

## THE STUDY FEATURES OF TEST PROCEDURES OF STUDENTS' KNOWLEDGE ON THE PHYSICAL TRAINING LESSONS

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**Annotation.** The aim is to determine the significance of the relationship and special professional skills necessary to detect and correct errors and evaluating students in physical education classes. The surveys were a group of qualified teachers (n = 31) with different pedagogical experience. Each teacher was asked to arrange the professional quality of the places from 1 to 10. It was found that all investigated have a certain quality and a high level of relationship, but they are manifested in different periods of teaching. It is shown that the process of organizing and carrying out checks of expertise includes logically related mental operations which are the basis of test procedures of students' knowledge on the physical training lessons. Found that the most weighty qualities were related to skills: a rating, comment exposed estimate visually identify the error and determine its significance.

**Key words:** mistake, skill, observation, reason, consequence, connection, perception, comparison, estimation.

### Introduction

Analysis of the literature as for the methods of students' knowledge control in physical training lessons is shown enough by several authors and is considered from the position of systemic-structural approach [1; 2; 4; 5]. For effective students' knowledge control teachers should have specialized professional skills such as excellent knowledge of the theme that is checked by him, determine the range of possible mistakes and their classification by correcting, evaluate students' action in general. The process of organizing and conducting testing includes logically related mental operations. The first one and the most important is the operation of monitoring students' actions because all the next operations depend on it because if this operation has some mistakes all the next ones will be also incorrect. In order to avoid mistakes a teacher should not only have excellent knowledge of all elements of the action that is estimated and also take the best place to monitor the action that is performed. The second operation is the operation of analysis of identified mistakes. The third one includes the mistake correction using the suitable methods. The fourth operation foresees putting the mark and its interpretation. Getting knowledge as for each operation and the ability to use them in practice is required in the system of methodical preparation of teachers of physical training.

### Purpose, tasks of the work, materials and methods.

The aim of the paper is to determinate the composition, significance and correlation of specific professional skills that are necessary to detect and correct mistakes in the students' action in physical training lessons. According to published data the composition of specialized skills are identified in table 2. For an objective assessment of the significance of each professional pedagogical feature the questionnaire of qualified teachers (n = 31) with different teaching experience was held (table 1).

Each teacher was asked to put all the professional skills, that were listed in table 1, arrange from 1 to 10, giving the first place to the most important skill, and the last place to the less significant in their point of view.

### Results of the researches.

The actor analysis was used for the processing of the data. It made possible to place the results of features that are studied in each group of teachers in the semantic space where the system of organized features that constitute and differentiate objects of a particular subject area is understood. In our case, the semantic space that characterizes the structure of "definition of mistakes and their elimination" is analyzed.

Table 1

*Teachers who took part in the survey*

Age	Years of teaching experience		
	Up to 10 years	From 10 to 20 years	over 20 years
20-30	9 person		
31-40	3 person	4 person	1 person
41-60		6 person	8 person

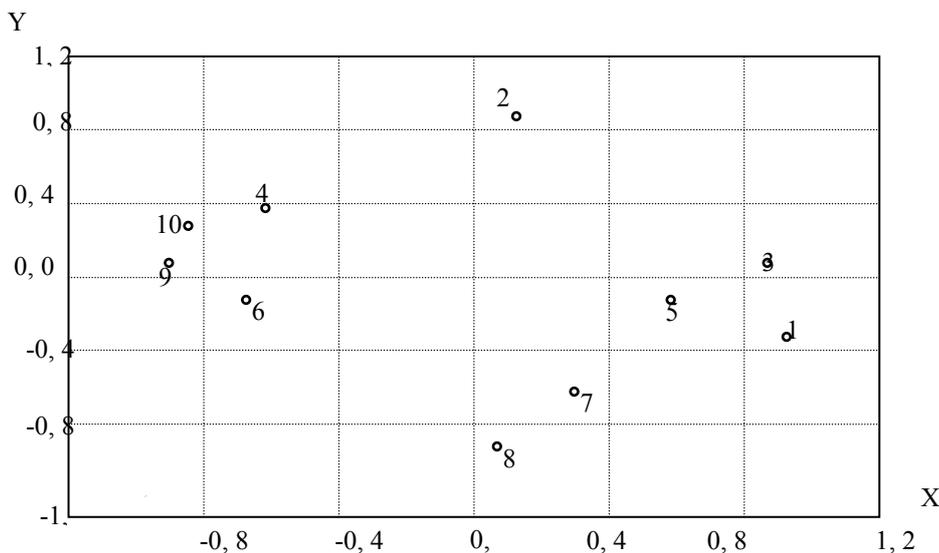
Table 2

*The special skills that are necessary to test students' knowledge*

№	Skills and its interpretation
1.	<b>Visual detection of mistakes.</b> Based on excellent knowledge of technique of physical exercises and opportunities to compare this knowledge with student's action.
2.	<b>Selection the method and the place of observation, depending on the mistake.</b> Taking the best place for complete review.

