Международная научно-практическая конференция
Шамовские педагогические чтения научной школы
Управления образовательными системами

НАУЧНАЯ ШКОЛА Т.И. ШАМОВОЙ:
МЕТОДОЛОГО-ТЕОРЕТИЧЕСКИЕ И ТЕХНОЛОГИЧЕСКИЕ
РЕСУРСЫ РАЗВИТИЯ ОБРАЗОВАТЕЛЬНЫХ СИСТЕМ

Сборник статей

I часть
ФГБОУ ВО «МОСКОВСКИЙ ПЕДАГОГИЧЕСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ»

ИП «МЕЖДУНАРОДНАЯ АКАДЕМИЯ НАУК ПЕДАГОГИЧЕСКОГО ОБРАЗОВАНИЯ»

НО «ФОНД ПОДДЕРЖКИ И РАЗВИТИЯ ОБРАЗОВАНИЯ, ТВОРЧЕСТВА, КУЛЬТУРЫ»

X Международная научно-практическая конференция
«Шамовские педагогические чтения научной школы Управления образовательными системами
«НАУЧНАЯ ШКОЛА Т.И. ШАМОВОЙ: МЕТОДОЛОГО-ТЕОРЕТИЧЕСКИЕ И ТЕХНОЛОГИЧЕСКИЕ РЕСУРСЫ РАЗВИТИЯ ОБРАЗОВАТЕЛЬНЫХ СИСТЕМ»

Сборник статей

Москва
2018
Научное издание
 Рецензия:
 Научная школа Т.И. Шамовой: методолого-теоретические и технологические ресурсы развития образовательных систем
 Сборник статей X Международной научно-практической конференции "Шамовские педагогические чтения научной школы Управления образовательными системами" (25 января 2018 г.)

В сборнике содержатся статьи, представляющие перспективные направления научно-практических поисков для решения актуальных проблем современного образования. Авторы статей – вузовские преподаватели, руководители и педагоги общеобразовательных организаций, сотрудники региональных и муниципальных управлений образования, являющиеся учениками, сторонниками и последователями Т.И. Шамовой.

Рецензия: В сборнике содержатся статьи, представляющие перспективные направления научно-практических поисков для решения актуальных проблем современного образования. Авторы статей – вузовские преподаватели, руководители и педагоги общеобразовательных организаций, сотрудники региональных и муниципальных управлений образования, являющиеся учениками, сторонниками и последователями Т.И. Шамовой.

ISBN 978-5-98923-442-4
 В сборнике содержатся статьи, представляющие перспективные направления научно-практических поисков для решения актуальных проблем современного образования. Авторы статей – вузовские преподаватели, руководители и педагоги общеобразовательных организаций, сотрудники региональных и муниципальных управлений образования, являющиеся учениками, сторонниками и последователями Т.И. Шамовой.

Рецензия: В сборнике содержатся статьи, представляющие перспективные направления научно-практических поисков для решения актуальных проблем современного образования. Авторы статей – вузовские преподаватели, руководители и педагоги общеобразовательных организаций, сотрудники региональных и муниципальных управлений образования, являющиеся учениками, сторонниками и последователями Т.И. Шамовой.

ISBN 978-5-98923-442-4
 В сборнике содержатся статьи, представляющие перспективные направления научно-практических поисков для решения актуальных проблем современного образования. Авторы статей – вузовские преподаватели, руководители и педагоги общеобразовательных организаций, сотрудники региональных и муниципальных управлений образования, являющиеся учениками, сторонниками и последователями Т.И. Шамовой.

