ICL Workshop

The Design and Deployment of the Cloud-based Learning and Research Environment Components

Mariya Shyshkina

Aims:

The workshop will target the following three objectives:

A- To consider the notion of the cloud-based learning and research environment of educational institution, the types of service models, the possible ways of the environment design.

B- To practise the methods and components designed and deployed within the cloud-based learning settings.

C- To discuss the problems of learning methods selection and implementation; to compare the learning and research components deployment and design; to compare the possible ways and methods (techniques) of these components implementation within the pedagogical systems of higher education.

Main topics:

The Workshop introduces the set of learning techniques deployed and tested in the cloud-based settings that can be injected in a learning process, for the purpose of fostering further participation and involvement of students into learning and research activities. Among these techniques are:

- the method of using the cloud-based component on the basis of Microsoft Office 365 to support the learning and research activities;
- the method of using the learning components deployed on the Amazon Web Services (AWS);
- the method of using the learning components on the base of SageMathCloud (CoCalc).

The workshop is designed for 3 hours (Can be shortened if needed).

Target Group:

It is open for all instructors interested to improve the level of student interaction and involvement in class, to take the most effects of using the cloud-based tools to support the learning and research processes.

The learning methods and approach were developed and tested within the pedagogical experiment that involved more than 400 participants from 12 educational institutions; it covers the research results of 3 Doctoral studies (2012-2017); the presenter organized and conducted the training sessions for educators within vocational training on regular basis (2014-2016).

Background knowledge expected of the participants:

No previous knowledge is expected.

Workshop Activities:

The participants will be able to explore and test the learning components deployed on the cloud server; to try the learning and research cloud on Microsoft Office 365; the virtual desktop and learning applications on Amazon Web Services; the SageMathCloud (CoCalc) Math learning components.

The workshop is to provide not only some learning methods, techniques and applications to be used within the cloud-based settings but also to consider the main aim of the cloud-based learning environment as creating the most favorable necessary and sufficient conditions for the implementation of learning and research activity, creative and personal development of a learner.

The Presenter:

Mariya Shyshkina,

Magister Degree (Mathematics) 1991;

PhD (Philosophy) 1999;

Seniour Scientist (Education) 2014;

DrS (Education) 2016.

Position: Head of Department of the Cloud-based Systems of Education Informatization, Institute of Information Technologies and Learning Tools of the National Academy of Educational Sciences of Ukraine.

Manager of the National pedagogical experiment "Computer-oriented electronic learning resources quality management system for secondary schools" (2013-2017)

Consultant of the National project "Cloud services in education" (2014-2015).

Member of the Scientific-methodical commission on the general and vocational education of the Ministry of Education and Science of Ukraine (from 2016)

The scientific advisor of 3 PhD students in educational sciences (from 2011).

Awarded by the Diploma of the Annual Contest for the Best Scientific Work of the National Academy of Educational Sciences of Ukraine (2017).

Member of the Program and Organizing Committees of several International and Ukrainian scientific-methodical and practical conferences, leads training sessions, lectures, workshops, webinars for post graduate students, educators, lecturers, teachers on regular basis due to the Institute annual working plans and events schedule.

Autor of more than 100 research papers in the fields of philosophy of education, ICT for learning, cloud-based learning tools application and design, quality of e-learning tools,

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