3. **Identifying the significance of the mistake.** The knowledge that includes the dividing of mistakes for major and minor and is based on scientific research in the fields of biomechanics, physiology, and so on.
4. **Identification of the result depending on the particular mistake.** Means the ability to set up the influence of a specific mistake on a final result.
5. **Setting the reason of appearance of mistake and its pedagogical interpretation.** Means the ability to explain the students the reason of appearance of mistake.
6. **Using the figurative comparisons for the prevention and correction of mistakes.** Ability based on knowledge of psychology and physiology and is to select the appropriate figurative comparisons for specific age groups of students.
7. **Using the physical help that is directed to sense of motion to correct the mistake.** Indicates mistake correction using contact, steering help.
8. **Selection and using specific exercises that are directed to mistake eliminating.** This ability is based on a knowledge of specific exercises and their directed using.
9. **Ability to set the mark for student action.** Means the ability to relate students' action to the criteria requirements adopted by the school.
10. **The ability to comment the putting mark.** Means an argued response to a question why the student was given the particular mark, but it can be done in a fully possessing nearly all the above-defined properties.

Semantic space of the first group of teachers with teaching experience up to 10 years is presented in table 1. Coordinate axis of the graph can be determined by the greatest performance of certain features. So the coordinate X axis is called the ability to "put a mark" (-0.950), and the axis Y - "to use special exercises" (0.963).

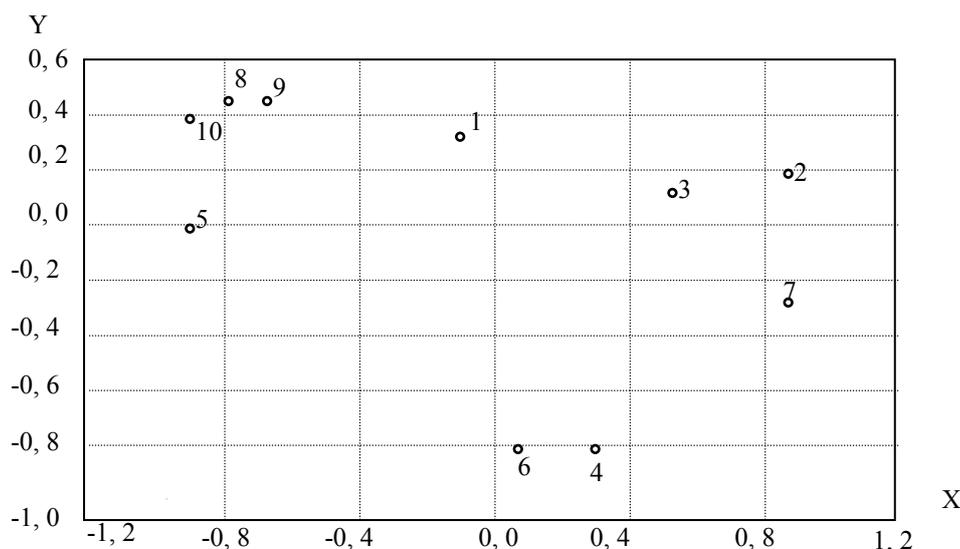


Picture 1. Semantic Space of teachers with teaching experience up to 10 years

In this space the studied skills were grouped into three galaxies. The first one includes those skills that have number 4, 6, 9, 10, which have their correlation coefficients. They are 0.613, -0.694, -0.950, -0.867. The second galaxy includes those skills that have number 1, 3, 5 with their coefficients. They are 0.924, 0.852, and 0.594. The third galaxy has 7 and 8 features with their coefficients 0.320 and 0.088.

And apart from with a very low correlation (0.095) is the feature that is connected with the ability to choose the method and place of observation, depending on the mistake. Obviously, in this category of teachers the most significant features are related with the next skills: put marks (-0.950), comment the mark (-0.867), visually determine the mistake (0.924) and to determine the degree of its significance (0.852). Now let's have a look at the semantic space of the second group of teachers with experience from 10 to 20 years (table 2), so the coordinate X axis is called "commenting the mark" (-0.885) and Y - "creating the notion of motion" (-0.827).

