



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

International Journal of Current Research
Vol. 10, Issue, 01, pp.64485-64489, January, 2018

INTERNATIONAL JOURNAL
OF CURRENT RESEARCH

RESEARCH ARTICLE

MEGATRENDS FOR HIGHER EDUCATION IN THE WORLD TILL 2020

^{1,*}Hosien Ali Taghi Tehrani, ²Amir Mahmood zadeh and ^{3,*}Kamran Yeganegi

¹Futurology Department, PhD student, Shakhes Pajouh Institute, Isfahan, Iran

²Futurology Department, Shakhes Pajouh Institute, Isfahan, Iran

³Futurology Department, Shakhes Pajouh Institute, Isfahan, Iran

ARTICLE INFO

Article History:

Received 21st October, 2017

Received in revised form

29th November, 2017

Accepted 08th December, 2017

Published online 31st January, 2018

Key words:

Megatrends,
University,
Privatisation.

ABSTRACT

In Ancient Greece numerous mathematicians managed to gain global fame. Figures such as Archimedes and Euclid presented new thoughts to the scientific society and contributed to growth of mathematics. Sometime later, the Roman Empire defeated the Greek empire and replaced it in the world. Despite all the attempts that the Roman Empire made to develop science, it failed to progress as much as the ancient Greek empire did in mathematics. One reason was the fact that the Roman Empire was deprived of famous talented mathematicians that boosted the scientific capabilities of the Greek empire. For instance, the numerical system in Roman Empire was so primitive that it failed to define numbers, equations and many other simple relations. This weakness and complexity in the numerical system prevented them from doing advanced mathematical operations and, eventually, making progress in the field. Roman society and mathematicians were so submerged in their numerical system that they did not even feel the complexities. As an example, since they could not work well with their accounting and banking systems, they attributed this weakness to the accounting system itself not to the numerical system or mathematics. Today's world is much different from the age of Roman and Greek Empires. However, we are still entangled in our own systems such as measurement, balance, accounting, banking, logistics, traffic management and the like. We are much similar to ancient Roman scholars in this respect. As we are submerged in these systems, we refuse to acknowledge their basic shortcomings. At the same time, we are stubborn enough to refrain from reviewing processes, presuppositions, structures and hypotheses.

Copyright © 2018, Hosien Ali Taghi Tehrani et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Hosien Ali Taghi Tehrani, Amir Mahmood zadeh and Kamran Yeganegi, 2018. "Megatrends for higher education in the world till 2020", *International Journal of Current Research*, 10, (01), 64485-64489.

INTRODUCTION

Institutions called universities depend on the experiences and transformations of the modern world. They do not go back far and are a few centuries old. Paris University is the oldest which dates back to 1200 AC. Shortly after its establishment, the universities of Oxford, Napoli and Cambridge emerged. These universities offer special courses such as science, art, law, medicine and theology. All of them were dominated by the rituals and culture of Christianity (Gaul 1977). Such dominance prevented any changes until the 15th century when the courageous criticisms found their way into universities and new ideas were discussed against the traditions, churches, the dominant socio-cultural thoughts, and most importantly, the scientific fundamentals. From 1540 to 1773, the Christian colleges where ideology-oriented and could control the society. However, new rivals gradually appeared as new thoughts emerged. They put an end to the Christian dominance in the 18th century.

Corresponding author: Hosien Ali Taghi Tehrani,

¹Futurology Department, PhD student, Shakhes Pajouh Institute, Isfahan, Iran.

After the 1789 revolution and with harsh critics like Rousseau, the ideas and attitudes saw major modifications and the church universities vanished. Colleges and universities took the first steps towards what we see today. About 100 years later, Davidson (1897) acknowledged the change. "This is the time when everything needs to be experimented. No thought, practice, tradition, custom or ritual is so sacred that cannot be questioned", he said. Everybody felt that the future belongs to scientific thoughts. When the scientific approach was adopted for experiments through measurement and observation, each subject which could be repeated, re-examined and precisely measured was labelled as science.

