

Enhancing Students' Performance in Basic Science and Technology in Nigeria Using Moodle LMS

Authors : Olugbade Damola, Adekomi Adebimbo, Sofowora Olaniyi Alaba

Abstract : One of the major problems facing education in Nigeria is the provision of quality Science and Technology education. Inadequate teaching facilities, non-usage of innovative teaching strategies, ineffective classroom management, lack of students' motivation and poor integration of ICT has resulted in the increase in percentage of students who failed Basic Science and Technology in Junior Secondary Certification Examination for National Examination Council in Nigeria. To address these challenges, the Federal Government came up with a road map on education. This was with a view of enhancing quality education through integration of modern technology into teaching and learning, enhancing quality assurance through proper monitoring and introduction of innovative methods of teaching. This led the researcher to investigate how MOODLE LMS could be used to enhance students' learning outcomes in BST. A sample of 120 students was purposively selected from four secondary schools in Ogbomoso. The experimental group was taught using MOODLE LMS, while the control group was taught using the conventional method. Data obtained were analyzed using mean, standard deviation and t-test. The result showed that MOODLE LMS was an effective learning platform in teaching BST in junior secondary schools ($t=4.953$, $P<0.05$). Students' attitudes towards BST was also enhanced through MOODLE LMS ($t=15.632$, $P<0.05$). The use of MOODLE LMS significantly enhanced students' retention ($t=6.640$, $P<0.05$). In conclusion, the Federal Government efforts at enhancing quality assurance through integration of modern technology and e-learning in Secondary schools proved to have yielded good result as students found MOODLE LMS to be motivating and interactive. Attendance was improved.

Keywords : basic science and technology, MOODLE LMS, performance, quality assurance

Conference Title : ICEET 2016 : International Conference on Education and Educational Technology

Conference Location : Berlin, Germany

Conference Dates : May 19-20, 2016