

MOTIVATION OF TEACHERS AND STUDENTS AS PART OF FORMATIVE EDUCATION

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Abstract: The authors of the study are based on the idea that the basic precondition for the success of the teacher's pedagogical-didactic work is his/her motivation as well as the ability to encourage students' intrinsic motivation and keep the students continuously interested throughout the educational process. For this reason, it is important that the teacher pays due attention to motivation and constantly improves his/her knowledge in this field. Motivation is a set of motives that evoke the activity of an organism and determine its focus. It is an internal driving force behind meeting unsatisfied needs. It is said that good motivation is a guarantee of success and in relation to education that "good motivation is half the success of a teacher's work and student's learning."

Keywords: factory and sources of motivation, formative education, learning, assessment, teachers, students

1 Motivation of students

The issue concerning motivation is very complex, as it is the key to understanding the human psyche and understanding the human. Motivation can be included among the components of human mental regulation, which ensures the functioning of learning, activates cognitive processes and motoric systems to achieve the desired and set goals, the authors, Hanuliaková and Porubčanová, state (2024). The phenomenon of motivation has always been understood and at the same time explained differently, as evidenced by a number of theories about motivation.

Motivation is an internal state of the organism that activates it to respond in a certain way to certain stimuli. This means that a person behaves in a certain way, chooses goals and the means to achieve them (Matúšová, 2019). On the other hand, it is a system of states and processes of self-management that activate a person and guide him/her through the creation of intentions and set goals.

Experts distinguish between the concept of motivation and the concept of motivating. Motivation is a condition whose causes, manifestations and results in a person are studied by general psychology. Motivating is a process demonstrating the use of the laws of motivation in stimulating or inhibiting personality motives to achieve a certain behaviour in learning (learning activities) and education. Motivating is an activity to promote other person's motivation (e.g., encouraging an appetite for learning). Self-motivation refers to the process of motivating oneself. Demotivation represents activities aimed at weakening someone's motivation (Machalová, 2015).

Motivation is an important part of work in those professions where the core of the work is contact, cooperation and influencing people (e.g., teachers and lecturers, psychologists, career counsellors, social workers, businesspeople, managers, coaches, priests). Demotivational influences and elements manifested in the behaviour of persons can be characterised as unintentionally applied or, conversely, as involuntary, unintentionally existing; undesirable manifestations that negatively affect the motivation of persons. They can grow into barriers to learning and education.

In this study we will deal with these phenomena, their theoretical basis and the possibilities of their application in the process of classical and formative education. It should be emphasised that motivation cannot be narrowed down merely to the types of motivation that are linked to external stimuli (e.g. teacher's influence on students, lecturer's on participants in education, teaching methods and organisational forms of education relevant

to the specificities of the target group, age specifics of participants in education, their expectations, life goals and attitudes), but also to the internal states and processes activating and energising the individual in the process of learning and education.

1.1 Motivation in education

Knowledge of motivation allows us to better understand the causes of human behaviour, understand the diversity of motives and apply knowledge of motivation theories and other principles in motivating people (students) towards desired behaviour, work and learning performance, or use them to design forms and methods applied in implementing educational programmes for adults, for instance.

Penetration and application of psychological knowledge into education is becoming an integral part of educational theory and practice. Education supports the development of education and upbringing of citizens, the creation of competencies for work and life in a society based on knowledge and information. Priority has also been given to the comprehension of psychological knowledge regarding personality and its development, support of acquisition and development of professional, social and psychological competencies. At the intersection of psychology and pedagogy, there is the development of the individual potential of the learner (Đurič, et al., 1999). The psychological approach emphasises the differences in the processes of cognition and application of knowledge. Pedagogy focuses more strongly on external manifestations of a person (externalities), psychology focuses on internal processes and states of a person (internality). Knowledge of psychological determinants, aspects and conditions of students' learning and their education is the epicentre of the scientific interest of educational psychology.

In a psychological approach, changes in the psychological level of individuals are assessed, and changes in the psyche (experience, behaviour, actions) and causal connections in the personality are taken into account. The psychological development of the personality of the participants in the education is evaluated (Machalová, 2015). Learning and education takes into account several aspects that are related to:

- psychology of personality in a broader sense (student and teacher);
- psychology of personality in the narrow sense (with the personality and specific characteristics of the pupil – student) – particularly with the abilities and motivation to study and its age peculiarities;
- ontogenetic psychology, specifying the characteristics of developmental periods;
- educational psychology, especially the issues of teaching (types and styles of teaching), learning (learning conditions) and education, as a process of mutual interaction between pupil – student and teacher (Krystoň & Kariková, 2015, p. 100).

Motivation of behaviour, in this case teaching/learning, is based mainly on intrinsic motives and needs (*intrinsic motivation*) or from external incentives (*extrinsic motivation*), as writes Matúšová (2019). In case of intrinsic motivation, the motivational state results from the personality, whereas in case of extrinsic motivation, the motivational state is controlled from the outside, by other people.

