



Diagnostic Activity of Teachers at High School

Aktividades de diagnóstico de profesores en Educación Media

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Contents

1. Introduction

2. Methodology

3. Results

4. Conclusions

Bibliographic references

ABSTRACT:

The article deals with the diagnostic activity of teachers at high school. Three basic diagnostic approaches (objective, subjective, projective) are considered with reference to diagnostic activity, the choice of which depends on the appropriate system of diagnostic methods for interpreting the results. The authors come to the conclusion that control and diagnostic activity of teachers allows to lead an effective management of the educational process of students.

Keywords: diagnostic activity, students, teacher, high school

RESUMEN:

En el artículo está examinada la actividad diagnóstica del profesor de la escuela superior. Tres básicos accesos diagnósticos (objetivo, subjetivo, proyectivo) están examinados con relación a la actividad diagnóstica, de la cual depende la elección del sistema correspondiente de los métodos diagnósticos y los modos de la interpretación de los resultados recibidos. Los autores llegan a la conclusión de que la actividad de control y diagnóstica realizada por el profesor de la escuela superior permite dirigir el proceso de la educación de los estudiantes eficientemente

Palabras clave: La actividad diagnóstica, los estudiantes, el profesor, la escuela superior

1. Introduction

Today, the educational process is characterized by the flexibility of the organizational forms, contents, means and methods of teaching, openness of the cognitive and socio-emotional spheres (Antoniali F. et.al., 2011; Instefjord E.J. and Munthe E., 2017; Kodele T. and Lesar I., 2015; Korneeva L.N. et.al., 2016; Pereira S. et.al., 2014; Povarenkov U.P., 2008; Zaytsev K. and Sergievskiy M., 2017). All these factors require appropriate diagnostic activity of teachers. Diagnostic activity of teachers, selecting and applying effective pedagogical technologies within the modern educational space have become indispensable components of the professional

activity of each teacher. This happens due to the significant complication of functions of teachers, educators, heads of educational institutions associated with the innovative processes in education (Bešter R. and Medvešek M., 2016; Christensen R. and Knezek G., 2017; Kim M.K., 2015; Tan C.P. et.al., 2017; Tavakoli M. and Baniasad-Azad S., 2017; Villarreal J.L. et.al., 2016; Yuan R. and Burns A., 2017; Zhan Y. et.al., 2017).

Considering the notion "diagnostics" (Aydogan Yenmez A., 2017; Fayadh A., 2017) narrow the understanding of diagnostics, revealing it as the goal of obtaining information that serves for optimizing pedagogical activity. Authors draw special attention to the fact that diagnostics should be a collective process, requiring the combined efforts of teachers and students. Authors (Ananiev B.G. et.al., 2003; Alse K. et.al., 2016; Borytko N.M., 2006; Galustyan O. V., 2017; Sondi L., 2005) believe that the essence of diagnostics is to study the effectiveness of the educational process at high school based on the growth of pedagogical skill of teachers.

2. Methodology

There are three main diagnostic approaches such as objective, subjective, projective ones, which determine the choice of the appropriate system of diagnostic methods and interpretation of the results. According to (Borytko N.M., 2006), the approach is fundamental basis of activity, which is based on a certain concept of a pedagogical (educational) process or phenomenon. The essence of the objective approach is related to the fact that the diagnostics is carried out on the basis of success (effectiveness) and the way (characteristics) of the activity. There are two types of methods in diagnostic activity which aim is to measure characteristics of person and to establish the level of his/her intellectual development.

The subjective approach assumes diagnostics, which is carried out on the basis of information, self-description (self-evaluation) of a personality, state, behavior in certain situations. This approach is realized through numerous questionnaires (personal questionnaires, questionnaires of state and mood, questionnaires of opinions).

The projective approach includes diagnostics, which is carried out on the basis of analysis of the features of interaction with externally neutral, impersonal like material, that becomes the object of projection because of its known uncertainty (weak structure). The methodologies created within the framework of the projective method are based on the various classifications.

(Borytko N.M., 2006) comes to an important conclusion, that the diagnostic activity of the teacher is the basis for the technological development of modern educational practice, increasing its effectiveness, rationality, purposefulness, organically included in designing, control and regulating of pedagogical activity. Diagnostic activity of the teacher is aimed at achieving a positive pedagogical result.

