COMPETÊNCIAS PARA O FUTURO DO EMPREGO

WORKING PAPER Nº 5.01

Machine and Myth-Proof: the University as a mere provider of useful knowledge?

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Junho, 2022

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1. The Modern University

The modern University dates from the 19th century and its best model is the University of Berlin. Humboldt's idea of the university was built on a basic assumption concerning the central importance of knowledge and its institutionalisation, freed from Church or State tutelage, and from the pressures of social and economic demands. It was in the interests of the state to protect the university's *Lernfreiheit* and *Lehrfreiheit*, for institutionalised knowledge granted the unifying force that the state needed to legitimate itself both as the top national institution and, to use Humboldt's words, as the 'State of culture'.

The modern university is associated with the implementation of the research doctorate (the PhD) developed at the University of Berlin (Wyatt 1998). Being awarded a PhD required "successful attendance at seminars, submission of an acceptable thesis, and the passing of a comprehensive oral examination, and the emphasis was on original and creative research (Goodchild and Miller 1997)" (Park 2005, p. 191-2). The implementation of the 'research seminar' (and lab) was instrumental in the development of this new research degree. It allowed the training of advanced and graduate students and, as seminars were allocated a budget, they also had the means to offer scholarships and fund research. This new research-based model attracted a large number of graduate students to Berlin, replacing Paris as "the Mecca of scholars and scientists across the world" (Rüegg 2011, p. 11).

Humboldt implemented the ideas of the theologian and philosopher Friedrich Schleiermacher, who considered that the university should "stimulate the idea of science in the minds of the students, to encourage them to take account of the fundamental laws of science in all their thinking" (Schleiermacher 1808, pp. 32-3) and proposed the research seminars in which "the scientific spirit, awakened by philosophical teaching, would penetrate more deeply into the particular, to research, combine, and create something of its own, and to confirm by the correctness of its judgement the insight it has gained into nature and the coherence of all knowledge" (1808, p. 39).

Therefore, the idea of the Humboldtian university clearly rests on the need to protect individual academic freedom, an idea that was echoed by Karl Jaspers, as cited by Kenneth Wilson (1989, p. 38):

> The university is a community of scholars and students engaged in the task of seeking truth. It derives its autonomy from the idea of academic freedom, a

privilege granted to it by state and society which entails the obligation to teach truth in defiance of all internal and external attempts to curtail it.

This new model associated doctoral education with the creation of new and creative knowledge. The university also had a role in socialising students so they could assume their role in society, promoting social mobility of the most capable and being a place for the free and independent discussion of the critical problems of society and defending and promoting the national culture. Some of these concepts were previous to the coming of the modern university. For instance, the 1650 Royal Charter establishing the Harvard College (today the prestigious American Harvard University) mandated that students should be encouraged to respect ideas and their free expression, and to rejoice in discovery and in critical thought; to pursue excellence in a spirit of productive cooperation; and to assume responsibility for the consequences of personal actions. And the university (Neave 1995) "was to act as the highest expression of cultural unity the independence of which was upheld by the legislative framework the state provided".

A number of scholars have made proposals on the idea of the university. Cardinal Henry Newman, Rector of the new Catholic University of Ireland, now University College Dublin, argued that the University has as its function the intellectual culture; it educates the intellect to reason well in all matters, to reach out towards truth, and to grasp it (Newman, 1947). He strongly opposed usefulness as a goal of higher education, arguing that "The Philosophy of Utility, you will say, gentlemen, has at least done its work... and I grant it – it aimed low, and it fulfilled its aim." Instead, he proposed "a pure and clear atmosphere of thought..." which would lead to "the true and adequate end of intellectual training... Thought or reason exercised upon knowledge" (Newman 1947, §8 discourse 5; §7 discourse 8).

Fleming (2006, p. 20) explains that for Habermas "the university carries out the functions of socialization, critical transmission of culture, political consciousness, and social integration". However, Fleming (ibid) further argues: "The danger is that too many courses will focus on the utilitarian, that there will be too many vocational courses to the detriment of courses and programmes that may be of benefit to one self and society rather than the economy".