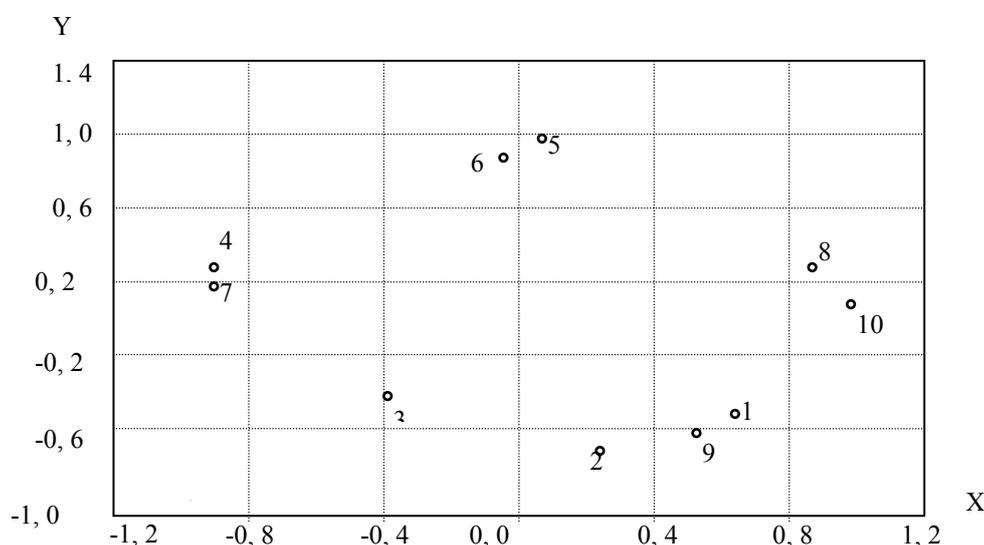
Here features were grouped into three galaxies. The first category includes the abilities that have numbers 5, 8, 9, 10 with the coefficients -0.871, -0.801, -0.670, -0.885. The second galaxy is outlined in abilities that have numbers 2, 3, 7 with the coefficients 0.863, 0.520, 0.860. The third galaxy includes number 4 and 6 with correlation 0.242 and 0.063. The first indicator of the quality of -0.099 cannot be attributed at least to any galaxy because of its specific location. As for correlation parameters such skills as setting specific reason of mistake appearance and its pedagogical interpretation (-0.871), the selection and using specific exercises (-0.801), commenting the mark (-0.885), the choice of method and place of observation (0.863), using of physical help (0.860) should be recognized.



Picture 2. Semantic Space of teachers with teaching experience from 10 to 20 years

The next semantic space is presented in table 3. Axis X is also "commenting the mark " (0, 973) and Y - "determine the cause of the mistake" (0.968).

In this group we have 4 galaxies. The first one combines skills number 4, 7 with the same correlations -0.940. The second galaxy, which includes skills number 8 and 9 with correlations 0, 830 and 0, 973. The third galaxy has skills number 1, 2, 9 with the correlation 0.607, 0.218, 0.544. The fourth galaxy has skills number 5, 6 with the correlation 0.076 and -0.031. And skill number 3 is separated with coefficient 0.405. The most informative are the next qualities: determination of the result depends on the specific mistake and the using of physical help (to -0.940), selection and using of specific exercises (0, 830), commenting the mark (0, 973).



Picture 3 Semantic Space of teachers with teaching experience over 20 years

These data indicates that all qualities that are mentioned in the article have rather high level of informativeness, but it manifests in different periods of educational activities. Difference in semantic space with simultaneous migration of certain qualities is observed, so there is no tendency according to their structure.

In all groups of teachers high correlation coefficients to the ability to set the mark was shown. This was the first sign that deposits on the X axis of the investigated space. The second feature that is defined on the axis Y, is not repeated in each category of teachers. Ability to use specific exercises to eliminate mistakes become a major in the first group, the second, it expands to creation a visual picture of the movement and in the third group it finally ends as the ability to set a specific reason of mistake appearance.

With this consideration there is a movement from "simple" to "complex" of integrated skills, and as a result the importance of student assessment increases. That is, it relies on more interconnected and complicated professional skills which appear while teaching experience increasing.

### Conclusion

The process of organizing and conducting testing involves thinking logically related operations that are the basis of methods of testing students in physical training lessons.

Defined professional skills are quite significant and tight correlation, and their systematic use shows positive result in testing students.

As a result the development of methods of teaching students the ability to check the students' knowledge at the physical training lessons paying attention at specific kind of sports.

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