Main driving forces of higher education

Why do so many transformations occur in our world? What are the main driving forces behind these transformations? One very important point to mention is the fact that there is a huge base of internet technology behind these transformations. Internet technologies link people together and rewrite the communication rules and regulations.

This, in turn, has resulted in major transformation of cultural customs, higher speed of operations and more expectations (Thomas Frey, 2009). Universities like many other industries call themselves intermediaries and gates to the information and human mind. However, free and abundant information will change this mindset and reveal the shortcomings and deficiencies of universities (Thomas Frey, 2009).

High costs of universities and higher education institutions

Currently, students and their families encounter a lot of problems associated with the high costs of universities and higher education institutions. Such problems force them to decide logically rather than idealistically (Thomas Frey, 2009).

- At the national level, tuitions and costs have gone up 439% since 1982 whereas the average income has increased just 147 percent. (American National Centre for Public Policies and Higher Education).
- 69.2% of private universities declared that economic recession has negatively affected student loans (National Association of Independent Colleges and Universities).
- Studies conducted in October 2008 reveal that insolvency forces about 60% of school children to target low-cost and low-level universities. Besides, 14% of them planned for 2-year degrees and 16% of them have delayed their decision-making. (MeritAid.Com).

The value perceived by the customer

Results and outcomes represent the value that clients perceive of university education (Thomas Frey, 2009).

- 80% of above-18-year olds in America use internet (Harris Survey Centre).
- 245 words are used in emails, short messages, chat rooms and blogs in America each day. 35% of commentators aged 13 to 17 take part in online chats (Michael Frey Group).
- 64% of student users resort to colloquial expressions while advertising in internet.
- Reliability and originality are the main factors that distinguish a university brand. Teenagers attribute a high value to these factors.

Effects of disrupting technologies

Online education is taking over the traditional one (Thomas Frey, 2009). Currently, 80% of universities have included various virtual and online teaching methods in their agenda. The number of students that prefer online or virtual education is increasing rapidly. Statistics reveal an increase from 500000 in 2002 to 3.9 million in 2007 in the number of online students.

The revolution of moderation

Although most universities try to be the best, many applicants prefer good to average services. One New York University lecturer surprised the audience in a scientific conference when he warned them not to believe the myth of quality (Thomas Frey, 2009). He said: "When discussions about future start in the internet, resist against environmental reactions. We are in a stage when internet can offer high quality content.

The concept of quality will stop and prevent us from progress. This is something that will be vivid in future as a higher number of new skills emerges". With the same token, the emerging sectors in software industry have managed to transform our world. Traditional belief holds that high quality teaching can be offered only through discussions and lectures in the classroom. However, research proves that online teaching is much more effective than classroom type. That is why, we are entering a stage of a course-ware which is "good enough".

The emergence of two-year colleges

Two-year colleges are growing rapidly. There are about 1200 two-year colleges in the United States hosting half of the 6 million graduates. Tuition fees have gone up remarkably in these colleges though they are still less than two third of the cost students have to bear in 4-year universities. These colleges are now aiming at 4-year courses as well (Thomas Frey, 2009). Miami College is the largest two-year college in the United States with 170000 students. About 33000 students applied for this college in autumn 2009 and faced the college with real challenges regarding the spaces, classrooms, parking lots and teaching staff. About 30000 students could not follow their favourite fields while 5000 people could not enroll at all.

Miami College is not alone. Two-year colleges in the United States hold significant records in solving unemployment issues and offering affordable loans. These colleges have been so effective that most people consider them adequate for acceptable job-creation. These people feel no need for higher levels. The appealing nature of two-year colleges owes itself to the applicability of courses. Applicable fields such as car repair and maintenance, carpentry, filmmaking, and software engineering are a few practical courses that train students for the labour market.