Both intrinsic and extrinsic motivational factors are manifested in human behaviour. Both types of motivational factors positively or negatively affect a person's effort to act as well as to learn. *Intrinsic motivation* is understood as the current state that forces an individual to do something for their own satisfaction. It represents a subjective aspect of motivation, the goal of which is the activity itself. A student who acts under the

influence of intrinsic motivation acts spontaneously, out of interest, with pleasure, but also on the basis of his/her life plan. *Extrinsic motivation* represents a state where a person acts under the influence of external stimuli, incentives. Incentives are stimuli that externally stimulate the personality to action. These can be external phenomena and events (e.g., proving to a parent or teacher that a student is able to overcome an obstacle, learn the curriculum; in the case of an adult, it may concern a difficulty in finding a job, job loss, outdated knowledge that cannot be used at work) affecting a person from the outside as motivating factors. Extrinsic motivation is caused by an exogenous stimulus.

Both types of motivation, which complement each other, need to be promoted and developed in education. Extrinsic motivation should not be exclusively prioritised over the intrinsic motivation, as extrinsic, forced motivation in the long run forms a person's dependence on external control, such as the lecturer's control tools (e.g., learning only to pass the exam is not the same as when a person learns to apply knowledge and skills in the workplace and in work performance).

Psychology has cultivated a certain concept of motivation, delimiting three dimensions – *arousal*, *direction* and *persistence of behaviour*. 1. *Arousal* of behaviour (activity) is caused by needs, especially their deficiency, which leads to an effort to eliminate the feeling of deficiency (deficit). 2. *Direction* expresses the focus of the activity depending on the values, interests, attitudes, life orientation, beliefs, in accordance with the aspirations and ideals of a person. 3. *Persistence of behaviour* pursues a certain goal to be achieved, which also depends on the level of aspiration.

The *arousal of activity* means activation of oneself (learning subject), states S. Matúšová (2019), and in terms of learning or education it primarily concerns clarification of educational *needs* of a personality that are related to the needs to ensure the existence and development of the personality (in terms of employment, occupational and personal interests and job prospects), knowledge of the most important *motives*, which are related to participation in education and the use of education results in personal, social and professional life. The basic needs of a person in society include the need to work, the need of self-actualisation, the need of social contact, security and safety, the need for recognition.

Szabó & Kolibová (2014) point out that if the level of arousal is low, the organism does not respond. Arousal can be affected by an intense stimulus, unexpected situation or stimulants (caffeine, drug). People feel comfortable as long as their level of arousal is moderate. Optimal performance is also provided at a medium level of arousal. At its higher level, disorganised behaviour may occur and at an extremely high level, an individual's activity can be blocked. Students and adults in education, when in a state of exam fever (high level of arousal), are unable to give adequate performance. However, individuals differ significantly in what level of arousal they experience as optimal. At very low levels, they are usually placed in an environment that is poor in stimuli, they are bored. This condition is called *sensory deprivation*. In this situation, the individual engages in an activity that increases the arousal level in order to get rid of sensory deprivation. On the other hand, account must be taken of the fact that the arousal and motivation features of the personality include instincts and impulses. These are innate and ensure the viability of the organism.

Direction means directing the outlaid energy in the appropriate direction, e.g., to pick a specific education programme, or type of education depending on values, interests, attitudes, life orientation and beliefs of a person. These are the motives giving purpose and direction to behaviour and action.

Persistence means targeting activities of the personality at a certain goal and its achievement (e.g. to achieve success or avoid failure).

Motivation therefore means arousing, sustaining and directing human energy and activity. It can be considered as a driving force of a mental nature that sets into motion human behaviour and activity. Motivation is manifested outwardly as a set of processes involved in the intensity, direction and manner of action, but in essence it means an internal force that energises the organism.

A typical sign of motivation is that it is always a present feature. Whatever the driving force is, it always motivates now, in the present. Even though the experience from the past can be manifested in the present behaviour and activities, the motivating force is contained in the present, current needs. However, motivation cannot be understood as an exclusive means or a tool to justify behaviour (Szabó & Kolibová, 2014). Direction towards the goal depends not only on the motivation, but also on the human competencies. Even very strong motives are not enough for a person to achieve a goal if such person lacks the necessary abilities and skills. Even the best competencies are not enough for a person to start and persevere in an activity, if that person's motivation is zero. Performance always depends on a person's intellectual preconditions and the level of motivation targeted at the goal.

2 Factors and sources of motivation

Stimuli and motives act on a person at the same time, and this effect and its result are called the process of action motivation. In practice, however, both notions are often used as synonyms or equivalents. This means that stimulation is understood as such an external action on the human psyche, the result of which there arise certain changes in person's activity through a change in mental processes, through a change in his/her motivation.

Motive is considered to be the key intrinsic source of motivation. Extrinsic sources of motivation are also stimuli from the external environment – incentives. Intrinsic motivation, which is manifested in interest, desire, longing and activity, is central to achieving goals and learning results. According to Ríčan (2009), the strength of the motive at a given moment is mainly influenced by the following factors:

- *internal state of the subject* – e.g., the time that has elapsed since the person last consumed something, or when the person was at a favourite cultural or sporting event;
- *presence and nature of the motive* (incentive) – e.g., the proximity of the object of desire, where the obstacle on the way to the goal further increases the strength of the motive, unless it is insurmountable at first sight; the motive can also be negative (e.g., visible danger reinforces the current motive to escape);
- *individual dispositions* – e.g., tendency to spend a lot of time with friends, peers or in shopping centres, gaming rooms, with computer in the virtual world.

