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CRITERIA FOR DIAGNOSING THE LEVEL OF STUDENTS READINESS FOR SELF-EDUCATIONAL ACTIVITIES

Abstract: The article presents the results of a study to determine valid criteria for diagnosing the students level of readiness for self-educational activities. In the study as the psychological readiness for self-education author considers the desire to perform certain self-educational tasks, the ability to achieve the goals of self-education, the presence of moral and volitional qualities that contribute to the fulfillment of this task (responsibility, discipline, perseverance), understanding of the essence and the need of self-education for becoming a specialist. By technological readiness for self-educational activity, the author understands the ability to perform self-educational tasks, the ability to allocate time, organize, control, and adjust self activities.

Based on the obtained results, it is concluded that the level of psychological readiness for self-education can be defined as the average arithmetic mean of students' assessments on a three-point scale of statements of the questionnaire "Readiness for self-educational activity": "I like to study on my own"; "I study additionally myself"; "I can independently achieve my goals of self-education"; "I realize that I will not achieve my goals without additional study"; "I study new things every day"; "I'm quite responsible"; "I'm quite disciplined." The level of technological readiness for self-educational activity is defined as the average value of expert assessments of self-educational skills and average assessments of students of their own ability to set goals and plan activities. The sum of these assessments makes it possible to judge the level of the student's readiness for self-educational activity, as well as to correct the underdeveloped components of readiness. The validity of these criteria is confirmed by a statistical study revealing reliable links with the corresponding scales of the standardized questionnaires "General structure of activity" (GSA) E.Yu. Mandrikova and "Style of self-regulation of behavior" (SSB) by V.I. Morosanova.

Keywords: self-education, self-educational activity, readiness for self-education, technological readiness for self-educational activity, psychological readiness, motivation, cognitive motivation.

KRYTERIA DIAGNOZOWANIA POZIOMU GOTOWOŚCI UCZNIÓW DO DZIAŁAŃ ZWIĄZANYCH Z SAMOKSZTAŁCENIEM

Abstrakt: Niniejszy artykuł przedstawia wyniki badań mających na celu określenie istotnych kryteriów diagnozowania poziomu gotowości uczniów do zajęć samokształceniowych. W niniejszym opracowaniu autorka postrzega psychologiczną gotowość do samokształcenia jako chęć wykonywania określonych zadań samokształceniowych,

zdolność do osiągania celów samokształcenia, obecność pewnych cech moralnych i wolicjonalnych, które przyczyniają się do realizacji tego zadania (odpowiedzialność, dyscyplina, wytrwałość) oraz zrozumienie istoty i potrzeby samokształcenia w celu zostania specjalistą. Przez gotowość technologiczną do samokształcenia autorka rozumie zdolność do wykonywania zadań samokształceniowych, umiejętność zarządzania czasem, organizowania, kontrolowania i dostosowywania własnych działań. Na podstawie uzyskanych wyników autorka dochodzi do wniosku, że poziom gotowości psychologicznej do samokształcenia można określić jako średnią arytmetyczną ocen uczniów na trzystopniowej skali wypowiedzi kwestionariusza zatytułowanego „Gotowość do samokształcenia”: „Lubię uczyć się na własną rękę”; „Sam dodatkowo się uczę”; „Mogę samodzielnie osiągnąć swoje cele samokształcenia”; „Zdaję sobie sprawę, że nie osiągnę swoich celów bez dodatkowych studiów”; „Codziennie uczę się nowych rzeczy”; „Jestem dość odpowiedzialny”; „Jestem dość zdyscyplinowany.” Poziom gotowości technologicznej do samokształcenia jest definiowany jako średnia wartość ocen eksperckich umiejętności samokształcenia oraz średnia ocen uczniów własnej zdolności do wyznaczania celów i planowania działań. Suma tych ocen pozwala ocenić poziom gotowości ucznia do aktywności samokształceniowej, a także skorygować słabo rozwinięte komponenty gotowości. Trafność tych kryteriów potwierdza badanie statystyczne ujawniające wiarygodne powiązania z odpowiednimi skalami standaryzowanych kwestionariuszy „Ogólna struktura aktywności” (GSA) E. Ju. Mandrykowej i „Styl samoregulacji zachowania” (SSB) autorstwa W. I. Morosanowej.

Słowa kluczowe: samokształcenie, aktywność samokształceniowa, gotowość do samokształcenia, gotowość technologiczna do samokształcenia, gotowość psychologiczna, motywacja, motywacja poznawcza.

