Advancing Research in Higher Education in the Arab World – Time for Action

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The three oldest universities in the world are located in the Middle East and North Africa (MENA) region - including the Morocco-based University of Al-Karaouine, the Egypt-based Al-Azhar University, and the Iran-based Nizamiyya. However, none of the MENA-based universities were included in the most recent list of the top 100 world-class universities.

Also, MENA countries perform poorly in terms of knowledge and technology. Only five Islamic states are above the world’s average in the innovation index, with Malaysia and the United Arab Emirates at the top; and only 12 Islamic states are above the world’s average in the knowledge economy index, with Qatar and UAE at the top, according to the report ‘Research and Scientific Development in OIC Countries’.

This weak performance of MENA’s universities is due to several reasons including reluctance to change and innovate, poor organizational frameworks, traditional management systems, financial dependence on governments, and lack of autonomy and academic freedom for universities.

To tackle these problems, MENA countries need to adopt clearly defined measures to promote scientific and technological development, innovation, and higher education.

Research in Higher Education – Present Status in the Arab World

While universities and research institutes in MENA region are making progress in research productivity, impact in terms of developing knowledge-based economies remains limited.

However, according to a 2012 forecasting exercise by the research, evaluation and ranking platform Scimago, on how the world will perform in research by 2018 based on past performance, three Islamic countries show dramatic increases in numbers and rankings: Iran, Malaysia and Pakistan.

Scimago analyses scientific outputs of institutions and countries and monitors more than 30,000 journals. Seven countries from the Islamic world were included among the top 50 countries: Iran, Malaysia, Turkey, Pakistan, Egypt, Saudi Arabia, and Nigeria.

One of the main reasons for weak performance of 470 Arab universities and educational institutions catering to 400 million people, roughly translating into 1.2 institutions for every million people, is the lack of research in higher education as well as knowledge dissemination tools.

Arab universities are the main or the partial aim of a number of bodies including the Association of Arab Universities, Arab Organization for Quality Assurance in Education, the Federation of the Universities of the Islamic World, the Arab Network for Quality Assurance in Higher Education, the Association of Arab and European Universities and L’Agence Universitaire de la Francophonie. However, none of them focus on research in higher education.

These regional bodies are mainly used as efficient vehicles for consultation, exchange of information and cooperation among institutions of higher education as well as representing the voice of higher education community on regional and international bodies.

The Arab world also has a few journals focusing on higher education research including learning and teaching in Higher Education. Gulf Perspectives is a peer reviewed journal that presents and discusses issues and research of relevance to university and college educators in the Arab Gulf Region. The Arab Journal of Quality in Education is a biannual peer-reviewed journal that is published online. The journal is multidisciplinary with focus on quality assurance and accreditation in all levels of education. And recently, Al-Fanar magazine started publishing news and opinions on higher education in the Arab world.

Arab Network for Research and Development in Higher Education

In the coming years, the Arab world needs to focus on research in higher education, including quality and entrepreneurship education. This will help bridge the gap between education supply and labor market demand, as well as tackle graduate unemployment, which was a factor driving the 2011 uprisings.
Also, research must focus on education citizenship and academic freedom to identify the role that higher education institutions must play in building social cohesion after political changes. It must also focus on preparing students to become active, informed, and responsible citizens.

To nurture and champion research in higher education, the Arab states must set up at least a network of scholars and researchers in the field of higher education studies. This will help stimulate new forms of research and inquiry into higher education as a field of study.

This proposed network will promote research in higher education in order to enhance understanding of higher education policy, institutional management and performance, teaching and learning, and the contribution of higher education to society and the economy.

Besides focusing on comparative studies and analysis of inter-system and cross-national issues, the proposed network must also carry out research addressing global and international themes.

To fulfill these aims, the proposed network could do the following:

- Maintain and develop a database of researchers and scholars in the field in the Arab world and internationally
- Develop guides for national, regional, and international studies in higher education
- Develop directories for Arab higher education studies institutes and societies
- Develop database for higher education strategies in the Arab world
- Establish and support a number of networks of members, each focused on a particular dimension of higher education, where research may have a role to play
- Provide advice to and engage with relevant national and international research and policy debates
- Conduct conferences and seminars that both bring researchers together and enable researchers, policy-makers and others to engage with each other
- Produce and support various forms of higher education research-based publications
- Identify areas of practice and/or policy, where the research base could be usefully developed and to stimulate such research

**The Way Forward**

Arab states must adopt clearly defined measures to promote scientific and technological development, innovation and higher education to build knowledge-based economies. To achieve that, evidence-based innovative higher education policies must be implemented by advancing research studies in higher education.

As one step on the rocky road, a plan to boost the role of higher education, research and development activities in cultivating sustainable, innovative and knowledge-based societies throughout the Arab world has been announced at the first Arab Forum for Scientific Research and Sustainable Development that took place in Tunis in December 2013.

