identifizieren, die die Partizipation der Studierenden und Dozierenden an diesen Angeboten beeinflussen. Die aus der hier dargestellten Untersuchung resultierenden Informationen, können einen Beitrag dazu leisten, dass die unterschiedlichen Perspektiven Studierender und Dozierender in diesem Zusammenhang besser verstanden werden und dass in Folge dessen, die Hochschulen, Fakultäten, Administratoren und Forschenden besser auf die spezifischen Bedürfnisse der jeweiligen Gruppen eingehen können.

The Efficiency and Implementation of Online Courses in Faculties of Education in Jordanian Public Universities

Introduction

"It is a great mistake to think that in the past the full sweep of a new invention has ever been anticipated at its first introduction" A.N. Whitehead (1967, p.73).

Computer networks are still relatively recent phenomena, and research into the use of such networks for communication and group work is less than 30 years old. There is growing support for computer-mediated communication (CMC) both as an integral part of online courses and as an extension of conventional classrooms that use "face-to-face" teaching techniques. University faculties are finding that discussions about using interactive technologies in their courses serve as a catalyst for improving teaching and learning processes generally. For example, in addition to re-examining instructional design in developing new online courses, CMC innovations have encouraged faculty to re-examine their teaching and learning practices in traditional face-to-face courses, especially collaborative learning practices that lead to constructivist learning communities (Comeaux, 2002). Interactive technologies may enhance collaboration and construction of knowledge whether a course is totally online or partly enhanced by technology. If mainstream faculty across disciplines would value CMC as an extension, or enhancement, of collaboration in their face-to face classrooms, then university campuses would probably witness a major shift in teaching and learning practices as well as the possible elimination of arbitrary distinction between virtual and face-to-face situations. In order to help smooth the path of such a shift, professional development programs need to directly confront the difficulties, as well as the rewards, for faculty and students who are willing to embrace change. However, the difficulties and rewards need to be exposed and clearly articulated first.

Aims of the Study

The aims of this study are threefold. First, to consider factors related to CMC, positive and negative, that can influence students' learning in online courses on the one hand and the effect on faculties transforming to an online environment on the other hand; second, to present experiences using CMC to support constructivist learning in online courses as an extension of a face-to-face communication course; and third, to explore the efficiency of online courses in the instruction of undergraduate students.

CHAPTER 1

1.0 Setting the Context for Background Information on Educational System in Jordan

The Hashemite Kingdom of Jordan became fully independent in 1946 and was founded as a hereditary constitutional monarchy. The national economy achieved remarkable growth rates despite existing obstacles and challenges, such as: scarcity of natural resources, limited cultivated land and high population growth rates. Jordan is situated on the southeastern shore of the Mediterranean Sea between 34-and 39-East longitude, and between 29-and 33-North latitude. It encompasses an area of approximately 91,000 km², 8% of which is desert or semi-desert. Jordan's educational system is concerned with directing education towards preparing the Jordanian citizen for future challenges and aspirations. These include several developmental aspects, the most important of which is extending the compulsory, free of charge, basic education.

1.1 Principles and General Objectives of Education in Jordan

The education system in the Hashemite Kingdom of Jordan is based on the aspirations of freedom, justice, as well as human and economic development to achieve a significant level of productivity and modernization. The philosophy of education stems from the Jordanian Constitution, the Arabic-Islamic civilization, the principles of the Great Arab Revolt and the national experience of the country. The general objectives of education are to build citizens believing in God, affiliated to their country and nation, endowed with human virtues and perfection, and having a fully developed personality in all its various aspects- physical, mental, spiritual, emotional and social.

1.2 The Higher Educational Legislation and Regulations in Jordan

The Higher Education **Act No. 28** of 1985 regulates higher education. This Act specifies the objectives of higher education and how they are achieved. It also establishes the Higher Education Council, defines its authority and responsibilities and contains some regulations concerning the functioning of higher educational institutions.

The Jordan Universities **Act No. 29** of 1987 determines the objectives of the university as a national organization for higher education and scientific research, and contains several items regulating its financial and administrative affairs.

Recently, the Parliament approved the draft Higher education Law which authorizes the Higher Education Council to formulate the general policy related to higher education in the Kingdom, and to co-ordinate university educational policies. The draft law also includes criteria for supervising private university education, and provides for closing the Ministry of Higher Education and the establishment of the Higher Education Accreditation Board.