Introduction

Scientific and technological progress requires constant development from a modern specialist in any area. There is a growing need for creatively thinking specialists capable of independent and non-standard solutions to diverse problems. All this contributes to increasing requirements for the quality of education, expanding the range of opportunities provided to students and pushing students to build their own educational trajectory. An important task of modern education is the formation of a desire for future specialists to constantly improve their professional level, and this requires the skills and abilities of self-educational activity. It is the student's self-educational activity that forms the ability to make an informed choice, be aware of life goals, be active and be responsible for it.

The term "self-educational activity" is usually considered in psychological and pedagogical science from the standpoint of the activity approach as an individual's activity aimed at achieving the set goals related to personal and / or professional improvement, which is largely consistent with the definition of the concept of "self-education". However, self-educational activity, first of all, should be understood as a productive active interaction between the subject and the environment, leading to a certain predictable result.

We consider self-educational activity as a systematic independent activity initiated and controlled by a student, implemented in the process of applying self-educational skills and abilities to the development of a certain social experience (knowledge, skills and abilities), with the goal of self-improvement, broadening the horizons, increasing the level of education, professional competence [1].

For the implementation of self-educational activity, the existence of certain conditions is necessary. The subject of self-educational activity should have self-educational skills, skills of goal-setting, planning, assessing the result of activity, the ability to manage it, motivation for self-educational activity, as well as moral and volitional qualities of the individual that determine the ability to carry out this activity (self-confidence, curiosity, criticality, observation, flexibility, independence). However, even with the implementation of these conditions, the subject needs a special state to carry out self-educational activity – readiness.

Any activity begins with the psychological readiness of a person to start it [2]. The same applies to the student's self-educational activity. Moreover, according to B.D. Parygin, psychological readiness for activity is a necessary factor not only for the initiation of any action, but also for its effective completion, since psychological readiness contains all the elements of the forthcoming action necessary for its successful implementation [3].

With regard to learning, educational activity, the concept of readiness for activity is mainly considered within the framework of the concept of "psychological readiness for school", within the framework of the study of psychological readiness for studying at a university, less often when considering the concept of "self-educational activity".

The main problem of the research is to determine the components of the student's readiness for self-educational activity, in the selection of criteria for their assessment. Diagnostics of the level of student's readiness for self-educational activity will make the process of preparing a future specialist more manageable. A teacher who knows the level of the student's readiness for self-educational activities will be able to organize training on the basis of an individual approach, taking into account the personal characteristics of the student. Awareness of their own results of professional activity encourages students to independently master new things, leads to an understanding of the need to improve the skills of organizing both professional and cognitive activities.

The relevance of solving this problem is determined by a number of reasons:

- social, based on the needs of the modern economy in highly educated specialists with a special "advanced" mindset, capable of cardinal changes and transformations;
- scientific, related to insufficient theoretical development of issues related to the structure of readiness for self-educational activity and system analysis of the conditions for the development of readiness for self-educational activity in the educational environment of a college, university;
- practical, allowing to generalize the experience of formation of self-educational activity readiness by means of educational activity and to determine the criteria of readiness levels.

Material and methods. The purpose of the work is to develop, calculate and substantiate the criteria of readiness for self-educational activity. The derivation of this criteria is an attempt to measure and formalize the parameters of diagnostic criteria that establish the level of students' readiness for self-educational activity. The practical use of the

index will allow teachers to take a differentiated approach to working with students, to influence in detail the individual components of readiness for self-educational activity.

To solve the problems posed in the study, a set of complementary methods was used: theoretical and methodological, conceptual and terminological analysis, empirical research, questionnaire "Readiness for self-educational activity" (developed by author), questionnaires of reflexivity (A.V. Karpov) [4], general self-regulation of activity (GRA) (E.Yu. Mandrikova) [5], "Style of self-regulation of behavior" (SSB) (V.I. Morsanova) [6]. The questionnaire developed for the study contained 10 questions. The questions of the questionnaire "Readiness for self-educational activity" were selected in accordance with the structure of readiness for self-educational activity. The questionnaire included blocks of questions that made it possible to single out the levels of development of individual components of readiness for self-educational activity, to correlate them with the indicators identified by the questionnaires of GSA, SSB and reflexivity.