The universities were considered specific organisations, characterised as organised anarchies (Cohen and March 1974), institutions with "many autonomous actors operating with bounded rationality in an environment with ambiguous goals, an unclear link between cause and effect, and fluid participation with the activities and subgroups of the organization." They are a unique organisational form due to the multiplicity of their missions and the absence of a unique form of absolute authority. For Allen (1988), "universities are really an organised anarchy, without being made illegitimate, immoral or ineffective".

In 1974, Moodie and Eustace still argued that academics were the only people qualified to run complex organisations such as universities (Moodie and Eustace 1974), while the late Burton Clark considered that universities, running an activity strongly based on the

development of the specialisms of different scientific areas, could only be efficiently run by professional experts in those areas (Clark 1983b). One characteristic thus is the predominance of the authority of 'professional experts' who are the only well qualified people to deal with knowledge. Therefore, professional autonomy is very important in higher education, its institutions being classified as 'professional bureaucracies' (Mintzberg 1979).

2. The knowledge society and the transformation of the university from social institution to social organisation

As argued by Musselin, since the 80s changes have been underway that have reversed the assumptions of the preceding paragraphs:

> On the one hand, universities are expected to become like any other organisation. Their specificity is denied and managerial tools from the industrial sector (and in particular in firms) have been introduced in universities (Reed 2002 and 2003) which are supposed to become more entrepreneurial, more corporate, more accountable, etc. Universities have been made less 'sacred'; they are denied their exceptional character and asked to go through 'economic rationalisation' and an 'organisational shift'. On the other hand, this general trend should weaken the influence of the national models and therefore reduce the organizational variety among universities (Musselin 2007, p. 1).

These transformations can be associated with the emergence of knowledge as an increasingly important production factor, which is becoming dominant compared to the traditional ones – land, labour and capital. Knowledge has always played a role in the progress of mankind but its relevance has increased over the ages (Amaral 2018). The driving force of the new economy has become knowledge and services and knowledge-intensive products are replacing material and labour-intensive products. The work most individuals now perform requires theoretical knowledge and the major resource of the post-industrial society is its well-educated workforce.

The fact that knowledge is today considered an indispensable factor for economic competition, in a progressively more globalised world, had consequences for higher education as it became seen less as a social right, and more and more as a service (Torres and Schugurensky 2002). Universities have become the providers of that service, while students are seen as customers. In other words, the university has lost its condition of 'social institution' to become a mere 'social organisation' or administered entity (Chauí 1999).

The university as 'social institution' is a social practice "based upon the public recognition of its legitimacy and of its attributions which grant its autonomy in relation to other social institutions, being structured by its own internal ordinances, rules, norms and values of recognition and legitimacy" (Chauí 1999, p. 217). On the contrary, a 'social organisation' has a completely diverse social practice based upon instrumentality (or relevance), being ruled by concepts of management, planning, control, and success (Chauí 1999).

Marilena Chauí suggests we are moving to an operational university "ruled by development contracts, evaluated by performance indicators, thought to be flexible (flexible labour relations, loss of tenure, separation of teaching and research)" (Chauí 1999, p. 220), governed by strategies and programmes of organisational efficacy. "Such university, complying with norms and rules that are completely alien to knowledge and intellectual ability has become a 'social organisation'" (Chauí 1999, p. 221).

3. The employability and skills agenda

In Europe, the Lisbon Strategy aimed at building "the most dynamic and competitive knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion, and respect for the environment by 2010… by preparing the transition to a knowledge-based economy and society…" (European Council 2000). The knowledge economy also places more onus on individuals to fit in and update themselves continuously in professional terms. A manifestation of this phenomenon has been the replacement of the term 'employment' with 'employability', which has contributed to the individualisation of social problems (Streckeisen 2009) by making unemployment or poverty the responsibility of individual misconduct. Under the Lisbon Strategy, social problems derive from deficient knowledge, education and (occupational) training, each individual being responsible to invest a percentage of his salary in long-life education in order to remain employable.