A special motive is *exploratory motive* evoking exploratory behaviour that extends to everything and is referred to as curiosity. *Secondary motives* are psychological (although they may be derived from biological motives). An example of a secondary motive is the need for money, for which you can buy food, prestige, pleasant company, health, educational course.

Intrinsic sources of motivation include *needs*. Need is a specific state of the organism that can energise behaviour leading to satisfying such need. Needs are linked to deprivation – a deficiency or excess of important substances in the organism. They are manifested by a feeling of internal deficiency or excess, which disrupts the homeostasis of the organism.

The *biological needs*, which include 12 to 15 needs – hunger, thirst, sexual motive, care for offspring, ensuring appropriate body temperature, avoidance of pain, excretion, need for oxygen, need for sleep and rest, need for activity (related to the level of activation), need for safety, aggressive motives (Szabó & Kolibová, 2014), serve for the organism's survival.

The needs the satisfaction of which ensures the survival of the organism are called the *primary needs*. They are innate and necessary to sustain life (e.g., needs for food, water, air, heat, sleep, activity, pain avoidance). Their satisfaction and motivational strength is similar in all living things. *Negative needs* require for their satisfaction the escape from an unwanted object or condition (e.g., the need for safety, the need for peace, the need to get rid of pain or discomfort).

Primary psychological needs may have a biological basis in human instinctual equipment, but they are strongly shaped by learning. They include the need for knowledge, games and entertainment, however the social needs related to other people predominate:

- the need for social contact (to be with other people, not alone);
- the need for autonomy (to do what I see fit, including the ability to be alone);
- the need to take care of others;
- the need to control someone;
- the need to excel, surrender or be in opposition;
- the need to imitate;
- the need for tenderness.

Satisfaction of primary psychological needs can be characterised, according to Řičan (2009, p. 180), as follows:

- i) their satisfaction is normally less urgent than is the case of the primary biological needs and can be also postponed;
- ii) it can take a variety of forms;
- iii) it is largely interchangeable in the sense that meeting one need replaces the satisfaction of another needs.

Range of secondary (psychological or social) needs is significantly richer. They are created during the individual's ontogeny and arise in the interaction of primary needs with the environment (e.g., the need for safety, care, affection, aesthetic and sensory needs, the need for self-actualisation, self-creation). The most important secondary needs include:

- social needs (e.g., the need for prestige, the need for a positive relationship);
- cognitive needs (e.g., the need to acquire new knowledge, the need to seek and solve problems);
- performance needs (need for successful performance and avoidance of failure).

For *social needs*, it is characteristic that they behave in contrast to the biological needs. If a person succeeds in satisfying their social need, then such need grows in intensity. For example, a person's success in social life motivates him/her to gain further success, though failure discourages him/her from such activity. Social needs are variable on the case-by-case basis, depending on each person's experience and life situations.

Interests represent a special category of motives that is of practical importance, especially in terms of education. It characterises a permanent relationship to certain objects and phenomena. They contain *cognitive* and *emotional aspect*. Interests indicate the focus and motivation of the personality and are a specific prerequisite for a strong positive motivation for activity and learning. They are carried out over the course of a certain activity, not in its result, e.g., interest means playing volleyball (but not winning; that's another motive), collecting coins, studying languages, caring for children, constructing aircraft models, etc. Interest is what a person enjoys doing.

Interests are very plastic and can be shaped by upbringing. They can change in different age periods and be completely different. Initially, they have a dynamic (and diverse) structure, later they become more permanent in nature. Knowledge of students' interests is of great importance in the educational process.

Attitudes are opinions on objects, phenomena, persons, situations that are formed during life under the influence of upbringing in

the family and school, under the influence of the environment, life experience, public opinion and the mass media. They express an evaluative relationship to social objects in the environment in terms of preferences and liking (what a person prefers or likes). An attitude comprises a cognitive component, emotional and cognitive component – the tendency and readiness to act in the direction of the attitude. Attitudes are shaped by person's experience, so they are highly emotional, individualised and variable.

Attitudes are formed on the basis of spontaneous learning in the family and other social environments. They are related to value systems, and are equally dependent on cultural, ethnic and educational factors (Průcha, Walterová, & Mareš, 2013).

Value is defined as a specific property of all social and natural phenomena manifesting their positive or negative significance for humans (Boroš, 2001, Jablonský & Matúšová, 2013). The values are not fixed. They are formed during life under the influence of the environment, upbringing and own activity (self-education) of individuals. Values are adopted in the process of interiorisation and, through a certain amount and arrangement of interiorised values, they create a person's value orientation. An important value of an adult is health, happiness, satisfaction, peace, good relationships.

The value of educational attainment has been gaining in importance and been clearly growing. Investment in education is considered to be the most promising and effective. Education is the "instrumental value" enabling the acquisition of competence and qualifications (retraining), application on the labour market, reduction of unemployment and getting a job, development of the ability to navigate today's world and its processes, formation of one's own opinion and attitudes, making a choice from offered alternatives in life and in the workplace, and the strengthening of the stratification of one own's place in society (Veteška & Kursch, 2021). Education promotes personal autonomy, independence and increases one's own defences against manipulation. The level of education achieved affects the way of integration into social, labour and family life. For many people, education as such stands for a meaning and value.

