



INFORMATION TECHNOLOGY SYSTEM FOR THE EVALUATION OF PHYSICAL EDUCATION TESTS

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Abstract:

This work presents an IT system made in order to eliminate subjectivity during the assessment of the baccalaureate candidates at the physical education and sport test, and at the same time to grade them in real time. The IT system also has the capacity to offer the specialists in the field information regarding the strong and weak points of the candidates' training for taking this test, through different statistic data.

Keywords:

Baccalaureate, evaluation, methodology, databases

1. THEORETICAL CONSIDERATIONS

During the 2009 baccalaureate examination, the education discipline comprised in the Physical Education and Sport curricular area is an optional discipline within the F test, for the students of high schools with profiles different from the ones with sports program.

At the practical test Physical education and Sport all candidates from high schools belonging to all profiles and specializations can register, irrespective of the number of specialty classes allotted according to the curricula of the education system.

The candidates that opt for this test take full responsibility regarding the compatibility of their own level of sport preparation with the level of exigency imposed by the Baccalaureate Examination.

Competences that evaluate the level of general and specific motive capacity of practicing 4 sport disciplines/tests. Each candidate will be evaluated at 4 tests:

Test I: One test chosen from the following:

1. 50 m speed running, start from the ground;
2. Distance weight throwing from the spot;
3. Length jump at the sand pool with take-off.

Test II: One test chosen from the following:

1. Jump over the buck in wide hold;
2. Imposed exercise from acrobatic gymnastics.

Test III: One test chosen from the following:

All the 4 tests are compulsory for the candidates and they are marked individually for the performance obtained at each test. After each test, a member of the Examination Board reads out loud to each candidate the performance, the mark received and its effect.

For the optional acrobatic gymnastics and sport game tests the marking takes place based on observing the performance. The examiners appreciate the candidates' performance individually, with integer grades; the difference between the grades must not be bigger than one. The grade given by each of the two examiners reflects the structures' correctness, fluency, expressiveness and/or efficiency. The final grade at these tests is the arithmetic means of the grades given by the two examiners.

For the 2 tests, the grading takes place by transforming performances into grades, according to table 1. The grading is done only using integer grades. For all the tests the candidates have only one trial, except for the length jump from the spot. For the sport games:

- ✚ The board appoints the person who will pass the ball to the candidate;
- ✚ If the performance is encumbered or interrupted due to the passer's fault, the board can rule its repetition without disqualifying the candidate.

The passer will be placed in a 1-meter radius circle drawn as follows:

- ✚ At the intersection of centre line with the lateral line of the field (basketball, handball, football);
- ✚ In the center of area 2 (volleyball).

The candidates will start their performance:

- ✚ From the free throwing line of the field (basketball);
- ✚ From the centre of the 6m semicircle line of the field (handball);
- ✚ From the back line of the field anywhere on its length (volleyball);

- ✚ From the back line of the handball ground (football).
- The tests will be held:
- ✚ For basketball: with rings situated at the proper height;
 - ✚ For handball: with balls of specific sizes, different for boys and girls;
 - ✚ For volleyball: with the network situated at proper heights, different for boys and girls;
 - ✚ For football: on the handball ground.

Tab. 1. Transforming performances into grades

Measurable sport tests	Grade 5		Grade 6		Grade 7		Grade 8		Grade 9		Grade 10	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
50 m speed running, start from the ground (sec.)	7.5	8.5	7.4	8.4	7.3	8.3	7.2	8.2	7.1	8.1	7.0	8.0
Length jump from the spot (m)	2.15	1.65	2.20	1.70	2.25	1.75	2.30	1.80	2.35	1.85	2.40	1.90
Push-ups (no. of repetitions)	19	9	20	10	21/22	11/12	23/24	13/14	25/26	15/16	27	17
Torso lifts from lying down on the back	17	15	18	16	19/20	17/18	21/22	19/20	23/24	21/22	25	23
Distance weight throwing from the spot (m)	5.40	3.80	5.65	4.15	5.90	4.40	6.10	4.60	6.30	4.80	6.50	5
Length jump at the sand pool with take-off (m)	4.0	3.00	4.10	3.10	4.20	3.20	4.40	3.40	4.60	3.60	4.80	3.80

2. APPLICATION PRESENTATION

The students’ option for sustaining the practical test at the Physical Education and Sport school subject within the Bacculaureate Examination is done on individual cards in due time, as foreseen in the Regulation, cards that must be registered at the secretariat of the school they belong to.

According to the material equipment of the school mixed or unisex candidate groups are created so as to ensure their proper examination.

The compulsory order of the Bacculaureate practical test performance is the following:

1. The chosen test of the 1st test group;
2. The chosen test of the 2nd test group;
3. The chosen test of the 3rd test group;
4. The chosen test of the 4th test group;

The candidates that opt for the sport tests of Physical education and Sport have to show the medical approval “CAPABLE OF PERFORMING THE SPORT TESTS AT THE 2009 BACCALAUREATE EXAMINATION”, which is a compulsory condition for examination enlisting.

This IT system can centralize the data at the county level, which will allow the specialty inspector the possibility to perform a SWOT analysis with a view to reconciling the analytical programs with the result reality.

Thus a database has been made which offers the examiner the possibility to evaluate in real time the candidates enlisted for this test. The interface allows the effortless identification of the following elements, namely:

- ✚ The candidates’ enlistment cards;
- ✚ The candidates’ last and first names;
- ✚ The tests chosen by the candidates;
- ✚ The list with the candidates enlisted for this test;
- ✚ The results and statistics.



Fig.1 The interface of the IT system



Fig.2. The enlistment card



Fig.3. The enlistment card



Fig.4. The result registration

3. CONCLUSIONS

By using this database the following will be achieved:

- ✚ identification and checking of candidate data;
- ✚ correct assessment (not subjective) and in real time of all the candidates;
- ✚ data centralization for all test types;
- ✚ listing the candidates' performances and grades for each test;
- ✚ statistic reporting of the grades received by the candidates for each test.

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