analyze ready program and evaluate it using his knowledge in human psychology. Psychologist, on the basis of his knowledge about child's psyche periodization and its development, can advise teacher in the process of material selection for pupils. He can tell whether given material will be interesting for pupils and will rise the motivation in them thus, resulting in more effective learning and comprehension. This information and recommendations can be of particular use for Ukrainian teachers, because psychologist in a school does not take active part in the process of educational program compilation.

School psychologists, according to Stefan Baley, can do some evaluation and tell warnings about proposed methods of teaching and educational material presentation. The role of psychologists rise when teacher wants his school educational program to not only give pupils knowledge and skills, but also educate them and prepare them to live in a society. In this case a school educational program should be planned in such a way that all psychological needs will be taken into account appropriately and in time, while harmonically combine with the methods of teaching. This proposal will allow modern schools and teachers not only give children some knowledge, but also will teach them how to behave in society.

The other recommendation of the scientists is the principle of social usefulness. This principle is very important to be included in modern educational school program, since it presupposes that the program should contain such material that will be useful for pupils as future member of society. This material can include skills of communicating with people and in particular with elderly, rules of behavior in different situations, which can occur in society. It is important to mention that Stefan Baley was against the fact that useless

information and materials were included in school educational programs. He understands such material and information as those, which will not be used by pupils in the future. This is of particular importance since a number of useless material is learned by pupils and they forget it in a couple of years. Thus, valuable educational time, which is wasted, could be used for some other kinds of educational activities or useful information.

Stefan Baley mentioned that while composing school educational program one should take into consideration interests of pupils and the principle of comprehensive development of pupil's personality. These principles is of particular use, since interests of pupils can rise their motivation in study and thus it will result in more effective learning process. The scientists said that the school educational program should contain several subjects, the aim of which is to develop and improve the level of mind, rise intellectual level and develop psychological functions.

One of the most important scientific researches of Stefan Baley concerns the division of child's psyche development for periods and phases and detailed characteristics of each of them. The division of children was done starting from the period of infant and ending with the period of 24<sup>th</sup> years old. This table can be useful for teachers and school psychologists. They can use this table while developing and composing the educational school plan, choosing materials for teaching, choosing and elaborating methods of education, rising the interest and motivation in children to learning new material etc. For example, the table provides information that children of 13-14 years old like stories in which a main character is surviving in the wild nature, like Robinson Crusoe, so knowing this information, teachers can select such kind of materials that will be interesting for pupils of this age and accordingly this will rise not only interest of pupils in the process of learning, but also motivation. School psychologists can have a lot of benefits using this table, because it can help them to understand better pupils needs, interests, feelings and behavior and thus can improve their educational influence on pupils.

Stefan Baley researched the notion of psychodidactics in schools. The results of this research can help a teacher to improve the methods of teaching that is actual in the modern system of education. Psychodidactics, as a subject, according to the words of Stefan Baley, combines didactics and psychological components in order to improve the process of education and learning. The researcher divides the subject into two main parts: psychodidactics of arithmetic and psychodidactics of reading and writing. He provides interesting and useful methods of teaching, which can be of great use for teacher, mainly to rise their motivation and interest.

Of great interest is the research of Stefan Baley concerning childrens' games and creativity. While comparing child's games with work of adults, the scientists noted that a child treat games with great responsibility as well as adults treat their work. Games promote creativity and work, give the possibility to understand these notions [4, 191]. Therefore, parents and teachers should not forbid children to play, because playing will increase their responsibility and develop child comprehensively. Games go through some stages of evolution or development as well, said Stefan Baley. The lowest games are functional that include different kinds of movements, running, jumping, talking etc. Higher

stage are manipulation games when a child begins to treat some objects as a material and other as an instrument. The next stage are constructional games — when a child begins to construct different objects with using other objects and the results of such kind of games is some creation [4, 191-192]. A child is often satisfied with the result of their work, observe it and waits for compliments from adults and here is important to give such compliments for children. This statement is very important for modern parents and teachers in order to rise child's motivation, interest and self-confidence. Parents can also inform themselves about the division of children's games according to age and choose those that correspond their kid.

The research of Stefan Baley concerning work of school psychologist and conducting psychological ward of pupils is extremely important element in the modern society. On the basis of numerous researches and work done, he gives a number of proposal concerning the work of school psychologists and teachers. The first proposal is about the fact, that teachers and school psychologists should observe children not only in class during lessons, but also during breaks, while children are playing. This, according to the scientist, will give the information about pupils interests and their behavior, so teacher and psychologist can choose appropriate teaching methods and materials. The second proposal was concerning the psychological ward of pupils in school. Stefan Baley said, that it is important to create so-called psychological profile of pupil's personality, when a kid enters school, and write changes that occur with these pupils during his stay in school. Using such profiles and psychological ward psychologists can spot some negative changes in pupils' personality and can do some actions to prevent it. The bright example can be spotted in Ukraine and Russia. A couple of months ago there was a big problem concerning so called "Death groups", which existed in social network VK. Their task was to write messages of certain context, in order to provoke or even force a child to some action, like doing harm to himself. The final stage of such actions was always suicide of a child, which he should film of the camera online. If school system of Ukraine and Russia had had well developed psychological ward and psychological profiles, such problems would have been avoided. Psychologists would react immediately when they saw some changes in the behavior of children and many children's suicides could have been avoided. Thus, it can be noted that ideas of Stefan Baley concerning psychological ward in school and creation of psychological profiles is very important in the modern system of education.

The important ideas of Stefan Baley that can be used in the development of modern school and educational system concerns the creation of special classes for children with intellectual disability and for children with difficult character. The researcher proposed to create such classes in schools and send there kids that do not have appropriate mental of intellectual level to study in class. Such classes or even schools should have trained specialist, teachers and psychologists. The educational and learning process there should be conducted according to specially developed programs, syllabus and methodic. He proposed to create special classes for children who is not able to study or for those who learn with difficulty. However, Stefan Baley noted that gathering such kinds of children in one class and left them without any "good example" i.e. pupils with normal of high intellect, can have quite negative effects. Arrogant

attitude to such children is possible in school from other children. Thus, it can be noted that Stefan Baley tried to research benefits of inclusive education in the early 20<sup>th</sup> century. The ideas of Stefan Baley concerning inclusive education can be adapted to modern school system and methodology of education and teaching.

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