The initiative includes the establishment of an Arab Higher Council for Scientific Research, Technological Development, and Innovation. The council will develop Arab research and development indicators, an Arab network of experts in the Arab diaspora, and find funding to finance higher education and scientific research.

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**About the Author**

Dr. Wagdy Sawahel is an expert in higher education, science, technology innovation, and knowledge economy. At present, he is Associate Research Professor at the National Research Center, Cairo, Egypt, Advisor for Observatory on higher education at the Ministry of Higher Education, Saudi Arabia.

He is the Founder and General Coordinator for Science Development Network, the Founder of Virtual Incubator for science-based business, a member in the Board of Trustees of Arab Organization for Quality Assurance in Education, and a member in Egypt’s Council for Education and Scientific Research and Technology. He published 25 books and more than 300 reports for a number of international organizations, such as London-based, Science and Development Network and Africa-based World Education Network. He also contributed to international science and higher education magazines, such as US-based, The Scientist, South Africa-based, Africa Research, London-based, University World News, and Switzerland-based, Intellectual Property Watch.

These reports focus on developing policies, strategies, and action plans. They also focus on designing initiatives for reforming higher education and establishing innovation and knowledge-based economy along with developing higher education and scientific research performance indicators. He acted as a reviewer for several organizations, such as United Arab Emirates-based, Arab Foundation for Science and Technology, Qatar National Research Fund, Oman’s Science Council, Islamic Development Bank and Poland’s National Science Center.
He acted as consultant for several regional and international organizations including the Islamic Development Bank, UNESCO, Arab League for Education, Culture and Scientific Organization "ALECSO". He has been recognized for his work at the national, regional, and international levels by being awarded the State Prize, the Third World Academy of Science Prize, Dr. Ahmed Zahran Prize in Scientific Culture, and the Excellent Leadership Award.

Poll Time

In your view, the main challenges facing Research in the Arab States are related to:

- Lack of funding
- Low quality of research outcomes / low impact
- Absence of a clear strategy, framework and policy for research at national and regional level
- Lack of alignment between the industry and research
- Weak human capabilities

Which of the following reasons in your opinion explain the most the relatively low production in science in the Arab countries?

- The role of the university promotion system
- The research policy of higher education institutions
- The lack of good Arab science journals
- The lack of data

In your own view, what shall be done to ratify the situation of Research in the Arab States?

- Reforms to the educational system
- Integrate research in national strategies and policies
- Involve the private sector in research and funding support
- Create inter-Arab Scientific Research bodies
- Focus on human capital development
- Increase the Arab-International Research Collaborations

How much do you agree on the statement “Arab universities and research centres have been unable to develop a smart R&D environment over the past five decades”.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Submit

Who is the new CLICKS Board Member?

Dr. Kathleen S. Ives, D.M.

It gives CLICKS a great pleasure to introduce Dr. Kathleen Ives as a new board member who has joined the CLICKS International Advisory Leadership Board. Dr. Ives brings with her extensive experience working with various forms of technology enhanced education and has specific expertise with the design and the delivery of courses for higher education.
Kathleen S. Ives is the Acting Chief Executive Officer and Executive Director for The Sloan Consortium. She has worked in online technology for over 20 years and serves as The Sloan Consortium's Associate Executive Director and Chief Operating Officer. She oversees the organization's operations as well as facilitates workshops in higher education online best practices. Formerly, Dr. Ives oversaw all forms of alternative instruction at Quinsigamond Community College in Worcester, MA (Distance learning, Accelerated programming). She teaches in on-ground, online, and blended modalities for the University of Phoenix and Bay State College in Boston, MA. Additionally, she serves on the Massachusetts Department of Education Distance Learning Advisory Board.

#2 CLICKS unveils its new website

We are pleased to announce the release of the new CLICKS website, which has been designed with a fresh new look, providing our users with latest and up to date information about CLICKS events, and upcoming activities. We hope that you enjoy browsing through the new design. To check out the new site, please follow the link: www.clicks.com

#3 The NMC Horizon Report | 2014

The New Media Consortium (NMC) and EDUCAUSE Learning Initiative (ELI) have jointly released the NMC Horizon Report > 2014 Higher Education Edition at a special session at the ELI Annual Meeting, 2014. The eleventh edition describes annual findings from the NMC Horizon Project, an ongoing research project designed to identify and describe emerging technologies likely to have an impact on learning, teaching, and creative inquiry in education.

Six key trends, six significant challenges, and six emerging technologies are identified across three adoption horizons over the next one to five years, giving campus leaders and practitioners a valuable guide for strategic technology planning. This year, the format of the report is new. It provides these leaders with more in-depth insights into how the trends and challenges are accelerating and impeding the adoption of educational technology, along with their implications for policy, leadership, and practice.