People acquire values through socialisation and enculturation. Each cultural community has specific values that govern attitudes, norms of behaviour, motivation, morality. A special role is played by the values relating to education, family upbringing, work and co-determining how individuals are integrated into school and further education, how they cope with the requirements of the labour market, etc. The values given by society are hierarchically arranged as value orientations/value systems and prioritisation of values changes due to the effect of the civilisation changes in youth and adults (Průcha & Veteška, 2012, p. 119).

Current values can also include moral level and the good (as opposed to the bad), justice, authenticity, truth, freedom, transcendence (transcendence of oneself).

Aspirations are strong arousal-motivational factors, characterised by the efforts to achieve close and distant goals on the basis of self-assessment and past experience. Aspiration is goal-oriented action, efforts, desire for something. It is the level of self-performance that an individual expects based on previous performance in a given situation. Aspiration depends on personality dispositions, value orientation and the current situation, which influences the strategy of one's activity. Real aspirations are linked to the desire to succeed and to try to avoid failure. If the aspiration and the achieved performance are in concord, the motivation is strengthened, if they are in discord, the motivation is weakened. Success increases the aspiration level, and, *vice versa*, failure decreases it (Průcha & Veteška, 2012, Matúšová, 2019). In adult education, we may encounter several aspiration levels for the same participant, depending on the type of activity, subject or content of education.

Habit is an individual motivational tendency to repeatedly follow a certain scenario in a certain situation. Certain situational

signals trigger the urge to act in the usual way. Habit is actually a learned need, but more specific and individualised. People differ greatly and are unique in their habits. In a certain situation or based on a certain stimulus, it is our tendency to perform a series of activities in a settled form, in an unchanged order (Průcha, Walterová, & Mareš, 2013, p. 170). One of the characteristics of habits is the automation of proceedings, routine actions without thinking, i.e., without conscious control. Useful habits save time and energy, bad habits create unnecessary worries and harm. Habit can have a great motivating power and inertia. In older learners, we may encounter in education reduced adaptability resulting from overly strong habits. Leading students to the right habits (repeating, revision, answering control questions, and solving practice problems) can give them significant benefits – added value to learning results.

3 Use of motivation theories in education

Motivation theories examine the motivating process by others, as well as the process of forming the intrinsic motivation of individuals. They explain why people behave in a certain way and why they make efforts in a specific direction (e.g. in learning and education, interpersonal interaction, communication in the family and in the workplace).

The needs of learning, education and personal development are based on individual learners' motives, which include the motives of improving and developing one's own performance by acquiring, expanding and deepening knowledge in a certain area, improving skills and forming habits.

Need theory may be named as one of the best-known motivational theories. The need theories examine the essence of motivation and ways of influencing it through the basic forms of human motives – needs. Needs are a signal of shortcomings or surpluses and are a direct initiator of individuals' behaviour. Need theories provide a number of ideas that can be used in the application of motivational approaches to learning and education, in designing a suitable range of motivational tools, and in creating educational methods and forms.

A. H. Maslow made a significant contribution to the need theory (cited according to Říčan, 2009). His theory of needs is probably the best-known theoretical conception of motivation in human behaviour. He believed that in order to understand motivation in a specific area, one must understand human motivation in general. He assumed that motivation arises on the basis of needs, i.e., everyone is motivated by satisfying unmet needs. He proposed a model of motivation theory that to some extent strikes a balance between biological and social needs. He assumed that the individual needs competed with each other for their own satisfaction. According to Maslow, the *motives are arranged hierarchically according to their urgency*. This means that basic needs must be met first, and only then follow the hierarchically higher needs.

The Maslow hierarchy of needs model distinguishes seven levels of needs:

1. *existential needs* belong to the basic needs of preserving human life, they must be satisfied so that the individual does not feel intolerable suffering (hunger, thirst, sleep, clothing, housing); Maslow placed them at the base of the pyramid and called them physiological;
2. *need for safety* is placed on the first level; it is important for a person to achieve a sense of safety for their standard of living, which may, nevertheless, be devastated by the loss of a job or the loss of a home;
3. *need for belonging and association* represents the need to belong somewhere and be beloved;
4. *need for respect and self-esteem* represents the need and desire for constant, firmly established, generally high self-assessment, self-esteem, self-confidence and respect shown by others, a desire for the feeling of self-assurance, self-worth and success;
5. *need for knowledge, beauty and harmony; and*

6. *need for self-actualisation* that focuses on satisfying the potentials available to an individual, namely the realisation of intentions that lead to the well-being of others, enthusiasm for creative work or the struggle for the superpersonal goal in which one can self-actualise;
7. *need for transcendence* means the transcendence of oneself, the deep feeling and experiencing that the individual is part of a larger whole – humanity, nature, the Earth and finally the whole universe.

The process from lower to higher levels is not automatic (Říčan, 2009, p. 190).

3.1 Other important areas of motivation

In terms of education, it is necessary to also mention other important areas of motivation. These are the areas of *performance motivation, cognitive dissonance, self-determination and self-assessment*.

Performance motivation

It is characterised as an individual's effort to overcome obstacles, to succeed in performance situations (both in one's own eyes and in the eyes of other people), to persevere in demanding activities, to achieve a goal, to be successful. It is connected with performance needs, such as the need for independence, the need for competence, the need for successful performance, the need to avoid failure and sometimes (paradoxically) the need to avoid success, i.e., not to draw attention to oneself (Průcha, Walterová, & Mareš, 2013, p. 159).