The role of universities has become progressively tied in with the economy or, as Guy Neave (1995) argues, the mission of the university is being redefined away from being an instrument for the distribution of wealth to becoming an instrument to supplement its generation. In Europe, the European Commission has been influential in these transformations. Despite the frail nature of the legal basis which allows little intervention by the European Commission in educational matters, it has been playing an increasing role in education, and particularly in higher education (Amaral and Neave 2009; Sin *et al.* 2018).

The main vehicles for re-defining the Commission's role in this domain embrace the implementation of both the Bologna Process and the Lisbon strategy, as well as its influential discourse (Amaral and Sursock 2018). According to Martens and Wolf (2009, pp. 100-101), the European Commission rapidly took "advantage of the strategic linkages created by the national governments and incorporated education policy into their own agenda in a way quite different from what states had originally intended".

The Commission has claimed that higher education institutions were a very important tool in the European strategy for promoting a knowledge society. By linking the Bologna objectives "directly to economic gains expected from a common education area" (Martens and Wolf 2009, p. 87), the Commission was able to promote the appropriation of the Bologna process by the Lisbon strategy. And, as a knowledge-based society requires a well-educated workforce, the Lisbon strategy had an obvious need to include a component of human capital development, which has made higher education a necessary instrument to answer the short-term needs and demands of the economy.

The Commission's position was very clear, as expressed in the words of The European Science and Research Commissioner, Janez Potočnik (European Commission 2006), who said that "universities are power-houses of knowledge generation" and "…they will need to adapt to the demands of a global, knowledge-based economy, just as other sectors of society and economy have to adapt". This adaptation includes the need to supply the labour market with graduates having the skills necessary for the short-term needs of the economy, skills that change all the time and are to be evaluated as learning outcomes. Streckeisen (2009, p. 194) argues that "this permanent demand to match skills requirements serves as a mechanism to limit the relative autonomy of the education system vis-à-vis capitalist production".

As explained by Sin *et al.* (2016), Bologna's emphasis on employability, i.e. making higher education relevant for the labour market, has further contributed to developing a utilitarian view of higher education as a key element in a strategy of economic growth and competitiveness (Sin and Neave 2016). Over the past decades, this paradigm shift has been accompanied by a growing emphasis on skills and competences, which have come to be valued above educational attainment (Chur 2011, van der Velden 2013). Influential supra-national organisations such as the European Commission (2005, 2006) and the OECD (2013, 2018, 2019) have fuelled this development, made evident by the various instruments designed to measure skill levels, such as the Programme for International Student Assessment (PISA), the Programme of International Assessment of Adult Competences (PIAAC) and the failed AHELO project, which attempted to measure higher education learning outcomes. According to van der Velden (2013, p. 208), educational attainment is seen as a poor indicator of the stock of human capital, and that "the driving mechanism behind the effect of education on economic and social outcomes operates through the skills and competences that these educational qualifications represent". Study programmes all over Europe have been redefined around the skills and competences that students are expected to acquire, starting with the Tuning project and culminating in the elaboration of the *Framework for Qualifications in the European Higher Education Area* (European Union, 2018)*,* as well as the national qualification frameworks which describe qualification levels in terms of competences. Concerns have been expressed that this may lead to standardisation, which might threaten the free development of the person in the Humboldtian understanding of the term (Chur 2011). The adoption of learning outcomes as a measurable expression of skills and competences can be interpreted, in instrumental terms, as a step taken to facilitate the evaluation of the relevance of degree programmes for the labour market.

4. Graduate skills measured as learning outcomes

The concept of learning outcomes has a long history with its roots in the behaviourist tradition of the 1960s. Adam considers that learning outcomes do not have a particularly edifying history (Adam 2004, p. 2). Their origin can be related to the work of Pavlov and the salivating dogs, and later to the American behavioural school developed by JB Watson (Watson 1928, 1930) and Burrhus Skinner (Skinner 1951, 1953).