The study involved 224 students of the final course of the specialty "Veterinary Medicine" of the Agrarian College of the Vitebsk Order "Sign of Honor" State Academy of Veterinary Medicine and Smilovichi State Agrarian College. Mathematical and statistical processing of the work results was carried out using the MS Excel 2013 and Statistica 10.0 for Windows software. on the Windows 10.0 operating system. The analysis of data by mathematical criteria was considered reliable at a significance level of no more than 5% ($p \leq 0.05$), however, data were analyzed at the tendency level ($0.05 \leq p \leq 0.08$).

Research results. Based on the data of modern research [7], we consider the structure of readiness for self-educational activity in two blocks: psychological and technological. The subject's psychological readiness for self-education includes motivational-need and orientational components, technological readiness includes organizational and operational components.

The motivational-target component is a positive attitude to independent study of interesting questions for the student; desire and need for additional educational activities, self-development, self-actualization.

The orientational component (which can be conditionally divided into cognitive and moral-volitional) is the personality traits that contribute to the organization of self-educational activity (curiosity, criticality, a sense of duty, self-confidence), the ability to identify and outline ways to achieve a goal.

The organizational component is the ability to plan your activities and your time, discipline, responsibility;

The operational component is the skills and abilities of self-educational activities.

Both types of readiness are mediated by reflexivity as a metacognitive formation responsible for planning, forecasting, evaluating and regulating one's activities, and the awareness of the correspondence of the results obtained to the planned ones.

Thus, we can say that the presence of a student's psychological readiness for self-educational activity means "I want to engage in self-education" and "I need to engage in self-educational activity". Accordingly, the presence of technological readiness means

"I can engage in self-educational activities" and "I am able to engage in self-educational activities." In total, a student who has a readiness for self-educational activity can say about himself: "I want, I need, I can and can engage in self-education".

Based on the above and the theory of situational leadership by P. Hersey and K. Blanchard [8], the readiness of students for self-educational activity can be conditionally divided into 4 levels:

- high: able and willing to engage in self-educational activities or confident in their strengths and abilities;
- average, represented by two options: a) capable of self-educational activity, but do not want to do it, or are not sure of themselves; b) are unable to engage in self-educational activities, but want or are confident in themselves;
- low: students are unable and unwilling to engage in self-education activities or are unsure of themselves

The typology of students according to the level of readiness for self-educational activity is presented in Table 1.

In the studies carried out, it was found that the development of the organizational component of readiness for self-educational activity can be determined by assessing students' ability to set self-educational goals and plan their activities.

Thus, the study showed that self-assessment of students' ability to set goals has a statistically significant relationship with the levels of programming scales ($F(2, 129) = 7.5904$, $p < 0.001$) and evaluation of results ($F(2, 129) = 5.5184$, $p < 0.01$), determined by the SSB questionnaire. Students' assessment of the ability to plan their activities has a statistically significant relationship with the level of the planning scale ($F(2, 129) = 3.4679$, $p < 0.04$) and the general level of self-regulation ($F(2, 129) = 9.6506$, $p < 0.0005$), determined by the SSB questionnaire.

Table 1. Types of students' readiness for self-educational activities

Readiness for self-educational activities			
high	average		low
able and willing or confident to engage in self-educational activities	are capable, but do not want or are not confident in themselves for self-educational activities	unable to engage in self-educational activities, but want or are confident	not able and willing or not confident to engage in self-educational activities
activity is regulated by the subject of self-education		activity is regulated by the teacher	

That is, the study showed that the organizational component of readiness for self-educational activity is associated with the individual development of conscious programming and planning by a person of his actions, the adequacy of self-assessment, the forma-

tion and stability of subjective criteria for assessing the success of achieving results, as well as the formation of an individual system of conscious self-regulation of voluntary human activity. The more highly the student's organizational component of readiness is formed, the higher his indicators of the formed need to think over the ways of his actions and behavior to achieve the intended goals, the detail and scope of independently developed programs that flexibly change in new circumstances and are stable in situations of interference. The plans of the students are realistic, detailed, hierarchical, effective and stable, the goals of the activity are put forward independently. And if the results obtained do not correspond to the goals, the student has the opportunity to adequately assess both the very fact of the mismatch of the results obtained with the purpose of the activity, and the reasons that led to it, flexibly adapting to changing conditions and adjusting the action programs until a success is acceptable for the subject.