(Galustyan O. V., 2017) distinguishes the following aspects in the diagnostic activity of the teacher such as comparison, analysis, forecasting, interpretation, informing the students concerning the results of diagnostic activities; control of impact on students of different diagnostic methods.

Considering the diagnostic activity of teachers (Ananiev B.G. et.al., 2003; Alse K. et.al., 2016; Borytko N.M., 2006; Galustyan O. V., 2015, 2017; Sondi L., 2005), pay attention to the determination of the purpose and the specific tasks of the diagnostic study, the selection of diagnostic tools, the accumulation and processing of diagnostic information, the determination of trends and prospects for personal development of students, control of the dynamics of their development, self-diagnostic of the teacher's actions and their reconstruction.

3. Results

The essence of pedagogical diagnostics is determined by its subject. The subject of pedagogical diagnostics can be the person who should be educated in accordance with the objectives and tasks of education (objects of education, the criteria of education); pedagogical conditions

(educational situation).

Pedagogical diagnostics allows to solve the following tasks at high school:

- to determine the educational potential of students;
- to identify positive and negative influences on the students ;
- to establish real conditions for the formation of collectives at high school within the education of various categories of students (difficult, gifted, unsuccessful);
- to develop a common teaching positions to increase the effectiveness of the educational influences;
- to promote the development of self-awareness and personal responsibility.

(Klug J. et.al., 2016; Minakhmetova A.Z. et.al., 2016; Sasmoko et.al., 2016; Tarling I. and Ng'ambi D., 2016) draw attention to the fact that diagnostics solves very diverse tasks, and depending on this one can single out the student's personality-oriented diagnostics, the diagnostics of the pedagogical process and its management, the diagnostics of innovation. The most comprehensive is the system diagnostics of the pedagogical process. (Klug J. et.al., 2016; Minakhmetova A.Z. et.al., 2016; Sasmoko et.al., 2016; Tarling I. and Ng'ambi D., 2016) equate systematic diagnostic with the pedagogical monitoring.

(Borytko N.M., 2006) defines diagnostics as an activity. The researcher determines the diagnostic activity of the pedagogue as an integral component of his professional activity, aimed at identifying the actual status, specific features of changes in the participants and in the process of pedagogical interaction and predicting the prospects of these changes. Diagnostic activity includes the purpose, means, result and the process. (Borytko N.M., 2006) defines the specificity of diagnostic activities within object, subject, purpose and tasks. The object of diagnostic activity is pedagogical phenomena. The subjects of diagnosis are the state, properties, characteristics of the student or educational process, as well as the trends that determine the effectiveness of the professional activity of the teacher. The purpose of the diagnostic activity is the study of objective information for management (control and correction) of the quality of the pedagogical process, increasing the effectiveness of pedagogical activity.

(Bešter R. and Medvešek M., 2016; Christensen R. and Knezek G., 2017; Kim M.K., 2015; Tan C.P. et.al., 2017; Tavakoli M. and Baniasad-Azad S., 2017; Villarreal J.L. et.al., 2016; Yuan R. and Burns A., 2017; Zhan Y. et.al., 2017) use method of project for diagnostic activities. Students learn how to formulate and solve various tasks during the preparation for the project. This can be realized in the following logical chain: the problem → the formulation of pedagogical tasks → selection of pedagogical tools → implementation → evaluation of effectiveness of pedagogical methods → results analysis → reflection.

According to (Galustyan O. V., 2017), diagnostics of the pedagogical process performs a number of functions. The first one is feedback function. Pedagogue loses the ability to evaluate the process of personality's formation without controlling his/her actions. The second one is the function of assessment of effectiveness of pedagogical activity, which is based on the comparison of the achieved pedagogical results with criteria and indicators, that is taken as an ideal standard of education. The third function is emotional and reflective, fourth and fifth are communicative and constructive, the sixth function is prognostic. Any diagnostics involves determining the prospects of development of the diagnosed object.

(Ostermann A. et.al., 2015; Tsukui A. et.al., 2017; Tolsdorf Y. and Markic S., 2016) believe that if the teacher lives the life of their students, diagnostic of student turns into a diagnostic of their joint movement from one goal to another. Diagnostic plays two roles for teacher in this case:

- 1) Diagnostic allows to trace the effectiveness of the students and teachers;
- 2) Diagnostic as the instrument of knowledge becomes the instrument of formation.