Scalable professions

Who is the most famous university professor in your country? This question is hard to answer. An easier question would be this one; "Who is the most famous radio presenter, journalist or caricaturist in your country?" Most people can easily answer the second question. But this leads us to a more challenging question; "Why is a presenter, journalist or caricaturist better-known than a university professor?" The answer lies in the expression "syndicate or trade union". It is the trade union that propagates the works of such people throughout the country and the world. Besides, these people use their fame as well as teamwork and synergy to create outstanding businesses (Thomas Frey, 2009). Today's educational systems lack such scalability. University professors depend on one single institution and their influence is constrained by the organisation boundaries. University deans and physical training instructors are perhaps the best-known people among faculty members. Yet, there are some exceptions. For instance, most Nobel Prize winners are academicians, or some may become reputable either nationally or internationally due to solving a certain problem or publishing a unique book. The fact is that most of the time out-of-university activities count for their reputation.

Scalable courseware

Just as websites provide a standardised format for audio visual contents, new internet systems will emerge that make it possible for users to create and distribute courseware (Thomas Frey, 2009). Most of the courseware may be subdivided into smaller packages and distributed via internet. Advertisements through media will gain more significance in education in the competitive world. Firms such as Coursera have fully understood the opportunities that virtual education offers. Moodle is a leading Australian company with more than 26 million users and 2.6 million operative courses (Thomas Frey, 2009). Despite such advances, search firms still lack the necessary web-based communication systems to respond to ever growing number of users. In addition, they lack a web-based distribution system which makes them unable to provide users with access to courses in all conditions and locations.

Abolishment of one-way information

Information technology is based on two-way exchange of information. Users are dissatisfied with one-way IT systems and cannot trust them. They demand participation, cooperation and ownership regarding the contents (Thomas Frey, 2009). Moreover, since physical printing of books has its own limitations, we will witness remarkable changes in the next generation books. Sony and Amazon readers have already tried to materialize the concept of large virtual future libraries. In these models, the students are not passive just to study books and understand the contents; rather, they attend virtual forum-like spaces where the authors, experts and online students read books while making and answering questions.

Your education is complete

Who can say that a training course for a certain student is complete and they need no more education? This is one of the biggest deficiencies of today's systems. Maintaining customer relations is a solid business principle. However, most universities aim at graduating students and cut their relation with them as soon as they are granted their degrees. The fact is that education is a never-ending necessity and the students should never terminate loyalty to their universities (Thomas Frey, 2009). The biggest problem is that universities demand an unreasonable tuition fee for a short-term course. Most tuition fees are paid in installments and continue years after graduation. However, offering a short-term course for a long-term student loan seems unjustifiable.

Wrong arguments about degree

At the time being, universities issue degrees for their students to confirm their qualification and validate their knowledge. However, most graduates attribute a high value for out-of-school experiences which may have a little connection or even no connection with academic studies (Thomas Frey, 2009). We have a poor understanding of knowledge-based economy and practically no conception of experience-based economy. The wrong arguments about degree are so widespread that people consider no validity for students' experiences simply because universities fail to do so. In this context, we can consider experience as a key distinction between physical and virtual education.

Megatrends of higher education

Transformational revolution in the area and variety of higher education which happened in the last half century is hard to unravel.

Recent achievements are as important as those made in the 19th century when the first research-based university was founded in Germany and provided a fundamental roadmap for universities all over the world. Due to their universal nature, increase of the number of students and those affected, academic transformations in the 20th and early 21st centuries were more extensive. Although competition has always been a driving force in scientific circles and resulted in progress and upgrading of universities, it can also erode the scientific society and downgrade its missions and values. In the following parts, we attempt to explain five megatrends which affect higher education at a global level.