Performance motivation (or motivation to succeed) is based on the need to set challenging goals and make efforts to achieve them. People differ in the level of performance motivation and its specific focus. These differences among people correlate with their commitment and success rate in the given field. It has been shown that companies with a high share of performance-motivated people are more dynamic, more productive and show a higher level of overall prosperity (Matúšová, 2019). Research on performance motivation yielded the following findings:

- i. In solving tasks, people with strong performance motivation are more persistent and more future-oriented (planning activities, strengthening prospects for success).
- ii. In solving challenging tasks, these people are predominantly interested in success (or expecting it) over the fear of failure. This finding has led to a distinction between two types of people – those oriented at performance (success) and those oriented at the avoidance of failure.
- iii. Where there is the option to decide the task difficulty, the performance-oriented people will usually choose a task of medium difficulty, i.e., a task requiring greater efforts to make a positive result realistic. People who tend to avoid failure usually choose tasks that are either extremely easy, with no difficulty to succeed, or extremely difficult tasks in the case of which everyone will fail, though there is also a chance of accidental success.
- iv. People with strong performance motivation attribute their success to their efforts rather than talent or external factors (Helus, 2011, p. 134).

Cognitive dissonance

It is defined as the contradiction experienced by a person when his/her internal attitudes or opinions are inconsistent with his/her external behaviour. As a rule, such dissonance is unpleasant, and people try to establish harmony. Dissonance is felt particularly badly when a person is forced (e.g., by circumstances at school, at work or by a situation in society) to suppress his/her attitudes and adapt his/her behaviour to such circumstances (Průcha & Veteška, 2012).

Self-determination

In education, the topic of self-regulation, human self-management falls under the issue of motivation. Here arises the eternal dilemma of whether the motivation for better and more responsible performance is associated more with intrinsic motivation (with the support of intrinsic resources) or with stimuli from the environment. The question is clear: Is the learning performance linked to independent, autonomous human decision-making or is it stimulated through external pressure coming from the person's control and from a sophisticated system of rewards and punishments? (Kuruc, 2017, p. 30).

The theory of self-determination by E. L. Deci and R. M. Ryan represents a mechanical model of human motivation and self-regulation. The authors perceive people as beings who have a natural tendency to be internally integrated, as beings with a natural tendency to the inner mental growth, endowed with a natural effort to develop their own interests. Everyone naturally seeks optimal challenges, new perspectives, tries to internalise and transform the cultural customs of their environment. It is a natural need to develop one's own capacity and show one's own talent. These natural features are characteristic of people of any age and form the essence of human motivation for life (Kuruc, 2017, p. 31). In their essence, people are oriented towards satisfying their own needs. The needs are more effectively met in a company of other people and in cooperation. Here we can see the first link between intrinsic and extrinsic motivation.

Self-assessment

This ego-related approach leads to a distinction between two kinds of motivation – to defend and evaluate the ego and to avoid ego devaluation. *Defence against ego devaluation* is manifested in the strategy of compensation and elimination of negative self-assessment. Boosting the opinion of oneself is manifested in the preference of *the autovalorisation motive* comprising a set of mental processes by which an individual maintains or strengthens an opinion about themselves (also in the sense of the saying “am I worse than the others?”).

For this reason, when monitoring the learning and educational motives of children, young people or adults, it is necessary to point out the links between the motive to learn, get educated and strategies to improve self-assessment and improve assessment by personally important people (parents, teachers, trainers, coaches, mentors, partners, superiors, peer community, etc.). In the decision-making stage, *cognitive component of motivation* (a person puts forward factual arguments) is applied, whereas *emotional component of motivation* is applied mainly at the beginning and at the end of the motivational process (at the beginning as an emotional impulse – enthusiasm for new, unknown areas, subjects, topics or educational challenges, at the end as satisfaction from the achieved result and improvement of self-assessment).

4 A new phenomenon in knowledge-oriented personality - personality success

The issues of motivation and motivating students for education need to be addressed when seeking for an answer to the question why students with the same (measurable) abilities achieve different levels of performance. This phenomenon is ascribed to the fact that the students are differently motivated. This requires that during the education process effective ways be sought and found of bringing students to the “optimal level of motivation”. It is recommended that when teaching students, as well as adults, the activities focus on problem solving, problem solving, personal experience and the need to achieve success. These are also the things forming the cornerstones of formative education.

Learning motivation, for instance, in adults, which is different from a certain aspect than in pupils or students, is characterised by Bontonová (2015, p. 97) as “a dynamic, individually unique characteristic of the participants in education, which forms part

of the complex *attitude-motivation-value component*, as well as part of the unique whole of the adult's personality.”

A new phenomenon and notion have emerged in the knowledge-oriented personality – *personality success*. Psychological approaches to the success of personality in education take into account the personality determinants of success in conjunction with environmental influences. Personality determinants are components and relationships of the personality system (personality potential). The social determinants are school education policy, visions, strategies and practical measures in programmes and in the content of education.

A personality (elementary school pupil, secondary school student, but also an adult) can have in relation to learning *positive motivation to learning* or *negative motivation to learning*. A positive motivation is considered to be a state of motivation that evokes an awareness of the positive consequences of learning. Positive motivation is based on the desire to know and curiosity, desire for knowledge, excellence in the classroom, group, love for the subject, etc. In case of negative motivation, learners are aware of the unpleasant consequences that may ensue if they do not learn, or if they do not direct their study efforts where the teacher (lecturer) or the parent want them to be.