(Ostermann A. et.al., 2015; Tsukui A. et.al., 2017; Tolsdorf Y. and Markic S., 2016) give the following characteristic features of diagnostics:

- diagnostics is carried out for pedagogical purposes, i.e. it is oriented on obtaining new information which is connected with how to improve the quality of education development of students based on the analysis and interpretation of its results;
- diagnostics gives a fundamentally new, meaningful information about the quality of the pedagogical work of the teacher;
- diagnostics is carried out by means of methods that fit organically into the logic of pedagogical activity of teacher;
- pedagogical diagnostics enhance monitoring and evaluation functions of the activities of teachers;
- some traditionally used means and methods of training and education can be transformed into the means and methods of pedagogical diagnostics.

The teacher-researcher should use his/her own system of research skills, among which we should highlight the diagnostic skills associated with the procedures of the use various observation methods, diagnostic and testing of actual and potential levels of the development of students. Diagnostic methods such as observation of the students, interviews are widely used. (Chen Y.T. et.al., 2017; Liampa V. et.al., 2017) also highlight the importance of pedagogical testing. The researchers offer some general rules for the procedure of diagnosing and analyzing results.

Among the rules of pedagogical diagnostics are:

1. Specifying the group, number of students, discipline.
2. Formulating purpose and tasks of diagnostics.
3. Determining the form of registration and collection of primary materials of diagnostic.
4. Presenting the results of diagnostics in the form of schemes, tables, diagrams.
5. Analyzing and give an interpretation of the obtained results, explaining their meaning.
6. Giving an overall assessment, formulating of pedagogical conclusions and recommendations.
7. Indicating where and how results of diagnostics and testing can be used.

(Slastenin V.A. et.al., 2013) believe that the method of comparative diagnostics has a great potential. The essence of this method lies in the fact that a comparative analysis of the final results of the pedagogical influence is carried out on the set of indicators on different phases of education and upbringing.

(Chen Y.T. et.al., 2017; Liampa V. et.al., 2017; Slastenin V.A. et.al., 2013) dwell on the problems of tracking and evaluation of quantitative indicators of the quality of diagnostics and drew attention to the need of mastering the diagnostic culture of teacher. The authors also believe that one of the main factors is the diagnostic culture of teacher which helps to improve the effectiveness of the educational process, stimulates the creative self-development of teacher. The diagnostic culture of teacher consists of the following skills:

1. Ability to set a diagnostic target.
2. Ability to choose the diagnostic methods.
3. Ability to conduct the testing.
4. Ability to process the data and to identify problems.
5. Ability to plan and to conduct correctional work.

According to (Slastenin V.A. et.al., 2013), the most important principles of diagnosing and controlling are systematicity and visibility (publicity). Systematicity means that all students are subjected to regular diagnostics from the first to the last day of studying at educational institution. Diagnostics is carried out at all the stages of the didactic process from the initial perception of knowledge to their practical application. The principle of systematicity requires an integrated approach for diagnosing, in which various forms, methods and means of evaluation are used in close interconnection. Principle of visibility (publicity) means conducting tests for all students within the equal criteria. The rating of each student within the process of diagnostics is clear and comparable. The principle of publicity requires the announcement of evaluation criteria. A prerequisite for the implementation of this principle is the announcement of the results of the diagnostic tests, discussion and analysis of them and the making up of perspective plans for elimination of mistakes.

(Slastenin V.A. et.al., 2013) consider that working with diagnostic techniques directs the student to create the individual programs for self-education, allows him/her to evaluate and reflect his/her activities during the educational period. Diagnostic methods also include various forms of teachers' self-improvement such as questioning, creative improvisation, developing of strategies and technology for teaching the students, self-diagnostics, determining the prospects for their own development.

Summing up, it should be noted that diagnostics is analytical work of teacher which contributes to the development of diagnostic and technological level of professional thinking.

4. Conclusions

Diagnostic activity is a kind of professional (pedagogical) activity of teacher. We believe that the diagnostic activity of teacher can be regarded as a separate type of professional activity of teacher. The implementation of diagnostics is connected with the difficulties in the organization of the pedagogical process. Thus, diagnostic activities can improve the efficiency of the educational process.

We believe that many mistakes in the education system can be eliminated by implementing diagnostic activity of teacher. Therefore, it is necessary to enrich the lectures of the disciplines of pedagogical and psychological cycles with information concerning diagnostic methods and effective teaching technologies.

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[Index]

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