# Online Education in a Developing Country: The Case of Sudan

Gelismekte Olan Bir Ülkede Cevrimiçi Eğitim: Sudan Örneği

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Abstract: This paper investigates the current state of online education in Sudan. The study covers educational programmes provided by higher and general education institutions via the Internet. The methodology employed is the survey method. Data collection tools include a survey of websites of educational institutions, document analysis, and an unstructured interview. The study reveals that online education in Sudan is still at a very preliminary stage and it is mostly in the form of ongoing or planned projects which are yet to be implemented. The study also highlights the main obstacles that affect the development and implementation of online education in the country.

Keywords: Online education, virtual learning, online education in Sudan, learning management systems

Öz: Bu bildiri Sudan'daki çevrimiçi eğitimin mevcut durumunu araştırmaktadır. Çalışma Internet aracılığıyla yüksek ve genel eğitim kurumları tarafından sağlanan eğitimsel programları kapsamaktadır. Betimleme yöntemi kullanılmıştır. Veri toplama araçları arasında eğitim kurumları web siteleri anketi, belge analizi ve yapısal olmayan görüşmeler yer almaktadır. Sudan'daki çevrimiçi eğitim hâlâ başlangıç aşamasındadır ve çoğunlukla henüz hayata geçirilmemiş devam eden ya da planlanan projelerden oluşmaktadır. Çalışmada ülkede çevrimiçi eğitimin gelişmesini ve kurulumunu etkileyen faktörlerin de altı çizilmektedir.

Anahtar sözcükler: Çevrimiçi eğitim, sanal öğrenme, Sudan'da çevrimiçi eğitim, öğrenim yönetim sistemleri

### Introduction

Online education has been flourishing throughout the world since the mid 1990s, particularly in economically prosperous countries like the USA, Canada, and Australia. With the continuous improvement in Internet connectivity and bandwidth, coupled with the decreasing costs of hardware and software, developing countries have joined the world in this growing type of education. Web-based resources enable education to be provided: in places where there is none, where resources are scarce, at anytime and anywhere (Balanko, 2010)

# **Objectives**

This study investigates the state of online education in Sudanese universities and pre-university schools. The term "Online Education" in this study refers to "education in which instruction and content are delivered mainly via the Internet".

# Methodology

The survey method is adopted. Data collection techniques employed included a survey of 10 relevant websites of Sudanese higher and general education institutions, an interview, and literature review and document analysis.

# **Findings**

A prerequisite for the provision of online education is the availability of telecommunications and internet infrastructure. A considerable proportion of private schools and public and private universities in Sudan have access to computer labs and Internet connection which is contrary to the situation in public schools (Figure 1). There has been a steady growth in Internet usage in Sudan during the past few years (Figure 2).

There are very few attempts at online education in Sudan. Two of these attempts are the experience of the Open University of Sudan (OUS) and the experience of the Sudanese Electronic School (SES), which are highlighted below.

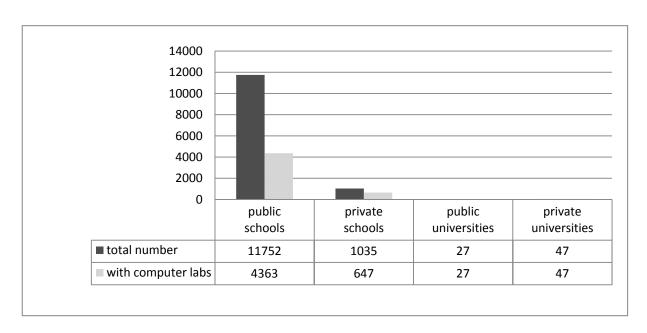


Figure 1. ICT infrastructure at educational institutions in Sudan (Hamdy, 2007)

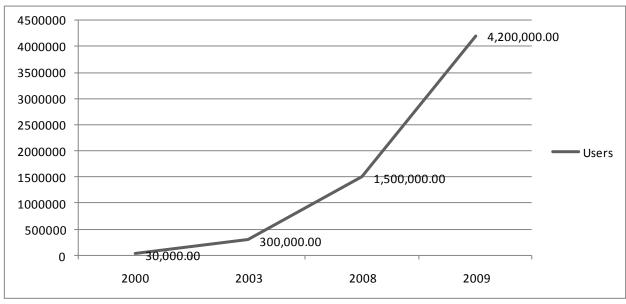


Figure 2. Internet user growth in Sudan during 2000-2009 (Internet World Stats, 2009)

### Open University of Sudan (OUS) Experience

- The OUS is implementing the Learning Management System "Moodle" to provide virtual support to its distance learning community. This project is underway and so far the university has accomplished the following according to the OUS E-learning Implementation Plan (Open University of Sudan, 2009):
- Training of trainers' courses in the use of Moodle.
- Establishment of a number of computer labs throughout the country to be used as supervision centres of the academic process through Moodle.
- A considerable proportion of the curriculum has been digitized and made available to learners over the Internet through "Moodle".

308 Abdelrahman

Sudanese Electronic School (SES) Experience

The only functioning virtual school experience in Sudan is a private venture called "The Sudanese Electronic School" (www.eschoolsudan.com). It aims to provide online support to students who are already enrolled in traditional schools. The SES has the following features:

- Digital content in the form of notes, worksheets, and PowerPoint files.
- Video lessons designed with Microsoft Silverlight technology.
- An instantaneous Self Testing System with Multiple Choice Questions.
- Parents can follow up and monitor their children's performance via the School's website.
- Audio lessons for the English language using the Microsoft Agent software.

### Conclusion

Implementation of Online Education in Sudan is facing the following problems which are yet to be solved:

- Weak ICT infrastructure in terms of hardware and equipment;
- Lack of information literacy programmes for both teachers and students;
- Lack of ICT skilled manpower in the general education sector;
- The slow pace of introducing Computer Science as a subject in school curriculum;
- Lack of managerial commitment and dedication to the introduction of ICT in the education system;
- Lack of courseware in both general and higher education sectors.

### References

Balanko, S.L. (2002). Review and resources: Online education implementation and evaluation. Retrieved November 15, 2009 from http://www.washington.edu/oea/pdfs/reports/OEAReport0211.pdf

Hamdy, A. (2007). Survey of ICT and education in Sudan. Survey of ICT and education in Africa. (Volume 2): 53 CountryReports. Washington, DC: infoDef / World Bank. Retrieved November 15, 2009 from http://www.infodef.org/en/publications.354.html

Internet World Stats. (2009). *Usage and population statistics*. Retrieved November 10, 2009 from http://www.internetworldstats.com/africa.htm#sd

Open University of Sudan. (2009). E-learning implementation plan. Khartoum.