ABOUT THE APPLICATION OF THE "TANGLED LOGICAL CHAIN" METHOD IN CLASSROOM ACTIVITIES

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Abstract: The article examines the confused logical chain method, which is used in order to increase the activity of students in higher mathematics in classes and to evaluate their knowledge level fairly and quickly. It is thought that the method can be used for a separate subject, section and whole part of Higher Mathematics.

Key words: higher mathematics, estimation method, probability, event, entangled logical chain, independent tests.

In recent times, many smart technologies - cars, household appliances, computers, household appliances - have revolutionized our way of life. To use them, a person needs a high level of knowledge, capacity and intelligence. These skills are acquired through the knowledge provided in higher educational institutions. For this reason, professors and teachers of higher educational institutions should sharply improve the quality of education, and for this, they should organize classes based on modern pedagogical and information technologies. In addition to providing quality education to students, fair, quick and transparent assessment of their level of knowledge is important. Among the highly effective methods in this field, we consider the use of the confused logical chain method in the lectures of Higher Mathematics.

We will consider the application of the method of the confused logical chain in determining the level of knowledge acquired by students on the subjects "Probability of an Event" and "Sequence of Random Trials" in Higher Mathematics. A table obtained from a data bank consisting of key words and phrases, formulas, and theorems related to the topic is used according to the method of the confused logical chain. At the end of the lesson, the teacher distributes to all students a copy of the table corresponding to the number of students in the group. Students study the given table in detail and write down the correct answer number on the right for each question listed on the left. Then the teacher collects the completed table from the students, checks them and announces the grades received by the students based on the results. Seen below is an example of a chart for one "Sequence of Tests" topic.

Determine compatibility:

1	The probability of an event occurring in each trial $p = 0,9$ knowing that is equal to $n = 2$ in unrelated trials $k = 1$ find the probability of occurrence.	1	0,2646

2	The probability of having a boy is 0.51. Find the probability that 50 out of 100 babies will be boys.	2	0,1056
3	There are 6 identical cubes in a box. Find the probability that the numbers of the cubes come out in ascending order when all the cubes are taken one at a time.	3	0,024
4	The student looks for the formula he needs in 3 references. The probability of the formula being in the first, second, third reference is 0.2, 0.3, 0.4, respectively. Find the probability that the formula is in all three references.	4	$\dfrac{1}{720}$
5	e probability of an event occurring in each trial $p = 0,3$ knowing that is equal to $n = 4$ in unrelated trials $k = 2$ find the probability of occurrence.	5	0,18
6	The probability of an event occurring in each of 100 random trials is constant, p=0,8 is equal to Find the probability that the event will occur at most 74 times.	6	0,0782

Correct answer: (5,6,4,3,1,2)

Now let's consider the application of the method of confused logical chain to determine the level of knowledge acquired by students on not one, but several topics of Higher Mathematics, for example, "Probability of an Event" and "Sequence of Random Trials". The number of questions in the table increases accordingly as the number of subjects increases. However, too many questions can be difficult for students. Therefore, it is recommended not to exceed the number of questions in the table by 15-25. Below is a table of questions on selected topics.

Determine compatibility:

1	The probability of event A occurring in each of 900 independent trials is 0.8. Find the probability that event A will occur 750 times.	1	0,0231
2	The probability of hitting the target when one shot is fired is 0.8. Find the probability that 75 bullets will hit the target when 100 bullets are fired.	2	0,2592

3	A coin has been tossed 5 times. Find the probability of landing less than twice on the Gerbli side.	3	$\dfrac{3}{5}$
4	If the probability of event A occurring in each trial is 0.25, find the probability that this event will occur exactly 70 times in 243 trials.	4	0,00146
5	The probability of winning a lottery ticket is 0.3. Find the probability of winning 2 out of 4 tickets.	5	0,027
6	Find the probability that a natural number not greater than 20 will be multiplied by 5.	6	0,4116
7	The numbers are different two-digit numbers. Find the probability that the guessed number is a two-digit number given by chance.	7	0,4598
8	There are 5 identical items in the box, 3 of them are painted. Find the probability that there is one unpainted item among them when 2 items are taken at risk.	8	$\dfrac{3}{16}$
9	The student knows 30 out of 45 questions in the syllabus. Each exam ticket consists of three questions. Find the probability that the student knows only two questions on the ticket.	9	$\dfrac{1}{81}$
10	The probability of seed germination is 0.7. Find the probability that 4 of the 5 seeds planted will germinate. find	10	0,243
11	The probability of a player winning a tennis match is 0.7. Find the probability that this player wins 3 out of 4 games.	11	$\dfrac{1}{5}$
12	The probability of an event occurring in each trial $p = 0,9$ knowing that is equal to $n = 2$ in unrelated trials $k = 1$ find the probability of occurrence.	12	0,4096
13	The probability of an event occurring in each trial $p = 0,1$ knowing that is equal	13	0,36

	to $n=3$ in unrelated trials $k=1$ find the probability of occurrence.		
14	The probability of an event occurring in each trial $p=0,6$ knowing that is equal to in unrelated trials $k=4$ find the probability of occurrence.	14	0,04565
15	The probability of an event occurring in each trial $p=0,9$ knowing that is equal to $n=3$ in unrelated trials $k=1$ find the probability of occurrence.	15	0,2646
16	The probability of an event occurring in each of 100 random trials is constant, p=0,8 is equal to Find the probability that the event will occur at least 75 times.	16	0,1056
17	The probability of an event occurring in each of 100 random trials is constant, p=0,8 is equal to Find the probability that the event will occur at most 74 times.	17	0,8944
18	The probability of seed germination is 0.8. Find the probability that 4 out of 5 seeds will germinate.	18	0,18

Answers: (4,14,8,1,15,11,9,3,7,13,6,18,10,2,5,17,16,12)

In short, as a result of using the method of confused logical chain in the educational process, students have the skills to perfectly master the basics of the subject they are studying, to distinguish the specific and general aspects of each concept, and to compare it with other concepts. will be One of the most important aspects of using this method is that it allows for quick, fair and transparent assessment of student knowledge.

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