Рецензия: В сборнике содержатся статьи, представляющие перспективные направления научно-практических поисков для решения актуальных проблем современного образования. Авторы статей – вузовские преподаватели, руководители и педагоги общеобразовательных организаций, сотрудники региональных и муниципальных управлений образования, являющиеся учениками, сторонниками и последователями Т.И. Шамовой.
та было реализовано 35 учебных программ из 22 университетов мира. За последние 10 лет учебная программа, основанная на расширенном учебном курсе, достигла своих целей, в частности, путем повышения качества ее преподавательского состава, расширения научных исследований студентов, развития международного сотрудничества.
Расширилась академическая мобильность студентов. Одной из целей проекта было привлечение иностранных студентов для обучения во Вьетнаме. План состоял в том, чтобы привлечь 3000 иностранных студентов во Вьетнам для обучения, но через 10 лет это число достигло лишь 2000 студентов. В процессе реализации проект также стал сталкиваться со многими трудностями: некомпетентные преподаватели иностранного языка, ограниченный бюджет.
Помимо программ повышения квалификации, университеты также разрабатывали другие высококачественные учебные программы. 18 июля 2014 г. Министерство образования выпустило Циркуляр № 23/2014 / TT-BGDĐT, регулирующий качество университетского образования. Целью повышения квалификации являлось повышение качества обучения на высшем уровне в квалифицированных учебных заведениях. Учебные программы высшего образования во Вьетнаме были направлены на их доступность для студентов.
Министерство образования Вьетнама также модернизировало программу обучения политическим теориям. Как мы знаем, социальная система Вьетнама после 1975 г. была построена на социалистической модели. Таким образом, марксистская идеология играет важную роль в общественно-политической жизни Вьетнама. Долгое время политические дисциплины марксизма и идеологии Хо Ши Мина занимали большую часть времени в учебном плане вьетнамского высшего образования. Однако для интеграции высшего образова- ния дисциплины необходимо было изменить. В 2008 г. Министерство образования Вьетнама приняло решение об объединении трех программ: марксистско-ленинской философии, марксистско-ленинской политической экономии и социальной науки. Это изменение направлено на преодоление разрыва между высшим образованием во Вьетнаме и в мире.
Для интеграции с мировым образованием наиболее важным элементом явилось изучение иностранного языка. Осознанная важность изучения иностранных языков и необходимость инноваций в их преподавании и изучении, Министерство образования Вьетнама разработало и внедрило проект «Обучение и изучение иностранных языков в национальной системе образования на период 2008-2020 гг.». Были внесены следующие изменения в преподавание иностранных языков: созданы новые программы обучения иностранному языку для уверенного общения вышкинских выпускников в интегрированной, многокультурной среде; увеличилось количество курсов по изучению иностранного языка; внедрены международные стандарты оценки качества усвоения иностранных языко- в, предполагающие 6 международных уровней, установленных Ассоциацией европейских экзаменов по иностранному языку; созданы новые учебные программы по иностранному языку.
То есть проект исходил из того, что для ускорения и улучшения преподавания иностранных языков в Вьетнаме, большое значение было придано разработке и внедрению стратегий и методов обучения иностранным языкам, а также использованию современных технологий в образовании.
УДК 37.02, 004.5
The Role of Self-Assessment of Students to Improve the Learning Process in Engineering Universities
Malinka Spasova Ivanova, PhD, Associate Professor, Department of Electronics and Computer Systems and Technologies, CEE, Sofia, Bulgaria, m_ivanova@tu-sofia.bg
Mariano Ivanov Dourcheva, PhD, Associate Professor, Department of Informatics, Faculty of Applied Mathematics and Informatics, Technical University of Sofia, Sofia, Bulgaria, m_dourcheva@tu-sofia.bg
Summary. Self-assessment by students is related to the development of skills for forming objective and critical feedback, as well as meta-cognitive skills for self-assessment of their performance during exam activities. The TeSLA system, which is applicable in different test scenarios and contexts, can also be used for self-assessment purposes. This article presents a self-assessment model using the TeSLA system, which was developed on the basis of a summary and analysis of best practices in the field of self-assessment and conducted TeSLA pilot experiments.
Key words: self-assessment; TeSLA; combined training; distance learning; formal training
Introduction
The responsibility for well-designed training and testing activities is entirely led by the responsible tutor, who plays the role of a training designer, trainer and assessor. They should also take into account the importance of self-evaluation and self-assessment for acquiring new knowledge and skills or for reinforcing ones that have been acquired during the course [10].
Student assessment is an essential component of their education process and contributes to both their progress and the end result. Quality education (see [7]) means the same effect of both the predictable learning process and its outcome, taking into account the target priorities and needs of the individual, society and the state.
Fitzpatrick defines self-assessment as a form of assessment where each student understands their strengths and weaknesses in a field of knowledge in order to identify their learning goals, overcome weaknesses and improve achievements or performance. [3].
Boad & Falchikov speak of self-assessment as involvement of students in the process of evaluation of their training, in particular evaluating achievements and results [1]. Self-assessment can be ongoing and improves the learning process, but it can also be generalized and help them assess how much knowledge they have acquired in a particular area. The result of self-assessment can be part of the final assessment of the students.
Self-assessment can include evaluation of various exam activities: tests, practical tasks, solving mathematical problems, course projects. In literature, self-testing is known as a test and an assessment of the student’s performance.
The aim of the article is to offer a self-assessment model suitable for engineering education, using the TeSLA system for authentication and authorship verification. The model was developed after summarizing and analyzing existing systems for self-assessment and evaluation and after pilot experiments with the TeSLA system in Technical University of Sofia.
Review of self-assessment and self-evaluation systems
This section shows some solutions that enable prospective engineers to assess their own exam activities.
To help train students in C programming, the Reflect system [6] was created, with its primary objectives being to enable students to evaluate their own knowledge and monitor progress in their
learning. Newer versions of the system include components that enable students to model different situations on their own, which is used to keep smarter feedback on the learners' progress, thereby promoting self-reflection. The Reflect system contains a set of self-assessment tasks.