Skinner's work was based on Thorndike's law of effect (1898). He introduced the principle of *Operant Conditioning* and a new term, *Reinforcement*. *Operant conditioning* is a mechanism that uses *Reinforcement* which can be positive [an individual receives a premium if he is expected to produce the same response in the future] or negative [an individual is punished so he will not repeat the response]. Skinner only considered positive stimulus and, in his words (Ferrari 2008) "In the Operating Conditioning a mechanism is reinforced to make a response more probable, or better, more frequent". He rejected the idea of free-will and considered that the behaviour is determined by the environment. For Skinner a student was a passive and mouldable being, dependent from the teacher who helped the student to reach previously established objectives.

Learning outcomes have jumped into unexpected popularity due to their association with the Bologna process. They are defined as:

> … statements of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning. They are explicit statements about the outcomes of learning – the results of learning. They are usually defined in terms of a mixture of knowledge, skills, abilities, attitudes and understanding that an individual will attain as a result of his or her successful engagement in a particular set of higher education experiences (Adam 2004, p. 2).

Adam (2004, p. 3) argues that "learning outcomes are arguably best viewed as a fundamental building block of the Bologna educational reforms" and that "the humble learning outcome has moved from being a peripheral tool to a central device to achieve radical educational reform of European higher education" (Adam, 2008, p.5). The introduction of learning outcomes and the elaboration of an overarching framework of qualifications for the European Higher Education Areas were requirements set by the European Ministers of Education in the Berlin ministerial conference. The Framework was adopted by the Ministers in the next Conference held in Bergen in 2005:

> We adopt the overarching framework for qualifications in the EHEA, comprising three cycles (including, within national contexts, the possibility of intermediate qualifications), generic descriptors for each cycle *based on learning outcomes and competences*, and credit ranges in the first and second cycles (Bergen communiqué 2005).

ENQA, the European Network for Quality Assurance in Higher Education, has produced an extensive set of publications on the subject of learning outcomes. In the *Handbook for Internal Quality Management in Competence-Based Higher Education* (part of the European Toolkit for Internal Quality Management in Competence-Based Higher Education) (ENQA 2016) the term 'intended competences' is defined as "those competences students should acquire by a specific study programme. In practice, these competences are often referred to as intended learning outcomes at programme level" (p. 12) and 'constructive alignment' means that "the outcomes that should be reached are defined and teaching and assessment are aligned to these outcomes. That means

that there would be an alignment between the intended learning outcomes of a curriculum, the student learning tendencies to reach these outcomes and how the outcomes are assessed" (p. 14). And it is argued that:

> Course level student learning outcomes are usually formulated on a very low degree of abstraction... we suggest formulating competences on a medium degree of abstraction (similar to programme level student learning outcomes) which means that competences are formulated domain-specific but more abstract than course level student learning outcomes (ENQA 2016, p. 33).

An ENQA workshop report (ENQA, 2010) provides an explanation for the choice of the learning outcomes approach: "At the beginning of the 90s, an EU pilot project on ECTS showed that study programmes were much easier to compare if they were described in terms of outcomes, instead of inputs" (p. 4). The authors present a number of reasons in favour of the adoption of learning outcomes: they make qualifications more transparent for students, employers will have more information in order to recruit the most suitable candidate, they increase transparency and comparability between qualification standards, which can be helpful for quality assurance and they may be valuable for course design (ENQA 2010, p. 4). However, several authors "mainly question the focus on the individual learner, the difficulties in the formulation and implementation, and the inappropriate approach to higher education and academic study" (ENQA 2010, p. 4). And on page 10 of the same report, Lena Adamson (2010, p. 10) argues that "there still exists a lack of knowledge in higher education about what learning outcomes really are and what they can accomplish. This probably explains the resistance still found".

Adam describes the pedagogic benefits of using learning outcomes as follows:

> ... the use of explicit learning outcome statements can help ensure consistency of delivery across modules or programmes... and curriculum design helping to determine precisely the key purposes of a course, how components of the syllabus fit and how learning progression is incorporated... Learning outcomes promote in-depth reflection on assessment, and the introduction of more effective and varied assessment" (Adam 2004, p.16).

