Is a test this test?

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Abstract - Feedback – student's self-control and teacher's back control – is very important in the teaching-learning process. This role is accomplished by online and offline tests, depending on the form of education. But do scores of made by the different learning management systems - such as Moodle, Ilias or ProBono - and test-maker softwares, such as Hot Potatoes – test provide a credible picture of the acquired knowledge and competences for students and teachers? This study looking for answers to this question.

It shows some examples of the most commonly used test forms, and finds that they do not provide adequate testimony to the set learning target or achievement of sub-goals, because the required score, or even guessing percent results can be reached by guessing in many cases. Some unique solutions for resolving this quandary will be shown in the lecture.

Keywords: traditional test, special test.

I. INTRODUCTION

I came upon a made by serious IT professionals of a serious company's serious education department online course. I completed the self-checking test of the basic exam, which consisted of the usual tasks, without looking into the curriculum. Result is shown on the Figure 1.

Figure 1. My test results.

II. THE COMMONLY USED TESTS

Creation of such tests is basic service in every decent LMS – such as the Moodle¹ and the Ilias² – or test maker software – such as the Hot-Potatoes³ (Figure 2÷6).

Typical Hot-Potatoes tests⁴:

Figure 2. "Mixed sentence" type test.

Figure 3. "Quiz" type test.

¹ https://moodle.org/?lang=en_us

² <https://ilias.de/>

³ <https://hotpot.uvic.ca/>

⁴ <http://drseres.com/elearning/tesztek/hotpot/index.htm>

Figure 4. "Gaps-fill" type test.

Figure 5. „Pairing” type test.

Figure 6. "Multiple answers" type test.

It is not difficult to see that such tests do not give a credible picture of the acquired knowledge and competences for students or teachers, because in many cases the required score, or even guessing percent results can be reached by guessing.

Some unique solutions for resolving this quandary will be shown below.

III. A SELFTEST⁵

In the first example we will present a made by PowerPoint self-test. In this test students should recognize models of special forms of armed combat by their graphic description.

The test opening page are shown graphical icons of six special forms of armed combat. Icons are sketches of the familiar topic's elements without text (Figure 7.).

Figure 7. Opening page of the test.

Whichever one is chosen, a "blind" image of the corresponding model is also displayed. The learner must select which specific form of armed combat is shown (Figure 8.):

Figure 8. "Blind" image of the chosen model.

Based on the characteristics of the specific type of armed combat, the learner should be recognized the model. In this case, three characteristics are striking. The **first** is that the red-signed attacker subsystem is considerably smaller than the blue-labeled defender subsystem. The **second** is that the attacker subsystem does not carry activity against the defender subsystem – its activity is directed against the protected object only. The **third** feature is that the output is only the result, not survival. If the student recognizes them and designates the "kamikaze" model, a full image of the "kamikaze" model will be

⁵ http://drseres.com/ceepus/test/selftest_01.pps

displayed, and the program indicates with applause that the choice is correct (Figure 9.):

Figure 9. A Full image of the chosen model.

If the student does not recognize the features of the model and does not designate the correct model, the full image of the correct model will be displayed, but the program will indicate wrong choice with whistle.

The program allows any number of choice as possible, so that the student can continue the self-test, until he/she will be sure in his/her knowledge.

IV. A TOPIC FINAL TEST⁶

The second example is the final test of the same topic which was created using the Quandary program. The task is like the previous one (Figure 10).

Figure 10. Opening page of the test.

First, sign an icon to display the "blind" image of a model as well (Figure 11.).

11. Figure. A kiválasztott modell „vak” képe.

By this “blind” image, student must recognize the specific form of armed combat that corresponds to the model. (Figure 12.). The student may decide whether to continue the test with a new election or complete the test

12. Figure. A kiválasztott modell teljes képe.

If the choice is wrong, only another model can be selected, because the selected ones will not show again (Figure 13.):

⁶ <http://www.halfbakedsoftware.com/quandary.php>

Figure 13. Limited designation.

Not only the number of attempts but their time is limited, but also their time is limited, because the program also measures the time (Figure 14.).