The motive for learning is also related to the success motive and the failure avoidance motive. They are linked to the theory of performance motivation. *Performance motivation* is a set of internal dimensions that encourage individuals to the performance-oriented behaviour, i.e. to achieve good performance in various types of activities. Good performance is both a motive and a goal of behaviour. Performance motivation refers to a wide range of activities, good performance in education, later in employment, interpersonal relationships, family and the wider social environment in which the individual has to demonstrate their abilities.

In terms of effective motivation, it is essential for teachers, managers and lecturers in education to get acquainted with and to know the main motivating factors that affect their students, but also adult learners, and to be able to use them to the benefit of education. Sources of individual learning motivation can be divided into several types, as writes Matúšová (2019), such as:

1. extrinsic motivation (requirements placed by a teacher, school, parent, employer);
2. intrinsic motivation (interest, desire, wanting by a student, learner);
3. reputation-based motivation (excellent reputation of the school, organisation, team of teachers, lecturer);
4. performance-based motivation (own achievements, school success, education and demands associated with learning or studies).

4.1 Success and failure as a psychological phenomenon

Success and failure is a psychological phenomenon that is associated with the level of motivation and aspiration (expectations of success or failure). They can be evaluated objectively, but greater value is placed on their subjective evaluation. It is necessary to compare the difference between the actual performance and the original level of aspiration. Success and failure participants in education mainly means an experiential state with an (immediate) dynamic motivating and emotional influence on human behaviour. The concept of one's own success is formed in the previous and current process of mental experience of success and failure, their assessment in the context of the difficulty of solving the required tasks, evaluation of success ranking in groups, in class, and in increasing one's own aspirations.

A comparison of personality factors and the influences of the situation revealed that “the more successful or unsuccessful the subject is, the more the success and failure depends on the personality and less on the situation. For subjects with a medium

level of success, success and failure," states Machalová (2010, p. 148).

Success is conditioned by the influences of the social environment (such as standards, behavioural models and performance standards). Pupils with relatively the same level of talent and abilities can achieve significantly different performances also because the motive for attaining successful performance has been developed in them in different cultural and family environments. Low levels are seen in those who, as children, were more dependent on their parents and behaved in a more subordinate way towards them.

Therefore, the success of a personality is both a psychological as well as social phenomenon. Self-assessment will be affected by an external evaluation of the student's or learner's performance, which has an impact on how the personality will behave in further performance situations and what aspirations will guide his/her performance. From the social point of view, it is important how the activity and performance of the personality is assessed and evaluated by others, according to the criteria applied in the school or other social environment.

The criteria for evaluating the learning results of pupils or adults in education are related to the control of educational activities, the performance of teachers, lecturers and educators, the performance of students or other participants in education, as well as the effectiveness of teaching and education. The starting point for determining the success criteria is the determination of the goal of education, educational activity or programme (Matúšová, 2019). When determining the education goal, it is necessary to determine what is to be achieved through education (acquisition of knowledge, formation of skills and attitudes, practical skills, etc.).

Forecasting success in education is oriented on the detection of intelligence, intellectual abilities, cognitive style of personality, personality motivation (interests, attitudes and value orientation) and knowledge of personality traits. A no less important source is also knowledge, analysis, comparison and evaluation of performance over the course of learning and education of the subject and the statement of whether the subject has always been successful, whether their performance has progressed, stagnated or declined, in which situations and under what conditions.

For instance, research in young people has confirmed certain characteristics of successful learners. They have developed and strengthened:

- effective learning habits;
- positive attitude towards study;
- defined interests with preference for intellectual interests;
- control of impulsivity in behaviour;
- a positive image of oneself;
- increased introversion (closure), or self-orientation;
- lower activity in establishing relationships;
- independent thinking;
- criticality in thinking;
- ability to develop and solve problems;
- logic and accuracy of answers (Machalová, 2010, p. 149).

Success in education is associated with psychological determinants and applies equally to students and young adults:

1. *Motives for learning and education:* In education, successful pupils/students are more guided by motives of personality development and personal (prestigious) goals.
2. *Success is linked to interest preferences:* The interest orientation of successful students is more oriented towards more distant life goals; among unsuccessful students it has several features of existential orientation.
3. *The course and results of education are greatly affected by the ability to learn (habits and attitudes to learning and education).* In the unsuccessful, attitudes to the study are significantly more negative in the cognitive, emotional and activity components. Learning lacks favourable circumstances such as lack of perseverance, deficiencies in

scrupulous work on assignments and writing of papers, inconsistent and unplanned learning, mental lability and nervousness, learning under the influence of moods and current mental states, time constraints, difficulties in understanding more demanding texts, difficulties in written expression, insufficient concentration, lack of concentration, will, desire to learn.

4. Learning performance is significantly affected by adaptation. Successful students are not under the influence of personal (health, emotional) and social adaptation during education. Failing learners are affected in the education by the family, health and emotional adaptation, etc. (Machalová, cited according to Matúšová, 2019).