Globalisation and internationalization

Globalisation is an event which is taken for granted in the 21st century and effects higher education system deeply. Its impact on universities is our main focus of attention. Factors such as global economy (with its increasing convergence), new IT, emergence of an international knowledge network, the role of English and other factors which are beyond the control of universities join hands to create a fact that is called globalisation. Internationalisation is defined as policies and plans that government and universities design and implement in response to globalisation. Universities have always been affected by international trends and academicians as well as academic institutions involve in research activities in an international level. The 21st century expedited the process and highlighted the importance of globalisation. Following the dominance of Latin in the middle age Europe, English gained an unprecedented role as the language for exchange of knowledge and information. Meanwhile, publications, databases and other basic resources were centralised in the most powerful universities and multinational companies, especially in developed countries. Some globalisation affects are inevitable which means it is impossible for higher education to isolate itself from the rest of the globe. At the same time, factors such as tendency to wealth, common language, scientific growth, and the like encourage institutions to internationalise themselves.

Privatisation

Privatisation of universities is another important trend. Most countries have scaled down their subsidies for public universities and provide half or less than half of their budget. Some American public universities received less than 20% of their budget from government and are obliged to resort to other sources mainly tuition fees. Other revenue resources for universities include research income, sale of products, research and consultancy services, as well as relations with industry. These financial resources contradict the traditional role of universities in some circumstances and affect their commercialisation.

Configuration conflicts

Distinct academic systems with various missions appeared all over the world as a response to the growing demand for higher education. However, universities have been under pressure to imitate each other, configure their activities and try to ascend to higher ranks in academic hierarchy. This pressure was intensified by a long established tradition of ranking as well as by global competition. Comparable reputation of research-based universities and increase of their number magnified the effects.

It was 60 years ago when David Riesman the American sociologist criticised the configured movements of academic circles led by research-based institutions. In his opinion, other American colleges and universities tried to take over research-based institutions. The main problem was the unleashed competition between those universities that pursue common goals. Unleashed competition may diminish some efforts that aim to develop a system of organisations that are appropriately distinct; based on certain requirements of a system; and differ in their goals, responsibilities, fundraising patterns, recruitment policies and other features.

IT and ICT

Undoubtedly, the academic world is being affected by IT and ICT revolution. Together with remote education and other technological innovations, these technologies are expected to fully uproot traditional universities. In our opinion, traditional university is not going to disappear in short time; rather, it will experience major transformations. In some courses such as management and IT studies, remote education plays the main role. The open resource movement was initiated by Innovative Open Resources department in MIT. It is a remarkable and significant development as it presents some parts of the course contents online and free of charge. This is a clear example of how significantly internet transformed the ways of knowledge transfer. At the same time, email has solidified its position as a widespread scientific communication tool. E-magazines are widely accepted and have gained high reputation in some fields. This trend has widened the gap between the haves and have nots. Some impoverished areas such as Africa are being denied access to high speed internet which explains why traditional scientific approaches especially those that use English as the language of communication still maintain their influence at a high level.

Academic profession

University tenure is an important position and universities will fail unless they can absorb committed and well educated faculty. Professors are under hard pressure and the demand for more professors is increasing as higher education develops. That is why more instructors are introduced in a shorter period of time while they may not be qualified enough. The salaries of university professors are far less than what they can earn outside universities. In some countries university professors can hardly make their ends meet. Various levels of salary explain why some university professors prefer to move to other countries with higher paid positions. As an example, the average salary in Canada is 6 times that of China. Movement of professors is becoming a global trend. With the spread of English as the international language of science, easy air travels and internet, a large number of university professors find postings in other countries. Better salaries and working conditions; scientific freedom; security of academic jobs; high quality institutions and labour market are among the main factors contributing to this process. Some countries such as Singapore, Persian Gulf countries, West European countries, Canada and the United States have adopted policies to attract foreign researchers and scholars. There is no wonder that this movement starts in developing countries and ends in developed ones.

Summary and conclusion

This study reviews the current situation of universities and higher education institutions and presents proposed megatrends

until 2020 based on futurology. There is no doubt that changes in economy and technology will affect these megatrends. That is why the research domain is set until 2020.

Acknowledgement

The authors feel obliged to express their gratitude to all those who offered their sincere assistance.