The so-called Intelligent e-Learning environment (ILE) is proposed in [2], which promotes active and collaborative learning for students. The ILE draws attention to the fact that the final assessment of the training is formed by the results of the tests as well as by the contribution of the students to the continuous course development. The system is applied in the course "Electrical Chain Analysis".

The appropriate presentation of information in various forms allows students to perceive only data that is relevant. Different ways of presenting information support and facilitate its easier absorption. For example, Nardoo [4] is an ecology themed self-learning system that provides information, which students can see, evaluate, and compare in different forms - graphics, video and audio.

Knowledge integration systems enable students to identify or link new knowledge with already existing knowledge. For example, the WISE tool [8] allows students to organize their ideas for data gathered from the Internet and integrate them with their existing knowledge.

New knowledge generation systems allow students to present their ideas in an appropriate form. For example, the Presentation Maker tool [5] allows students to create artifacts by combining various available resources, such as graphics and dashboards, along with personal notes and audio clips.

The TeSLA system for authentication and authorship verification

The TeSLA system is being developed in conjunction with the three-year project "Adaptive, Trust-based e-Learning Assessment", funded under the European H2020 program. It supports e-testing in courses where combined training or distance learning courses are applied. TeSLA is now tested for evaluating exams in a formal learning environment, with ongoing, concise and continuous assessment. Pilot experiments with the TeSLA system and the experience gained have shown that suitable self-assessment scenarios by students trained in Technical Universities can be summarized as follows:

- **Scenario 1:** Students have to perform a self-assessment task, for which the tutor has prepared a list of self-assessment criteria. For example, students must complete a test activity in which they have to self-test (perform a test). They form their self-assessment after taking into account the criteria prepared by the tutor. In addition, students may be asked to explain why they have assessed their knowledge/skills accordingly. Students can be encouraged on completion of their self-assessment, this task being perceived as a percentage of the final grade. They can also be stimulated by performing qualitative self-assessment.

- **Scenario 2:** Self-assessment can be implemented in combination with other forms of assessment. For example, students should submit their self-assessment according to predefined criteria regarding their activities during the course, such as participation in a lecture or preparation of a presentation or work on a project. Such self-assessment can be encouraged in different ways. The self-assessment may be a percentage of the final mark or be counted as an average arithmetic value, also taking into account the teacher's assessment.

- **Scenario 3:** Another approach is for the teacher to evaluate the student's self-assessment and to make this assessment a percentage of the final grade.

- **Scenario 4:** It is possible for students' self-assessment to not be a percentage of the final grade nor be evaluated by the lecturer. In this case, students will self-assess according to certain criteria, thus improving their performance, achievements or end results.

**Model for self-assessment using the TeSLA system**

Based on the review of existing e-self-assessment systems, the pilot experiments carried out under the TeSLA project as well as the long experience of the authors in their work with students, the self-assessment model has been proposed taking into account the following factors:

- **Context of the model implementation** – Until recently, self-assessment by students had been carried out to support formal learning and examination activities, but the model is also suitable for assisting non-formal learning. For TUS as a university, which is characterized by offline training in auditoriums and laboratories, as well as combined training applicable to some courses, the model is used for e-Learning purposes.

- **Assessment model** – It is possible for the self-assessment by students to not be combined with another evaluation model and to not affect the final grade. The tutor can decide that the competences that students will receive in the self-assessment process are among the course targets, and then the student's self-assessment or the tutor's evaluation of the student's self-assessment can form a percentage of the final grade.

- **Role of the self-assessment** – the tutor should clearly define the goals of self-assessment: whether it will support learning and examination activities, or has the task of improving the performance of a particular activity by the student, or it would test knowledge and/or skills.

- **TeSLA instrumentarium** – the tutor should evaluate which TeSLA tools are appropriate in carrying out self-assessment activities depending on which test activity is to be performed: test execution, solving an engineering problem, preparation and implementation of a presentation, course work or project, or other activity.

- **Role of the tutor** – it turns out that the tutor plays a particularly important role before and after the self-assessment process. They should prepare adequate resources for students who have no self-assessment experience, as well as provide opportunities for experienced students to participate in setting criteria and self-assessment standards. After self-assessment, the tutor would have to decide whether to take into account the students' assessment or to form their own evaluation of the self-assessment process.

