Chart 1: Student's adaptation to online learning

From the analysis of the students' answers, we concluded that the students who participated in our study highlighted the same advantages and disadvantages of distance learning, which we find mentioned in the literature on this topic. However, we would like to emphasize once again that the answers obtained in our research differ greatly from student to student, which suggests the idea that the effectiveness of online learning is related to the subjective reality of the student and the specifics of his personality. Therefore, it is very important to have a permanent connection with students who learn online, to listen to their feedback and to adapt to the specifics of each one of them.

5 Conclusions and Proposals

Given that the purpose of developing the online course system is to provide everyone with access to quality courses, we consider it necessary for teachers to adjust university education to the specifics of online teaching, which involves:
- providing materials to support online interactivity;
- structuring the material for easy and quick assimilation;
- motivating and stimulating the learning activity;
- creating the conditions for the individualization/differentiation of the educational path;
- adjusting the program to the psychological characteristics of the students;
- objective assessment of knowledge.

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Effective Online Assessment in Software Testing Education

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Abstract

Developing relevant learning activities that ensure competency acquisition is important. At the same degree, the design of effective assessments that address key concepts studied throughout course duration is necessary. During this endeavour, educators undertake both student and teacher concerns on having a fair evaluation. This paper examines issues related to rigorous, accurate, and equal online assessments in a software testing course. Results on applied assessment strategy are investigated and general recommendations are inventoried.

Keywords: online assessment, evaluation items, learning outcomes

1 Introduction

Skill acquisition verification through formative and summative assessments allow teachers to have accurate reflection of the actual knowledge in the learning process. Face to face evaluation through time-based written papers is commonly used. When various circumstances require adopting online assessment many aspects needs to be changed or adapted in order to preserve accuracy and academic integrity. As the COVID-19 pandemic circumstances required the switch to all teaching and assessment activities to the online medium, higher education teachers were challenged to tailor teaching activities and assessment tasks acccordingly.

This paper investigates the online assessment associated activities for the Test Design Techniques (TDT) elective course, taught for computer science 3rd year undergraduate students at Babes-Bolyai University of Cluj-Napoca, Romania.

The main contributions of this paper are an empirical analysis on various issues related to the online assessment aspects. Key elements that need to be promoted in both face to face and online assessment are reviewed. The evaluation items of the online assessment of the 2020 TDT course session are described together with the results obtained, emphasising the added value of the designed tasks for online evaluation in the context of learning test design techniques.

The paper is organized in several sections as follows. *Section 2* shortly describes TDT course learning goals, considering those testing topics mandatory for both junior and senior testers. Important view from the online assessment lens are analysed in *Section 3*. The participant profile and the evaluation items used to design assessment tasks are detailed in *Section 4*. *Section 5* presents the results of the online assessment for two different categories of evaluation items and the corresponding analysis. Lessons learned from teacher's perspective referring to preparation and actual online assessment tasks are inventoried in *Section 6*. The paper ends with conclusions and future improvements.

2. TDT Course Learning Goals

TDT course is proposed to several undergraduate specializations at the Faculty of Mathematics and Computer Science at Babes-Bolyai University of Cluj-Napoca, Romania. The educational