Adam further argues that learning outcomes also increase transparency and better comparability of standards between and within qualifications which improves quality assurance, they favour students by offering them information on what they will be able to achieve after successful study and they benefit "employers, higher education institutions and civil society in general by clearly articulating the achievement and attributes associated with particular qualifications" and they "contribute to the mobility of students by facilitating the recognition of their qualifications and improving the transparency of qualifications and thus simplifying credit transfer" (Adam 2004, p. 16).

4.1. Critical views on learning outcomes

There are also numerous criticisms of the use of learning outcomes. Murtonen argues that the use of learning outcomes may lead to unintended consequences "if the

theoretical background of the 'learning outcome' concept is not considered or not known" (Murtonen *et al.* 2017, p. 115). Indeed, as administrators or university teachers of different disciplines frequently lack expertise in educational science or educational psychology, they will have difficulty in deciding where and how to evaluate if students have already acquired the intended [soft] skills or even how to endow students with those skills.

Erikson and Erikson present a first kind of critiques which challenge:

> … the use of learning outcomes as a managerial tool, where it is argued that using learning outcomes can diminish teachers' academic freedom and divert academic attention by putting administrative practices at the forefront (e.g., Clegg and Ashworth 2004; Furendi 2012; Havnes and Prøitz 2016; Hussey and Smith 2002, 2008; Lassnigg 2012). These critical voices are also concerned about the use of learning outcomes for quality assurance (Erikson and Erikson 2019, p. 2296).

And they also refer to:

> … empirical findings suggesting that even if formal learning outcomes for a course exist, their influence on teaching and assessment practice might not be as profound as the adopted policies suggest (e.g., Dobbins *et al*. 2016; Furendi 2012; Hadjianastasis 2017; Havnes and Prøitz 2016; Lassnigg 2012; Schoepp 2019) (Erikson and Erikson 2019, p. 2296).

In a second type of critiques Erikson and Erikson question epistemological assumptions on how teachers and students can understand learning outcomes and find them useful (Erikson and Erikson 2019, pp. 2296-7). They argue that "different teachers will have different disciplinary understandings and thus may have different interpretations of the same learning outcome (including setting different standards for when a learning outcome has been reached)" (Erikson and Erikson 2019, p. 2297), while some authors call the attention to the fact that verbs used in learning outcomes (e.g., describe, analyse, demonstrate…) have meanings that differ from discipline to discipline (Hussey and Smith 2002). And as students will have much less expertise than their teachers their interpretations will be far more trivial (Allais 2012; Havnes and Prøitz 2016; Hussey and Smith 2002, 2003, 2008).

Consequently, Erikson and Erikson consider that "this means that learning outcomes are not as beneficial for transparency as the literature promoting them suggests (2019, p. 2297), and they quote Hussey and Smith (2002) to argue that "at the course level, a set of learning outcomes "... would state little more than an annotated list of contents... At the programme level, learning outcomes would be even less informative (see also Avis 2000; Hussey and Smith 2002, 2003)" (Erikson and Erikson 2019, p. 2298).

While Avis (2000) states that not every goal of higher education can be expressed as a learning outcome, Havnes and Prøitz (2016, p. 207) are critical of learning outcomes as "being too limited, technical, rational and oriented towards purposes of managerialism rather than of teaching and learning (e.g., Au 2011; Hargreaves and Moore 2000; Hussey and Smith 2008; Prøitz 2015)". They also refer to unsolved problems, such as:

> … contestability – Most LOs address dominant knowledge, which needs to be generally challenged (Popper 1959) and particularly so in higher education where emphasising uncertainty is a core value. The focus on prescribed LOs might risk being in conflict with the epistemic culture (Knorr Cetina 1999) of higher education. Questioning established 'truth' is a key dimension of higher education culture and meta-level learning – Explicit formulations of curricula, LOs and didactic practice often overlook more or less hidden aspects of teaching, learning and assessment (for instance) in terms of the hidden curricula (Snyder 1971) or peer-mediated socialisation within the student role (Havnes 2008) (Havnes and Prøitz 2016, p. 208).