- **Students' self-assessment experience** – usually, first-year students do not have experience with self-assessment, and they need resources developed by the tutor to help them perform self-assessment to high quality standards. Students with self-assessment experience can be involved in the preparation of criteria and standards for self-assessment.

**Conclusion**

Self-assessment contributes not only to the assessment of knowledge and skills, but also to the development of metacognitive skills [9] for objective and critical evaluation, and helps to detect and fill the gaps in the learning process. Students are actively involved in the training, become more responsible, and see the opportunity to control their training. Technological solutions such as the TeSLA system can facilitate the self-assessment process by providing student authentication features and authorship verification. The paper presents a self-assessment model using the TeSLA system, which can be used in different self-assessment scenarios as well as in different contexts.

**Acknowledgement**

This article was supported by the TeSLA project "Adaptive, Trust-based e-Learning Assessment", H2020-ICT-2015 / H2020-ICT-2018, 688520.


5. Iyoshi,T.&Kikue,K. Constructivist learning environments: five principles of designing educational hypermedia, paper presented at the Annual Meeting of the Association for Educational Communications and Technology, 1996, Indianapolis, IN.

All of this will have an impact on the cultural and social level of these children in the future, and on the way they live and raise their children on, moreover working in traditional characters that are far from the scientific and civilized foundations of today's world, so as a result of all that, these human resource will not be qualified to contribute to the reconstruction of the country when the war ends.

**Damages of the educational infrastructures in millions of dollars.** According to the minister of education in the Syrian government, the war damaged nearly 5,000 schools out of the 22,500 schools frequented by more than 5 million children before the crisis. These included total or partial destruction of 3,000 schools, which the government would need at the very least to rebuild, rehabilitate and qualify for $ 100 million. While the rest of the affected schools were used either as military sites or as places for sheltering the displaced. Most of them were located in three governorates: Aleppo, Idlib, Deraa, in addition to Deir al-Zour, Raqqa and Damauscus Countryside. Displacement into safe areas has put pressure on schools located in those areas, in terms of the number of students in the classroom or the availability of seats or teaching staff. The number of students per class in some schools has increased to 90 students, whereas the average did not exceed 35 students before the crisis, which affects the level of understanding, perception and information that can be delivered to students. While some international non-governmental organizations estimated the damage to the education sector from the destruction, loss or damage to educational equipment and the departure of cadres in the amount of $ 1 billion, as well as the loss and killing of more than 500 educational personnel and 500 other students.

**Reduction of expenditure budget on higher education.** The total damage to the higher education sector was estimated at 9 billion Syrian pounds, according to sources in the Ministry of Higher Education. These major damages were accompanied by a decline in government expenditure on education during the crisis years. The education budget in 2010 amounted to 35.4 billion Syrian pounds, which equaled 778 million dollars in exchange rates for the said year. In 2012 it reached 19.5 billion pounds and 28.1 billion in 2015, which accounted for 2% of the total budget appropriations and then amounted to 32.85 billion in the budget of 2016 accounted for 1.66% of the total budget, calculated at the exchange rate prevailing in the market, this amount is only $4.23 million dollars, that constitute 10.8% of the 2010 higher education budget.

That reflected the reduced financial ability of the government to cover the expenses of the main services in society, especially the education sector, and this will leave serious effects on the levels and quality of its outputs in the case of the decline in the provision of basic education requirements and teaching methods and tools, the bad security conditions, the weak financial capabilities of citizens to enroll their children in private school or universities. The percentage of increase in the number of students enrolled in Syrian universities during the crisis years declined significantly, reaching 32.4% between 2006 and 2010, and decreased to 18.7% between 2010 and 2016. The main reasons of reducing number of university students, especially in the first stage, can be clarified through:

- Disruption of transportation, difficulty in moving between cities and students' access to their colleges.
- Bad security conditions in many cities where universities are located, and targeting them more than once by missiles and rockets.
- The decline in the financial possibilities of the citizens due to the decline in their financial capabilities and the high cost of education and living expenses.
- The departure of many students to emigrate to the country or join the military service.

**The connection between increasing of the violence and declining of the education.** Higher education suffers from the absence of any national strategies linking its outputs to development issues and their societal aspects. However, regardless of the scientific level, the potential and the quality of the outputs of education in Syrian universities and the large number of students beyond its absorptive capacity, as well as stripping their administrative bodies and the absence of the foundations and the real criteria in the selection and appointment of faculty members, but it was able to provide the economy and society with many cadres and qualifications that contributed in one way or another in the development process in the country before the crisis years.