REFERENCES

- Fernandez, J & Bajo- Sanjuan, A. 2010. The Presence of Business Ethics and CSR In Higher Education Curricula for Executives: The Case of Spain. *Journal of Business Ethics Education*, Vol. 7, pp. 25- 38.
- Ferreira, M., 2006. Rethinking Academic Culture in the Information Age. Unpublished Doctoral Dissertation. McGill University. Canada.
- Harkema, S.J.M and Schout, H. 2008. Incorporation Student – centered Learning in Innovation and Entrepreneurship Education, *European Journal of education*, 43 (4) , pp.513-525.
- Hegarty, C & Jones, C. 2008. Graduate Entrepreneurship: More than Childs Play, *Education and Training*, 50 (7), pp.625- 637.
- Henry, C; Hill, F and Leitch, C. 2005. Entrepreneurship education and training: can entrepreneurship be taught? Part I *Education + Training* Vol. 47 No. 3, pp. 158-169.
- Jose Tarri, J. 2009. An EFQM Excellence Model Self-Assessment Exercise at a Spanish University, *Journal of Educational Administration*, Vol.44, No.2, pp. 170-188.
- Kanyllinepa, H. 2009. Entrepreneurship and Innovation Systems: Towards a Development, *European Planning Studies*, 17, 8, Lulea University of Technology, Entrepreneurship, LULEA, Sweden.
- Lee, B.K. 2004. "Corporate Image Examined in a Chinese-Based Context: A Study of a Young Educated Public in Hong Kong, " *Journal of Public Relations Research*, Vol. 16.
- Lenuta Rus, C, Chirica, S., Ratiu, L & Baban, A. 2014. Learning Organization and Social Responsibility In *Romanian Higher Education Institutions, Procedia - Social and Behavioral Sciences Journal*, 142, pp.
- Minniti, M & Levesque, M. 2008. Recent Development in The Economics of Entrepreneurship, *Journal of Business Venturing* 23, pp. 603-612.
- Nabi, G., Holden, R. and Walmsley, A. 2006. Graduate Career Making and Business start – up: A Literature Review, *Education & Training*, 48 (5), 37338.
- Neck, H; Brush, C & Allen, E. 2009. The Landscape of Social Entrepreneurship *Business Horizons*, Vol.52, pp. 13-19.
- Nelson, Kim A. 2004. "Consumer Decision Making and Image Theory: Understanding Value-Laden Decision", *Journal of Consumer Psychology*, No.14 (1&2).
- Oosterbeek, H., Van preaag, M & Ijsselstein, A. 2010. The Impact of Entrepreneurship Education on Entrepreneurship Skills and Motivation, *Journal of European Economic Review*, 54, pp.442- 454.
- Sana E Harbia & Alistair R. Andersons. 2010. Institutions and the shaping of Different Forms of Entrepreneurship, The firm. Ph. Dissertation Abstract. The State University of New Jersey- Newark.
- Schurenberg, E. 2012. "Whats an Entrepreneur? The best answer ever". Available at: <http://www.inc.com>.

- Seto- Pamies, D., Domingo- Vernis, M., Rabbas- Figueras, N., 2011. Corporate Social Responsibility In Management Education: Current Status In Spanish Universities, *Journal of Management & Organization*, Vol. 17, No. 5, pp. 604-620.
- Styles, C and Seymour, R 2006. Opportunities for Marketing Researchers in International Entrepreneurship, *International Marketing Review*, Vol. 23, No.2, pp.126-145.
- Takii, K. 2008. Fiscal Policy and Entrepreneurship, *Journal of Economic Behavior & Organization*, Vol.65, pp.592-608.
- Taormina, R.I & Lao, S.K.M. 2007. Measuring Chinese Entrepreneurial Motivation, *International Journal of Entrepreneurial Behavior & Research*, 13 (4), pp. 20- 221.
- Thomas Frey 2009. "The Future of Colleges & Universities – A Blueprint for a Revolution", the DaVinci Institute.