And both Erikson and Erkison (2019) and Havnes and Prøitz (2016) argue that learning outcomes may foster compliance rather than critical, analytical thinking, while Adam states that some authors consider

> ... that learning outcomes written as threshold statements can limit learning and stifle creativity as well as dumb-down teaching. Finally, it is sometimes the case that the move to learning outcomes, which is often linked to the introduction of credits and modular frameworks, leads to module/unit overload as too much is crammed into a restricted time period for learning (Adam 2004, p.15).

Adam also warns that there are problems in the formulation/implementation of learning outcomes as it is

> …a formidable task that involves a huge staff-development process as well as cost implications in terms of time and money... In addition, there can be a high degree of initial staff resentment and disagreement concerning the detailed process of identifying, writing and implementing learning outcomes – and the consequential changes to teaching, learning and assessment (Adam 2004, p. 14).

There are also objections in terms of philosophy as proposed by Adam:

> … higher education learning cannot be constricted and/or reduced to a series of learning outcomes that inhibit and prescribe the learning process... the detailed specification of outcomes is antithetical to the traditional university function. Academic study… cannot be limited to a skill/competence-based approach that creates a target-led culture focused on ticking boxes. Learning outcomes are viewed as an attack on the liberal conception of education, which diminishes the teacher to facilitator and stifles the diversity of education by reducing it to a crass instrumentalist approach (Adam 2004, p. 14).

5. Moving beyond the employability and skills agenda

In the political discourse, this outcome-oriented approach has been tied in with employability. In particular, generic skills and competences (in addition to discipline-specific skills) have been given much attention, as these are claimed to be most valuable to employers and, therefore, opening up better career opportunities for graduates (Moore & Morton 2017; Suleman &

Laranjeiro 2018; Teichler 2013; Teijeiro, Rungo & Freire, 2013). Several shortcomings can be attributed to this approach. First, there is no consensus in the research literature about the generic skills and competences that the labour market deems more relevant (Humburg & van der Velden 2015, Suleman 2016).

Second, the labour market is constantly undergoing transformations and the skills that are relevant today may cease to be so tomorrow, while new skill demands may emerge (Teichler 2013; Tholen 2018; Streckeisen, 2009). Therefore, there are limits in predicting demand and it would be unwise for higher education to respond to the current needs of the labour market at any given moment as those may soon become obsolete; instead, it should focus on developing skills that enable graduates to be adaptable individuals and autonomous learners, prepared for learning throughout their lives. According to Teichler (2013, p. 422):

> Graduates have to be both over-qualified to be prepared for unexpected tasks and underqualified because higher education cannot mirror the existing diversity of job tasks (…) Higher education does not have to teach the rules and tools needed in a certain moment in time, but also prepare students to challenge constantly conventional wisdom. Finally, in the wake of dynamics, uncertainties and vagueness of the labour market, graduates have to be competent to respond flexibly.

Third, the employability skills agenda seems to overemphasise the role of higher education for graduates' integration into the labour market and to forget that employers themselves also play an important role (Witt *et al*. 2013; Kavanagh and Drennan 2008; Suleman and Laranjeiro 2018). Suleman and Laranjeiro (2018) make a distinction between ready-to-work and ready-to-learn individuals and suggest that higher education should aim at the latter type. Ready-to-learn graduates would possess generic skills such as critical thinking, creativity, ability to learn, an open mind-set, ability to plan, collaboration or communication. Employers would then be expected to provide on-the-job training, especially because each work setting has its own needs and characteristics.

Finally, the focus on skills and competences relevant for employment raises a question about the purpose of higher education. It suggests that the objectives of higher education are subordinated to the employers' expectations, while playing down the value of key competences for a holistic education. Similar to other scholars, the argument put forward in this chapter is that preparing students for the labour market cannot be the dominant focus of higher education (Barnett 1994; Bergan and Damian 2010; Chur 2011; Klemenčič 2011).

