

Guest Editorial Preface

Special Issue on Teaching in Higher Education: Active Learning, and New Teaching Methodologies

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In our era, Higher Education (HE) is facing a multidimensional transition. For years, Higher Education was considered an “Ivory Tower” where those interested in theoretical and scientific explorations could focus on such activities. As we have moved from an industrial society - where industrial activity spearheaded progress - to a knowledge society, in which knowledge is conceived as the lever to progress and innovation as the way to better societies, the role of Higher Education needs to be reconceived, and along with that, teaching methods and the organization of HE institutions.

It is not new for experts in education to talk about experiential learning (Montessori, 1989; Dewey, 1997), learning in the field, education not only on the environment (knowledge transfer) but also in (engaging students also emotionally) and for the environment (aiming to a healthy environment) (see UN Tbilisi Declaration, 1977), or even education that empowers learners not only as learners but also as members of the society (Freire, etc.). Quality of education and what it means for pedagogy has been a concern for some time. However, more recently, these discussions have been taken up by Higher Education and a number of efforts worldwide have been initiated so as to add value to Higher Education by promoting interdisciplinary curricula that aim to an integrative approach to learning, or by focusing on innovative ways of teaching that increase student engagement, promote creative thinking, cultivate problem solving and team work skills, and reinvent learning as a fun activity.

Starting from educators, it is important that curricula are redesigned so that they are better suited to the present-day students – the XYZ Generation – by taking into consideration innovative ways of teaching that involve wider use of ICTs, problem solving, flipped classroom approaches, game based learning, integrating research into teaching. Furthermore, educators and academic administrators should create programs that address selected issues in more systemic and integrative ways, contradicting the fragmented – single-issue approach often adopted in problem solving today. Nowadays, it is widely recognized that an essential driver of student success is a more inspiring, engaging and challenging pedagogy in Higher Education, revealing the relevance of learning to real life challenges, personal and social. Such changes require educators that are trained and interested in active learning methods and supported by their institutions to do so.

It is also significant to examine how students perceive teaching and learning, scholarship, research and service and to use this information in the design of HE curricula. Furthermore, it is important

to actively involve students in the development of the learning practice in the classroom itself and their associations in the development of curricula, practicums and internships and various ways of service learning. Involving students in this way should aim to turn the learning process from a way to knowledge they have to bear with into an engaging, desirable although inevitably demanding process.

So nowadays, there is a need to move away from the traditional educational practices which are mainly instructor-centered to student-centered practices where the instructors act as facilitators or mentors of the learning process and the students are more actively engaged and are no longer passive recipients of knowledge. There is also a trend to move from fragmented, single-discipline-based academic practices to interdisciplinary collaborative teaching and research. In these ways, students become creative and critical learners as well as active and responsible citizens, capable of addressing real world problems in an integrated fashion.

In our times, Higher Education is also called to move away from the “Ivory Tower” approach to a more inclusive and socially-involved academic activity. The United Nations in their Sustainable Development Goals (<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>) indicate that we need inclusive and quality education for all, including lifelong learning. They state: “Obtaining a quality education is the foundation to improving people’s lives and sustainable development.” (<http://www.un.org/sustainabledevelopment/education/>). Very broad as the UN Sustainable Development Goals may be, they constitute a useful reference as they highlight the main concerns in education today: quality education, inclusiveness, lifelong learning, and education for better quality of life. HE institutions – via specific coursework, internships, or research – often collaborate with the industry and local communities to address real problems. Lately, this has been enhanced with the idea of service learning which emphasizes the social usefulness of the learning product and process. Furthermore, with the urgent need to develop sustainable societies and adopt sustainable practices given the increasing environmental and social challenges of our times, higher education aims to be transformative and empowering as well.

Higher education also needs to address the challenges of a globalized society and economy. Globalization in education is tied to rapid developments in technology and to interdisciplinarity, affecting the way we communicate and our international relationships. It also raises students’ awareness of the world in which they live by exposing them to global environmental, economic and political challenges as well as to issues of human conflict and diversity. Students should be prepared with a new set of skills to apply to a new, competitive and information-based society and should be ready to address jobs in a rapidly increasing international market; workers with a deeper understanding of languages, cultures and business methods are required. Rather than “homogenizing” international education, globalization should be seen as an element that enables higher education institutions to create new learning opportunities. Developing ways to integrate learning, both locally and globally, by creating academic ties between institutions or between different urban locations of the world would be examples in which globalization could positively impact international education (Chen, 2014). Furthermore, the internationalization of higher education is a reality, with universities competing in their efforts to recruit international students and students seeking to enrich their learning experience through study abroad or international internship programs.

In our days more than ever, it is imperative to also consider the adoption of technology in education – like the use of internet and other IT tools, the growth of distance learning education, Massive Open Online Courses (MOOCs), use of robotics in education etc. – as well as its impact on the learning process. Students should be actively engaged with technology tools and resources in ways that promote critical and creative thinking, collaboration and communication - skills essential for 21st century global citizens and for the international job market. Higher education institutions should not only provide the appropriate resources for this purpose in terms of the best technological infrastructure, they should also ensure that teachers receive the best professional development to offer all students the technology skills needed to succeed in a globalized world.

Such efforts need to be systematically supported however, so that they are transformed from isolated good initiatives to institutionalized common practice. This support involves the availability of needed resources such as technologies and ICT applications, laboratories, and appropriate facilities; new policies that allow and value multiple forms of learning, including out-of-the-classroom instruction; a new organization of time in academia that values and plans for the required work for these adjustments; as well as a reconsideration of funding allocation in order to support innovations and interdisciplinary collaborations in teaching and research. In addition, the vision and organization of the HE institutions should be adjusted to the new reality and needs, so that they can effectively support these new developments, including the connection with society, local communities and local problem solving.

This should be reinforced by accreditations of good standing and teaching professionalism. Professional standards frameworks are being developed through recognition of institutional commitment focusing on raising teaching standards and development of best practices, continuous professional development of educators, and providing thought leadership. Given the concerns in traditional and formal education mainly of issues regarding the perceptions of educators but also of students in terms of teaching effectiveness, motivation, enjoyment, engagement but also development of competencies and skills linked to real world problems and industry demands there is a need that all stakeholders involved address those issues now, more than ever before.

The integration of all these elements into Higher Education – as a system, institutions and teaching and learning practices – is a value chain process that requires careful planning, enthusiasm and commitment at the top administrative level so as to exploit the available resources in the best possible way with the aim to benefit all stakeholders. As an end goal, care must be taken so that a good number of skills and competencies – including technological, social and spiritual ones – are well developed in the future citizens and leaders of our societies who more than anything should be well equipped and empowered with knowledge, critical thinking, collaborative skills, the desire and values for creating a better and sustainable world.

The articles of this special issue aim to explore in more depth some of the issues that relate with technology use in and impacts on education.

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