The same study found that students cannot reliably assess the development of their self-educational skills. Self-educational skills that can be measured are the ability to select literature, work effectively with a textbook, take notes, quickly read and understand what you read, and effectively search for information on the Internet. Expert assessments of teachers make it possible to more accurately assess these skills and the dynamics of their development. The result of self-education, its analysis and correction can only be reliably assessed by the subject himself. The study confirms that the sum of expert assessments of self-educational skills has a relationship with the result of coursework, taken as a criterion for the formation of self-educational skills, which can be measured ($F(6, 68) = 49.213$, $p = 0.0000$). These results allow us to say that the expert assessment of the formation of self-educational skills of students can be used as a criterion for assessing the procedural-operational component of readiness for self-educational activity.

Thus, the total average assessment of students' ability to set goals and plan activities can be used as a criterion for the level of formation of the organizational criterion of readiness for self-educational activity, and an expert assessment of self-educational skills can be considered as a criterion for the formation of self-educational skills of students. The total assessment is the technological readiness for self-educational activity.

In studies of psychological readiness for self-educational activity, the author determined that the level of severity of the motivational component can be taken as the average student's assessment of the statements "I study additionally myself", "I like to study on my own". There is a relationship between the criterion defined by the author and the levels of reflection ($F(2, 92) = 9.72$, $p < 0.0002$), planning scales ($F(2, 92) = 3.19$, $p < 0.05$) (SSB questionnaire) and evaluation of the results ($F(2, 92) = 4.82$, $p < 0.02$) (GSA questionnaire), the result of the course work ($F(2, 38) = 4.55$, $p < 0.02$).

That is, the study showed that the motivational component of readiness for self-educational activity is associated with the level of planning, the desire to consistently implement the set goals, developed tactical planning skills, the person's ability to understand their actions and motives, the adequacy of the individual's self-esteem, the formation of subjective criteria for evaluating activities. The more formed the motivational component of the readiness of the student, the higher his indicators of these indicators.

The assessment of the statement "I can independently achieve the goals of self-education" was taken as the level of development of the target component of psychological readiness for self-education. This indicator has a statistically significant relationship with the level of reflection ($F(2, 174) = 3.27, p < 0.05$).

The level of development of the cognitive component was determined by the average assessment of the statement "I realize that I will not achieve my goals without additional study" as an understanding of the essence of self-education, and "I study new things every day" as the application of its forms and methods. These estimates have a statistically significant relationship ($F(2, 175) = 9.16, p < 0.0002$). The calculated level of the cognitive component of self-education has reliable connections with indicators of programming ($F(2, 174) = 7.24, p < 0.001$), planning ($F(2, 174) = 4.55, p < 0.02$), general level self-regulation ($F(2, 174) = 4.2847, p < 0.02$) (SBB questionnaire), orderliness ($F(2, 173) = 8.58, p < 0.0005$), purposefulness ($F(2, 174) = 4.98, p < 0.01$) (GSA questionnaire), reflections ($F(2, 174) = 4.82, p < 0.01$).

The qualities of the student's personality that affect self-educational activity are perseverance, discipline, a sense of duty, responsibility. In this study, the arithmetic mean of self-assessment of discipline and responsibility of students is taken as the level of the moral-volitional component. The calculated level of this component has statistically significant relationships with the levels of purposefulness ($F(2, 174) = 5.18, p < 0.01$), orderliness ($F(2, 173) = 3.59, p < 0.05$), the total score of the GSA questionnaire ($F(2, 174) = 8.55, p < 0.0005$), the level of modeling ($F(2, 174) = 3.63, p < 0.05$) and the general level of self-regulation of behavior ($F(2, 174) = 5.41, p < 0.01$) (SSB questionnaire). These indicators also describe the personality traits that help her to regulate her own activities, to highlight significant conditions for achieving goals.

Conclusion

Thus, having determined the criteria for measuring the levels of technological and psychological readiness of a student for self-educational activity, it is possible to determine the general level of readiness. The level of technological readiness for self-educational activity is defined as the average value of expert assessments of self-educational skills and average assessments of students of their own ability to set goals and plan activities. The level of psychological readiness for self-educational activity is determined by the arithmetic mean of students' assessments of the statements "I study additionally myself", "I like to study on my own", "I can independently achieve the set goals of self-education" (motivational-target component), "I realize that I will not achieve the set goals without additional study", "I study new things every day" (cognitive component), as well as assessments of discipline and responsibility of students (moral and volitional component). If the level of psychological readiness is below the level of technological readiness, then the teacher should direct his activities towards developing a positive attitude towards self-education and the profession among students. If the level of technological readiness is lower, the teacher must form students' self-educational skills and abilities to plan and organize their own activities.

