

Comments made by Panelist Prof. Heitor Gurgulino de Souza, at IUC,Dubrovnik, on September 21, 2015.

Initially, comments will be made on Prof. Keri Facer's presentation, followed by some brief additional comments on Higher Education/University Future:

**Past:** Bologna-1088; Salamanca – 1134; Paris-1150; Harvard-1636; von Humboldt – 19th century; Land Grant College Act – 1862; Cordoba – 1918; BR-1920/1934

**Present:** Higher Education Institutions/Universities as we know today; Still main objectives are: Education, Research and Extension. But now not only present education is offered: O.U.- UK; UNED/UOC-Spain; O.U.s in India, Thailand, Japan; MOOCs; Khan Academy; edX; Coursera. Some developments: Aalborg Univ.-Denmark; Maastrich-Netherlands; Quest Univ.-BC, Canada; University Minerva and Arizona State Univ.-USA; ITA, UFSCAR, ABC – BR; “Global Classroom”-Aoyama Gakuin Univ., Tokyo

**Future:** I foresee slow changes in near future. We don't know yet well *how we learn*. So, much more research is needed

(See “Brain scans better forecast math learning in kids than do skill tests, study finds”-Stanford Univ. School of Medicine - August 18,2015 –Journal of Neuroscience)

Technology will certainly open new avenues, tech adapted to each student. (New developments as expressed in: “Five ways Online Learning – and blended learning - will enable changes in Post-Secondary Education”- Chronicle of H. E. - 7/29/2015 (<http://teachonline.ca>)).

A big challenge: “If ½ of the occupations and ¾ of the companies will not exist in a decade”, we'll need to educate students for an unknown future.

Other major developments: focus on “interdisciplinarity” instead of teaching individual disciplines; promote creativity, entrepreneurship and innovation; need to reach globally (language, finances must be assured); need for more and better teachers; promote life-long learning.

In developing countries we should also support the development of STEM global 2020, by AAAS (as proposed by Lloyd Etheredge - Policy Sciences Center)

We should follow some research efforts now going on:

“Machine Teaching”- Univ. of Wisconsin (Chronicle HE – 08/12/2015 by Mary Ellen McIntire);

“Neuroscience of learning gets nod at Texas A&M” (Chronicle HE- 07/29/2015 by Dian Schaffhauser);

“Open Education: the sustainable way in the knowledge age” (University World News, Issue 378 - 08/23/2015 by Karen MacGregor);

And follow other research efforts going on, not mentioned here.

New developments: WAAS/WUC-2013 -Global Virtual University; Open Education Resources - OER Foundation, launching of OERu 2013 - Otago Polytechnic, New Zealand.

Encourage more research and share results globally (WUC)

[www.wunicon.org](http://www.wunicon.org)

I fully agree with Prof. Winston Nagan’s conclusions on: “Nagan’s Thoughts on Future Higher Education”

-----