Therefore, conceiving study programmes in terms of learning outcomes may be counterproductive, as they can prescribe and limit learning, constrain intellectual development, stifle liberal approaches to education, ignore the necessary contribution of employers to adapt graduates to the particular characteristics of the work place, and promote the subordination of higher education to the immediate needs of employers.

It is relevant to recall that the Council of Europe identified four major purposes of higher education: preparation for sustainable employment; preparation for life as active citizens in democratic societies; personal development; the development and maintenance, through

teaching, learning and research, of a broad and advanced knowledge base. Thus, the Council of Europe's Steering Committee for Higher Education and Research (CDESR) referred to "higher education between humanism and the market" (Bergan and Damian 2010, p. 8).

Ronald Barnett (1994) laments that critical thought, understanding or wisdom appear as "unworthy of serious attention" and claims that the ideology of academic competence is being displaced by the ideology of operational competence. He proposes an alternative idea of the human being "unconstrained by sectional interests", where knowing is not driven by mere instrumentality, and promoting "human beings in situations and conditions unimaginable because the human beings concerned will be doing the imagining". In the face of an unpredictable evolution of the world around us, higher education must aim at the holistic development of students and must have not only economic, but social relevance as well.

The concept of *bildung* (Biesta 2002; Karseth and Solbrekke 2016), suggestive of the transformational effect of education on human beings and reminiscent of Cardinal Newmann's ideals, cannot be neglected either. *Bildung* implies a holistic development of the learner by nurturing the human person and his/her individuality (Biesta 2002). Considering higher education as a site of skill development is prejudicial to personal development (Tholen 2018). The commodification of skills in the context of employability is dangerous as it may lead students to "learn about the value of creativity or initiative, for example, solely in terms of exchange value rather than as an aspect of what makes us intrinsically human and, hopefully, good citizens" (McArthur 2011, p. 743).

Therefore, the mission of higher education should not be confined to being at the service of the economy and the university should not be transformed from being a social organisation into becoming a service industry (Suspitsnaya 2012). Beyond its economic relevance, higher education should embrace a broad human development mission, which includes students' preparation to participate actively in the society (Harkavy 2006; Zgaga 2009). This paradigm sees higher education as a public good (Walker 2012) which contributes to a better society by developing individuals who are aware and sensitive to real-world problems such as discrimination, human rights abuse or inequality, and thereby enabling them to fight injustice (Walker 2010; 2012). Social cohesion has been neglected in the dominant economic and instrumental orientation of higher education nowadays (McCowan 2012; Harkavy 2006; Suspitsnaya 2012; Walker 2010, 2012; Zgaga 2009), and issues such as equality, citizenship or democracy have been put aside to the benefit of more tangible outcomes such as research productivity, patents, employability, etc.

It is not to be ignored that having a predominance of an economic mission of higher education also influences students' education and values, who develop a widespread sense that higher education serves only to acquire career skills and credentials. The ideals of a fairer and just society are alien to them, when their institutions function as "entrepreneurial, ferociously competitive, profit-making corporations" (Harkavy 2006, p. 14). Students are thus trained to play their economic role in society, leaving "broader university objectives of personal development and the social good seriously out of balance" (Walker 2010, p. 488). To re-balance the missions of higher education, students need to learn how to participate in noneconomic causes for the good of the society by developing civic competences.

According to the *European Reference Framework of Key Competences for Lifelong Learning*, civic competences include ethics, respect for diversity, critical thinking and an ability to act and empathy. In the words of the document, these competences:

> … relate to the ability to engage effectively with others in the public domain, and to display solidarity and interest in solving problems affecting the local and wider community. This involves critical and creative reflection and constructive participation in community or neighbourhood activities as well as decision-making at all levels… Full respect for human rights including equality as a basis for democracy, appreciation and understanding of differences between value systems of different religious or ethnic groups lay the foundations for a positive attitude (European Commission 2019, p. 12).