"Campus leaders and practitioners across the world use the report as a springboard for discussion around important trends and challenges," says Larry Johnson, Chief Executive Officer of the NMC. "Understanding how to better incorporate online learning in face-to-face settings will be critical over the next year, along with the notion that higher education institutions need to define policies around social media use to maximize the potential of these platforms for teaching and learning."

Key Trends Accelerating Higher Education Technology Adoption

This year's NMC Horizon Report identifies the integration of online, hybrid, and collaborative learning and the growing ubiquity of social media as fast trends driving changes in higher education over the next one to two years. The 'Shift from Students as Consumers to Students as Creators and the Rise of Data-Driven Learning and Assessment' are mid-range trends expected to accelerate technology use in the next three to five years; and 'Agile Approaches to Change and the Evolution of Online Learning' are long-range trends, positioned at more than five years away.

Significant Challenges Impeding Higher Education Technology Adoption

A number of challenges are acknowledged for presenting barriers to the mainstream use of technology in higher education. 'Low Digital Fluency of Faculty' and 'Relative Lack of Rewards for Teaching' are perceived as solvable challenges - those which we both understand and know how to solve. Competition from 'New Models of Education and Scaling Teaching Innovations' are considered difficult challenges. These are defined as well as understood but with solutions that are elusive. Described as wicked challenges are 'Expanding Access and Keeping Education Relevant,' which are complex to define, much more complex to address.
Important Developments in Educational Technology for Higher Education

Additionally, the report identifies ‘Flipped Classroom and Learning Analytics’ as technologies expected to enter mainstream use in the first horizon of one year or less. ‘3D Printing and Games and Gamification’ are seen in the second horizon of two to three years; ‘Quantified Self and Virtual Assistants’ are seen emerging in the third horizon of four to five years.

The subject matter in this report was identified through a qualitative research process designed and conducted by the NMC that engages an international body of experts in education, technology, business, and other fields around a set of research questions designed to surface significant trends and challenges and to identify emerging technologies with a strong likelihood of adoption in higher education. The NMC Horizon Report > 2014 Higher Education Edition details the areas in which these experts were in strong agreement.

"With its 2014 edition, the Horizon Report for higher education has taken some important evolutionary steps," says ELI Director Malcolm Brown. "The report now embeds the six technologies more explicitly in the overall context of higher education, with its expanded section on trends and challenges. The report has always assisted the community in making decisions about technology directions, but now the trends and challenges sections provide additional resources for campus discussions and decision making."

The NMC Horizon Report > 2014 Higher Education Edition is available online, free of charge, and is released under a Creative Commons license to facilitate its widespread use, easy duplication, and broad distribution.

Download the 2014 Horizon report

#4 CLICKS’ Participation in STEM 2014

Dr. Narimane Hadj Hamou, CEO of CLICKS took part as a panel member during the "STEM International Policy Briefing Series" in Dubai on March 13th, 2014

Higher education teachers, managers, and policy makers discussed current issues in the teaching of Science, Technology, Engineering, and Mathematics (STEM) subjects at university level.

In building a successful economy, governments look to build capacity in STEM graduates. They see innovative STEM graduates bringing creativity, ideas and drive to help the economy grow in a wide range of sectors. The STEM skill set is seen as key in today’s society of BIG data, high performance manufacturing, and complex societal challenges. This event brought together academics and higher education policy makers from the UK and the UAE and surrounding region; as they discussed how to embed innovation into STEM Higher Education so that graduates develop the ability to engage effectively in a super complex world to achieve sustainable economic growth.

#5 CLICKS announces the theme of the 2nd MENA Higher Education Leadership Forum (HELF) 2015

The Center for Learning Innovations and Customized Knowledge Solutions is pleased to announce the theme for the second HELF 2015: “Towards Transformative Higher Education: The Role of Innovation in the 21st Century Digital and Knowledge-Based Society”. The Forum is scheduled to be held from Nov. 10th to 11th, 2015 in the United Arab Emirates.
The Forum aims at attracting decision makers and leaders from within the community of higher education from around the globe to share ideas and new perspectives on a wide range of issues concerning higher education in the MENA region.

Sub-themes:

- Innovation in Research and Knowledge Transfer
- Innovation in Student Support and Supporting Learning Experience
- Innovation in the Digital Age and the Exploitation of Ubiquitous Technology
- Innovation in Quality and Continuous Improvement
- Entrepreneurial Approaches to Leading and Managing Higher Education

For more information about the event, please visit the CLICKS website, www.cli-cks.com

CLICKS invites institutions to submit institutional Best Practices of relevance to the Theme. For details, please click here, sponsorship opportunities are also available, please click here for more information.