

FORECASTING THE LEVEL OF ASSIMILATION OF MATHEMATICAL KNOWLEDGE AS A STAGE IN MODELING THE EDUCATIONAL PROCESS OF A UNIVERSITY IN A BLENDED LEARNING ENVIRONMENT

E. Zhuravleva, L. Studenikina
RTU MIREA, Moscow, Russia

lena-jur@yandex.ru

I. INTRODUCTION

In the context of building an individual educational scheme for students, it becomes especially important to analyze the assimilation of theoretical and practical material in order to make corrections in the methodological aspects of teaching the mathematical cycle disciplines. As well as forecasting the level of mastering disciplines. This approach is especially important in a blended learning environment, when knowledge control takes place in a distance format.

II. MAIN TEXT

In the first semester, the working curriculum for students of economic training areas provides for the study of two disciplines of the mathematical cycle: linear algebra and mathematical analysis. As shown by the analysis of the final testing in the discipline "mathematical analysis", less than 10% of students scored more than 20 points out of 50 possible. The main part barely crossed the required minimum of 16 points to get credit. In this regard, an analysis was made of possible difficulties that students faced when completing assignments. The main problems include:

- Weak basic mathematical preparation, caused by the usual memorization of only the necessary mathematical apparatus for the successful passing of the exam.
- Lack of skills for attentive work with the text of the assignment.
- The use of Internet resources, which knocked off the correct decision inherent in the software testing algorithms.

The performed correlation analysis of the test results in the disciplines of linear algebra and mathematical analysis showed the presence of a close linear relationship between the test results and the exam, and the analysis of the exam results in linear algebra, that the same problems were present during testing in this discipline.

To reduce the dependence of the results of mastering the material on the identified problems, at the beginning of the semester, a repetition of what was learned was carried out at the beginning of the semester, analysis of typical mistakes made when completing the test assignment, as well as the order of studying the sections assigned to the second semester was changed. These measures led to an improvement in the assessment of the forecast of the success of the exam, which was confirmed by the results of examination testing. The projected 30% of those passing increased to 57%.

The exam result, from our point of view, is still unsatisfactory. The reasons for this result are the following:

-Lack of students' skills in working with theoretical material, which was presented at webinars and video lectures ("I watched the lecture and remembered everything, only now I forgot", i.e. «I went to a concert and learned to play a musical instrument»);

-lack of motivation to do homework ("I understood everything in practice")

- the teacher's lack of the ability to insist on retaking topics that are poorly developed by the student, i.e. rewrite control and independent work to a satisfactory result

- a student have the opportunity not to attend classes to take the exam, which reduces the value of both the full-time study itself and devalues the teacher's work on the examination test.

III. CONCLUSIONS

The study shows that predicting the results of success in mastering the discipline based on the results of previous tests and exams leads to an increase in the level of mastering the material in mathematical disciplines. As a guideline, you can do the following:

1. To organize for first-year students with a low USE score (less than 60 points) a compulsory elective course during the first month of study (at least 2 times a week) in order to explain forgotten or missed topics in the school mathematics course, which will increase their level of perception of theoretical mathematics

2. Students who missed most of the classes (more than 40%) should be offered to take this course again, since in 90% of cases these students have an unsatisfactory exam result.

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