It transpires from the Maslow's hierarchy of needs how important the needs for acceptance, recognition, performance, competence or self-actualisation are important for an individual. All these needs are a motivation source for students, also during their education. If teachers want teaching to be effective, they should work from these needs, states e.g. Furlong and his colleagues (2014, 2016, 2018). In educational practice this means creating an opportunity so that students experience success, recognition as often as possible, and are praised, awarded and encouraged a lot in the learning process.

5 Formative education and assessment as a current method in the teacher's work

The current method in the work of a teacher – manager, is *formative education and assessment*, as a process that is gradually being implemented in several areas, whether it is the assessment of those in education or assessment of learners in the process of their self-assessment, or evaluation of projects, teamwork and individual work. The main goal of formative assessment, as presented by Laufková, V. (2017), Starý, K., & Laufková, V. et al. (2016), is to improve, develop and acquire new occupational competencies needed to manage and evaluate the teaching process through innovative forms and methods. In European countries, considerable attention is paid to formative assessment (Bell-Cowie, 2001, Frey, N. & Fisher, D., 2011, William, D., 2015), whereas in Slovakia there is a lack of information. In practice, assessment is most often used when students are placed in classification levels (Szarka, 2017, Szarka et al. 2019). However, formative assessment is focused on the continuous identification of areas that primarily require some improvement and subsequent decision on the further course of teaching (Tóthová, Kostrub, & Ferková, 2017).

The function of motivating students to learn is fulfilled by various, and that is not only positive, motivational factors. These factors affect differently the students and their overall success in the learning process. Often times, students' learning is guided by fear either of a bad mark, punishment by a parent, fear of teacher, or duty, or the need to achieve success, prestige, and reward. In the case of intrinsic motivation, the student is motivated by the activity itself, i.e., he/she is interested in the curriculum, motivated by a desire to know, etc. In extrinsic motivation students care for praise by a parent or improvement in marks. Since the basis of students' active and creative activity in lessons, as well as their success, is what motivation they use to do these activities, the primary role of the teacher is to arouse and maintain students' genuine interest in cognitive reality and to develop in them a desire for continuous learning. Inducing and maintaining intrinsic motivation is not an easy task. Modern didactics offers teachers the options of inducing and sustaining intrinsic motivation of students by using initial and continuous motivational methods, activating methods, methods of differentiated teaching, which allow to transform educational content according to age and individual peculiarities of students and motivate all students not by fear of failure but by desire to succeed (Petty, 2002), and here lies a built-in requirement of formative education, or formative approach.

The aim of the school's current educational activity must be to develop the student's personality so that, in addition to the acquired knowledge and skills, the student also learns such

qualities as activity, independence, creativity, responsible approach to learning and then later to work. The path of further improvement of the educational activities for students is in the whole complex of motivational factors that activate the internal resources of students and based on that they lead them to conscious regulation of activities. The issue of the relationship between the educational process and the learning motivation of students must be viewed from two aspects, as write Petlák et al. (2006, 2019), which overlap:

- The problem of using motivational factors to facilitate learning, to gain knowledge. The authors included here the use of motivational factors by a teacher in teaching, the organisation of learning activities, the use of content, methods and forms during lesson, and the impact on the social climate in the classroom. An important fact is that teachers are able to use motivational factors in the greatest possible unity with the needs and interests of students.
- The problem of influencing the motivational sphere of students, the development of the level of motivation of students, the formation of new motives.

In terms of strategies for forming a positive relationship to learning activities, important are positive motivation, student's positive attitude to the course of learning activities, interest in content, understanding of context, ability to apply knowledge in other learning situations, need to know, find out the result, solve a problem independently and seek problem solving options. In order to ensure positive motivation, it is necessary to strip the lessons of stereotype, boredom and avoid uninteresting activities (Petlák et al., 2006, 2011).

Motivation to learn is also influenced by the way students interact. Such interaction can take three forms: cooperation, competition or individualism. Vendel (2018) states that cooperation between students arises in the events of complex learning. This form though can sometimes slip into a situation where the two or three most skilful students do the work of the whole group. Then it turns into a situation when these students are gaining, while the other students in the group "just enjoy the ride" without the desired effect. It is frequently beneficial to have equal representation of both genders when forming a group that is to work together. Imbalance has often proved to be disadvantageous. In general, it may, therefore, be said that for very timid and introverted students, individual learning is more beneficial precisely because they are unable to express themselves enough within a group.

Individual learning is learning when students learn independently and are evaluated for their own performance only. With the right approach and the necessary time and adequate explanation provided, most students can meet the goals.

5.1 How to increase motivation to learn? Procedures for increasing motivation to learn

According to Petty (2002) and Szarka, et. al. (2019), the main prerequisite for optimal motivation is properly prepared and organised *classroom climate and rules*. The teacher should be patient, helping, should form the right relationship with the students, also individually with each student, should not criticise them and should especially not shame them in front of the classroom. It is important for the teacher to be able to assign tasks that are not too easy or too difficult, as in both cases there may be a loss of motivation. It is essential for students to be reminded of the meaning of what the teacher is presenting to them. When evaluating students' performance, it is appropriate to emphasise the comparison of the student with himself/herself, not with others, and point out the improvement. It is necessary to provide feedback and tell students what they are doing right and what wrong. Vendel (2018) brings up again the fact that when a teacher makes a student feel that he or she believes the student or that he/she can get better, it becomes a certain obligation for the student. Regarding motivation, Petlák (2006) talks about the magic circle, where success feeds success and failure leads to failure.

