Chapter 22
How Active Learning Can Make a Difference

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ABSTRACT

The aim of active learning is to provide opportunities for learners to think critically about content through a range of activities that help prepare learners for the challenges of professional situations. This chapter aims to present and describe some active learning strategies implemented by the authors, teachers at the Management School of Polytechnic Institute of Cávado and Ave (IPCA), in Portugal. The expected result of this article is sharing successful case studies in Higher Education Institutions.

INTRODUCTION

Nowadays we are at the beginning of a new industrial revolution, the so called Fourth Industrial Revolution that is fundamentally changing the way we live, work and relate to one another. Instead of previous industrial revolutions who liberated humankind from animal power, made mass production possible and brought digital capabilities to billions of people, this Fourth Industrial Revolution gather a range of new technologies that are melting the physical, biological and digital worlds, impacting all disciplines, economies and industries, and even challenging ideas about what it means to be human (Moavenzadeh, 2015). The impact of the Fourth Industrial Revolution will also be reflected on economic, legal, regulatory, and socio-political questions, demanding proactive roles from government policies and institutions at local, national and global levels.

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A changing educational paradigm is needed (Tomozii & Topalăa, 2014) and Higher Education can have an important role in this process, by providing a culture of active learning that allows leverage the students activity through the development of new and creative ideas, actions, roles and projects. In fact, through meaningful activities, students think about and apply what they are learning. It is a deliberate contrast against passive learning (Pelley, 2014).

The indispensable societal role of universities is defined by their function as educators of critical, creative thinkers capable of making a contribution and an impact in an ever-changing and “super complex” (Barnett, 2000), world. Graduates should furthermore embrace lifelong learning and see universities as a given option for continuous education (Hunt, 2011). This requires, however, that learning in the 21st century develop into an active process. Traditional approaches to learning, mainly manifested through lectures, are not sufficiently effective in promoting ownership and application of knowledge, key to the development of understanding, but rather supporting the passive absorption of content (Bligh, 1972). If individuals are to consider themselves life-long and life-wide learners, there can be no power differential between teacher and student. Active learning can provide a valuable contribution to implementing a cooperative institutional vision of learning and teaching in higher education, which educates active, well educated, well-rounded and responsible, global citizens (EFFECT, 2018). In doing so, universities observe their third mission and contribute to the achievement of the Sustainable Development Goals: in particular no. 4, Quality Education, but they contribute also to the other Sustainable Development Goals indirectly, through citizens that contribute to an open, inclusive, democratic and knowledge and evidence-based society. Active learning is a key approach to achieving this goal, since it is based on an involvement of all stakeholders in higher education. An argument against active learning is the (perceived) cost effectiveness of traditional lectures. However, active learning has financial advantages as well, as any space can be used as a learning space. Furthermore, the outcome of active learning, i.e. enhanced, more student-centred learning, entails benefits that should outweigh concerns over the financial input associated with active learning. This is an aspect to be considered, especially in view of the challenges posed to universities by alternative models of education, raising questions regarding the continued societal relevance of universities. Active learning is a way to develop uniquely human skills, which are becoming ever more relevant to both employers and societies. Establishing active learning across universities – as an approach used alongside lectures – would thus help to preserve universities’ unique role as educators of active citizens and professionals fit for today’s and tomorrow’s societies.

Active learning, it is also iterative, dialogical and mostly collaborative; it is about the doing of understanding and, hence, about the application of knowledge in new and authentic situations (Perkins, 1998). Is performative and needs to be intentional, well designed and framed. Active learning begins with the design of a curriculum that is student-centred, and that draws on students’ intelligences (Gardner, 1999) and on their prior knowledge and experience in determining how students should demonstrate their understanding of course content (Perkins, 1998). Active learning should be universally designed to include all learners, providing them with multiple means of engagement, of action and of expression (Meyer & Rose, 2000). Such design has to take place at a variety of levels: spatial, temporal, cultural and curricular. An active learning environment invites students to create and share their learning in spaces, whether physical or virtual, which are democratic, flexible and fluid (Brooks, 2011). Active learning also demands a different construction of schedules, which allows for discussion, logic, reasoning, experimentation and feedback. The greatest challenge faced by universities is a cultural one, since active learning moves beyond tips and tricks that are immediate, instrumental and remedial to learning patterns that are long-term, investigative, and incremental and that invoke a growth mindset (Bass, 1999). Active