Figure 14. If the student exceeds the time limit.

At the end of the test - voluntary or real - the student will have a clear assessment of his/her implementation (Figure 15.).

Figure 15. The test result sheet.

V. A COURSE EXAM TEST⁷

Third example is an exam test of a presentation-editor course. Solving of a courses exam test is already a complex task for the student and the teacher.

In this course, students learn about managing multiple presentation editors, prepare presentations with them and practiced sharing products on portal of various social networks.

The exam test was done with the Quandary program.

The first task is to recognize the products of presentation editors familiar with the course based by their file extension (16, 17. Figure):

Figure 16.. First task of the exam test.

Figure 17.. The first task response options

The candidate can move to the next assignment only if he/she has reached the correct score (Figure 18.):

Figure 18. If the candidate has not reached the required score.

The second exam task examines the knowledge of community portals sharing presentations (Figure 19.):

Figure 19. Second task of the exam test.

Candidate must log in - or register - on the selected community portal (Figure 20.):

Figure 20. Log in or sign in on the selected portal..

If the login is successful, the password (Jelszó:...) can read (Figure 21.):

Figure 21. The password is placed in selected community portal.

The task execution is verified by marking the founded on the selected portal password (Figure 22.):

Figure 22. Confirmation of the correct password.

After obtaining the appropriate score, the examinee may move to solve the third task, which measures the competence level achieved in the presentation editing (Figure 23.):

Figure 23. The practical task of the exam test..

The candidate must make a presentation in several editors according to specified requirements (Figure 24.):

Figure 24. The requirements of prepared presentation.

The fourth task of the exam test is to share the presentations on the selected community portal of the Internet (Figure 25.):

Figure 25. Selecting the place of publication.

After sharing of the prepared presentations, the candidate must identify himself / herself (Figure 26.):

Figure 26. Debut of the examinee.

As proof of identity, a screen shot should be made about the debut page which must be sent to the examiner's address as an attachment to the e-mail with availability of the prepared presentations on selected community portals (Figure 27.):

Figure 27. Submit the exam task.

After completing the test, the candidate will see the score, but the result of the exam will be evaluated by the examiner after evaluation of the produced and shared on community portals presentations (Figure 28.).

Figure 28.. The final image of the exam test.

VI. A QUIZ OF A 50 YEAR OLD HIGH SCHOOL REUNION⁸

And finally, let's a quiz of a 50-year-old high school reunion.

Recognizing someone after 50 years is not a simple task, that's why a quiz game was created using the mature tabloid pictures and fresh photos (Figure 29.):

⁸ http://drseres.com/osztaly/kikicsoda_0.htm

Figure 29. Opening page of the quiz.

If you select an old, or a new image and click (Figure 30.), then the questionnaire appears - "Who am I?" (Figure 31.).

Figure 30. Click a photo.

Figure 31.. „Who am I?” page.

By clicking on the adequate images, the individual page of the selected classmate appears (Figure 32.).

Figure 32.. Individual page of the selected classmate.

Quiz games like this can be used not only for HR activities, but also in education – for example, in forming and controlling associative skills.

CONCLUSION

Measuring and feedback of the acquired knowledge, ability, skills and competences – the self-monitoring of students and the teacher's assessment – plays an important role in the teaching-learning process. One of the most widespread forms of this is the e-test. Learning management systems – such as Moodle or Ilias – and special test software – such as Hot Potatoes or Google Forms – support multiple tests, however, they do not always guarantee the objectivity of the measurements.

For example, think that – in a test like "Become a Millionaire", which offers four answers, the probability of randomization of the correct answer is 25% in principle. However, if one of the answers is so unlikely that a person of average preparedness will exclude, then the probability of a random finding of the correct answer is 33%, and in the case of two unlikely responses is 50%.

It is therefore a very difficult task for the test maker to formulate possible answers that are difficult to exclude from the possibilities. Likewise, the formulation of solutions that logically can't be deduced is very difficult for the other traditional types of test. Therefore, to find unconventional solutions is advisable for test makers to ensure objectivity.

In this paper, we tried to show examples of this.

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