Bibliografia

1. Mazitova R. I., Samovospitaniye i samoobrazovaniye lichnosti // Problemy i perspektivy razvitiya obrazovaniya v Rossii. 2014. №26. URL: <https://cyberleninka.ru/article/n/samovospitanie-i-samoobrazovanie-lichnosti>.
2. Prangishvili A. S., Problema ustanovki na sovremennom urovne yeye razrabotki gruzinskoy psikhologicheskoy shkoly // Psikhologicheskkiye issledovaniya, posvyashchennyye 85-letiyu so dnya rozhdeniya D. N. Uznadze / pod red. A. S. Prangishvili. – Tbilisi: Metsniyereba, 1973. – P.10-12
3. Parygin B. D., Sotsial'naya psikhologiya. Problemy metodologii, istorii i teorii. — SPb.: IGUP, 1999. — 592 p.
4. Karpov A.V., Refleksivnost' kak psikhologicheskoye svoystvo i metodika yeye diagnostiki / A.V. Karpov // Psikhologicheskiiy zhurnal – 2003. – tom 24. – №5. – P.45-57.
5. Morosanova V.I., Stilevyye osobennosti samoregulirovaniya lichnosti // Vopr. psikhol. 1991. № 1. P. 121-127
6. Mandrikova Ye.Yu., Razrabotka oprosnika samoorganizatsii deyatelnosti (OSD). / Ye.YU. Mandrikova // Psikhologicheskaya diagnostika, 2010, №2. P. 87-111.
7. Soveiko Ye.I., Diagnostika urovnya psikhologicheskoy gotovnosti obuchayushchikhsya k samoobrazovatel'noy deyatelnosti / Ye.I. Soveiko // Pravo. Ekonomika. Psikhologiya. 2020. № 4 (20). S. 95-100.
8. Hersey P., Blanchard K.H., Management of Organizational Behavior Utilizing Human Resources, 4th e d , © 1982, P. 152..

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Annex

Criteria for diagnosing the level of students readiness for self-educational activities

An important task of modern education is to form the desire of future specialists to constantly improve their professional level, and this requires the skills and abilities of self-educational activities. The article presents the results of a study to determine valid criteria for diagnosing the students level of readiness for self-educational activities. In the study as the psychological readiness for self-education author considers the desire to perform certain self-educational tasks, the ability to achieve the goals of self-education, the presence of moral and volitional qualities that contribute to the fulfillment of this task (responsibility, discipline, perseverance), understanding of the essence and the need of self-education for becoming a specialist. By technological readiness for self-educational activity, the author understands the ability to perform self-educational tasks, the ability to allocate time, organize, control, and adjust self activities.

The aim of study is to develop, calculate and substantiate the criteria of readiness for self-educational activity.

Research methods. To solve the problems posed in the study, a set of complementary methods was used: theoretical and methodological, conceptual and terminological analysis, empirical research, questionnaire "Readiness for self-educational activity" (developed by author), questionnaires of reflexivity (A.V. Karpov), general self-regulation of activity (GRA) (E.Yu. Mandrikova), "Style of self-regulation of behavior" (SSB) (V.I. Morsanova). Mathematical and statistical processing of the work results was carried out using the MS Excel 2013 and Statistica 10.0 for Windows software. on the Windows 10.0 operating system.

Results and discussion. Based on the obtained results, it is concluded that the level of psychological readiness for self-education can be defined as the average arithmetic mean of students' assessments on a three-point scale of statements of the questionnaire "Readiness for self-educational activity": "I like to study on my own"; "I study additionally myself"; "I can independently achieve my goals of self-education"; "I realize that I will not achieve my goals without additional study"; "I study new things every day"; "I'm quite responsible"; "I'm quite disciplined." The level of technological readiness for self-educational activity is defined as the average value of expert assessments of self-educational skills and average assessments of students of their own ability to set goals and plan activities. The sum of these assessments makes it possible to judge the level of the student's readiness for self-educational activity, as well as to correct the underdeveloped components of readiness.

Conclusion. The results obtained allow us to determine the level of readiness of the student for self-educational activities. Having defined the criteria for measuring the levels of technological and psychological readiness of a student for self-educational activities, it is possible to determine the overall level of readiness. If the level of psychological readiness is below the level of technological readiness, then the teacher should direct his activities towards developing a positive attitude towards self-education and the profession among students. If the level of technological readiness is lower, the teacher must form students' self-educational skills and abilities to plan and organize their own activities.