5.1.1 Assessment

Assessment measures the depth and breadth of knowledge and skills. It is sometimes criticised for being inaccurate and unreliable, and distorting both teaching and the curriculum. It should also be borne in mind that assessment results are not always a good or appropriate prediction of future performance. Nevertheless, both teachers and society need them. Properly implemented assessment inspires, motivates and gives feedback, which is important for, for instance, directing a quick correction or assistance if needed. However, according to Petty (2002), it can also result into an oversight of that what cannot be easily assessed.

Assessment can serve for various purposes. It can classify student performance, assist in job interview processes, assess the effectiveness of courses, teachers, lecturers, coaches, and can provide learners with a goal. This mainly concerns the assessment of the teaching or course, which should contain what the student/adult learner has achieved.

Teachers most frequently use *continuous – formative* assessment, which takes place during the lessons/course, and which assesses whether and how much the student has learned. With precision it also determines the student's learning problems, which the teacher can use to provide help. Since summative and formative assessment have very different goals, they are implemented by different methods.

5.1.2 Self-assessment

Assessment of students has been becoming more and more humanistic (Szarka, K. 2017, Szarka, Brestentenská, & Ganajová, 2019), it is focused on the development of self-assessment skills. The student compares the development of his/her skills with himself/herself in a given time. In assessment, it is appropriate to focus on the cognitive, affective and psychomotoric side of the personality, which makes the evaluation of the student comprehensive. In assessing, the teacher prioritises the positive aspects of the student and constantly encourages him/her to improve. The meaning of self-assessment lies in the fact that students be able to assess their learning performance and at the same time be able to realistically assess their own strengths and abilities. Self-assessment can be implicit when the student assesses own results for himself/herself, re-evaluates what he/she has or has not managed to do, and explicit when self-assessment can take place outside the classroom between the teacher and the student, or possibly in front of the classroom, where each student assesses himself/herself publicly.

In self-assessment, the teacher's important role is to create climate and space for students in the classroom by, for example, providing students during lessons with procedures for solving individual tasks, in conclusion by providing information on the correctness of tasks, using tests that are not marked and thus verify only students' knowledge, by giving the assessment criteria in advance and informing the students of the given assessment criteria, in case of incorrect problem solving by not giving bad assessment immediately, but by giving students room for correction, and thus actually supporting the student's awareness of what is correct, and last but not least, by requiring from students to assess their own performances (Chmelíková, 2003, Tomášková, 2015).

There can be more ideas and suggestions and it is up to the teacher which procedures he/she chooses to succeed among the students and thus induce the right climate in the classroom, natural motivation, and to make students feel confident, comfortable and have the desired impact on them.

6 Conclusion

Formative assessment is a long-term, responsible and demanding activity, which – provided it becomes a school philosophy – makes sense and continuously brings demonstrable results. The

goals of self-assessment, but also the methods and forms, are determined by the school itself. This allows its self-regulation and management from within (Turek, I., & Albert, S., 2006). The use of self-assessment though also increases the quality of education provided, report Spilková, V., 2012, Braunová, 2013, Straková, J., & Slavík, J. 2013, and Marks, I. 2022.

Systematic assessment and self-assessment of work is thus one of the main tools of school autonomy, it is a starting point for compiling annual reports, school educational programme, updating the goals of further development, etc.; it should definitely not become a formal issue. On the contrary, thanks to team cooperation in its implementation, it should be an important tool, without which quality management in school is difficult to imagine. By knowing your strengths and weaknesses, it is possible to advance.

Therefore, it will be interesting as well topical to: – examine some issues of formative assessment and motivation of students; – assess the pedagogical training of future teachers; – what innovations have been put into practice, whether teachers of vocational subjects use assessment methods promoting students' learning process and metacognitive development, for the purpose of purposeful and targeted planning of personal progress; – it will be necessary to expand knowledge about formative assessment at the secondary school level as one of the current trends in secondary school assessment; – explaining emphasise its benefits in respect of students, teachers, vocational lecturers, instructors, and for the school as such as well as practical training centres; – and to analyse whether teachers use appropriate teaching strategies and whether, in the generation of the new millennium, within the upbringing and educational process, they really assess what will be needed in the future regarding the requirements of the labour market in Slovakia and abroad.

The teacher has a strong formative influence on the students. A teacher's communication, attitudes, expectations, aspirations, goals and relationships with the students themselves, can greatly influence their attitudes and the learning outcomes as such. In addition to the pedagogical-didactic, methodological readiness of teachers for their profession, the ever-growing emphasis is placed on their personal and psychosocial qualifications. It is also underlined that the basic precondition for the success of the teacher's pedagogical-didactic work is his/her motivation as well as the ability to encourage students' intrinsic motivation and keep the students continuously interested throughout the educational process. For this reason, it is important that the teacher pays due attention to motivation and constantly improves his/her knowledge in this field (Petlák et al., 2006, 2011, Matúšová, 2019). Motivation is a set of motives that evoke the activity of an organism and determine its focus. It is an internal driving force behind meeting unsatisfied needs. It is said that good motivation is a guarantee of success and in relation to education that "good motivation is half the success of a teacher's work and student's learning", writes E. Petlák in his monograph on motivation (2019).

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