An amendment to the Jordanian Universities Act was also approved. It aims at establishing the autonomy of these universities by providing them with the necessary resources and creating a trustee council for each university, responsible for forming the university policy and supervising it. In 1964, the Education Act expanded compulsory education to nine years, six years of primary and three years of preparatory education, and introduced the diversification of secondary education to provide general academic and vocational programs. The 1994 Education Act expanded basic compulsory education to ten years and introduced comprehensive and applied secondary education streams of education lasting two years.

1.3 Administration and Management of Higher Education System in Jordan

The Ministry of Higher Education supervises higher educational institutions. The Higher Education Council is chaired by the Minister of Higher Education and its members are the Ministers of Education, Planning and Culture, as well as the Presidents of Jordanian universities, public and private community college representatives and six other members recognized by experience and specialization. The Council is entrusted with the following main responsibilities: approving the establishment of private higher education institutions in the Kingdom, and their types and plans of study; approving and reviewing fields of specialization in light of changing needs. There are institutions, other than the MOE (but under its supervision) which also participate in the delivery of education services. Several institutions under the Ministry of Social Development educate students with special needs and those with learning

difficulties. The Directorate of Education and Culture of the Armed Forces administers 19 specialized schools. The United Nations Relief and Works Agency in the Near-East (UNRWA) is responsible for the administration of 198 schools for Palestinian refugees. In addition, there are non-governmental organizations (such as the Queen Alia Fund for social and voluntary work, and the General Union of Charity Societies) assisting educational institutions at the kindergarten level, and those for pupils with special needs. The Noor Al-Hussein Foundation (NHF) administers the Jubilee School, established in 1989, which caters to gifted students beyond the ninth grade of basic education.

1.4 Higher Education in Jordan

Access to higher education is open to holders of the General Secondary Education Certificate who can then choose between private Community Colleges, public Community Colleges or universities (public and private). The credit-hour system, which entitles students to select courses according to the study plan, is implemented at universities. All post-secondary education is the responsibility of the Ministry of Higher Education and Scientific Research which was established by the Higher Education Law in 1985. The Ministry includes the Higher Education Council and the Accreditation Council.

1.4.1 Composition of Higher Education in Jordan

Higher education in Jordan comprises two levels: a) a two-year *intermediate level* program provided by community colleges, managed by Al-Balqa' Applied University and similar institutions owned by private agencies. These institutions offer more than 100 specializations distributed over 11 programs, including: Academic, Administrative, Agricultural, Applied Arts, Computer Science, Educational, Hotel Management, Meteorological, Paramedical, Social Work and one Engineering programs; b) *university level*, in public universities, providing a variety of degree programs with a duration of at least four years.

The Ministry of Higher Education undertakes the supervision of the administrative and financial staff in accordance with the laws and regulations in effect. The Higher Education Council is entrusted with the following responsibilities: a) approving the

establishment of higher education institutions in the Kingdom and their types and plans of study; b) approving and reviewing fields of specialization in light of changing needs. Presidents of Jordanian public universities are appointed by a royal decree upon the recommendation of the Council, and deputy-presidents are appointed by a resolution of the Council upon the recommendation of the university president. Every university has a board of trustees approved by the Council. It manages the internal affairs of the university, and is totally independent of the Ministry.

1.4.2 University Level Studies

University level first stage: Undergraduate level:

Bachelor's Degrees normally take four years. In Dentistry, Pharmacy and Engineering, studies last for five years. In Medicine, they last for six years, followed by an Internship which lasts for one year. The Bachelor's Degree requires a total of 126-164 credit hours, depending on the field of study.

University level second stage: Graduate level:

A Master's Degree is awarded by the public universities and one private university (the Amman Arab University for Graduate Studies), which awards Higher Diploma, Master's and Doctorate degrees. The Master's is awarded after a further two years' study following the Bachelor's Degree. It can be obtained either by course work and a thesis (c. 24 credit hours of courses and nine credit hours of research), or by course work (c. 33 credit hours) and a comprehensive examination. Candidates should hold the Bachelor's Degree with "good" as a minimum rating.

University level third stage: Doctorate:

A Doctorate Degree is awarded by the public universities and one private university, after three to five years of further study and the submission of an original dissertation. It requires, depending on the subject, 24 credit hours of course work and 24 credit hours of research. Candidates should hold a Master's Degree with "very good" as a minimum rating. According to the Non-Traditional studies (as Distance Education), this type of education is offered at the branch of the Arab Open University.

Source: IAU from Ministry of Higher Education and Scientific Research.