6. Conclusions

The modern university is modelled on the Berlin university implemented by Humboldt, where research played an important role, subsisted without loss of legitimacy until the end of the 1960s, while the welfare state survived (Amaral and Magalhães 2003). Peter Scott (1995, p. 72) states that:

> It is not unreasonable, therefore, to regard the modern university as intimately bound up in the welfare state. They are near-simultaneous formations. So, any retreat, or reach beyond, the welfare state is likely to have important consequences for higher education.

The modern university was inseparable from the ideas of education, reflection, creation and critique (the university educates, it does not merely train or upskill).

The emergence of the knowledge society and the recognition that a well-educated workforce is an indispensable component in the economic competitivity of nations has changed this vision of the university, which was transformed into a 'social organisation' with a social practice based upon instrumentality (or relevance), being ruled by concepts of management, planning, control and success (Chauí 1999). In Europe the Bologna process was appropriated by the Lisbon strategy and in the words of Janez Potočnik (European Commission 2006) the university had to be responsive to the demands of the economy, by supplying the labour market with graduates having the skills necessary for the needs of the economy. Thinking university programmes in terms of learning outcomes would allow the evaluation of such skills (Streckeisen 2009).

This has downgraded the university from being an institution to become mainly a provider of services, the handmaiden of the economy. However, it remains to be seen if learning outcomes are here to stay or if they will be another management fad. In the words of Harris and Clayton (2019, p. 94):

> Only time will tell if there will be a move away from this powerful emphasis on learning outcomes or whether it is to remain embedded within our educational systems. The recent call to 'rethink and revitalise Australia's tertiary education' (Dawkins, Hurley, & Noonan 2019), including the reforming of the tertiary

curriculum, especially in VET, to broaden the skills and capabilities of its students, may have some bearing on this issue.

The massification of higher education and the emergence of the knowledge society has resulted in the displacement by workers with higher education of those without such credentials. Today many graduates of higher education are performing routine work which does not correspond to the aspirations acquired when studying at university (Streckeisen 2023).

Newer and more diversified institutions have been created all over the world and distance education is also playing an increasing role. There is an elite group of traditional research universities, responsible for the creation of new knowledge, coexisting with a large number of institutions, many of them teaching-only institutions, which are responsible for mass higher education. In the words of Guy Neave, governments have created "a highly focused and selective 'Guardian Relationship' resurrected and built around a few highly performing establishments" (Neave 2009). These research universities (the real universities) are fully autonomous and well-funded.

Those elite research universities coexist with a very large sector of higher education institutions, less generously funded, not protected from strict regulation and from pressures to be relevant for the labour market. Or, according to Guy Neave, one observes "the emergence in Europe's higher education systems of a 'temporarily protected' sector, consisting of highly performing research universities at the apex and at the base a 'market-driven' mass sector" (Neave 2009). This large sector at the base, conditioned by the use of learning outcomes, is the preferred tool for producing workers more directly suited to the labour market demands, and creates space for preserving the protected research sector (Amaral 2018).

Piketty (2020, p. 1012) refers to those developments as the educational hypocrisy of higher education or the illusion that everyone has the same chance to be successful independently of the university where they were enrolled. Or in the words of Streckeisen (2023):

> ... this also means that it [the University] bears more responsibility regarding cultural and political domination, economic extraction and exploitation, and social injustice and inequality. Hence there is both an analytical necessity and a moral obligation for scholars to analyse and criticise their own institution with the same rigor than any other object of scientific inquiry.

To conclude, in a world where knowledge is in permanent change and new knowledge may become obsolete in a short period of time, in a world where individuals are likely to have different employments during their working life, the capacity to adapt to change and to be able to permanently update their capacities and knowledge assumes unquestionable relevance. Therefore, it is more than ever important that universities educate their students to become individuals ready-to-learn, rather than individuals ready-to-work, conditioned by a set of learning outcomes in compliance with the immediate demands of the economy. Universities cannot be reduced to training students for the labour market, they have a much more enlarged responsibility towards society in educating students to be active and model citizens, aware of

social and environmental problems and prepared to learn and update their knowledge throughout all their working life.

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