



Does the design of learning outcomes matter from students' perspective?

Kaija Kumpas-Lenk*, Eve Eisenschmidt, Anneli Veispak

School of Educational Sciences, Tallinn University, Tallinn, Estonia



ARTICLE INFO

Keywords:

Learning outcomes
Bloom's Taxonomy of cognitive demand
Design of learning outcomes

ABSTRACT

Learning outcomes have gained more attention in the development of higher education course unit programmes. This study sought to understand how the design of learning outcomes relates to students' perceptions of their motivation, satisfaction, engagement and achievement of the learning outcomes. The learning outcomes from 78 course units were coded to reflect the level of cognitive demand according to Bloom's Taxonomy and the attended students ($n = 1329$) were surveyed regarding their perceptions of their achievement of the learning outcomes. The results indicated that the lowest four levels of Bloom's Taxonomy were most commonly used in the design of learning outcomes, the highest level was not used at all. The levels of learning outcomes related to students' perceptions of their achievement of learning outcomes, motivation, satisfaction and engagement. The results demonstrated that students were more likely motivated, satisfied, engaged to achieving learning outcomes, which were designed at higher levels of cognitive demand.

1. Introduction

“What was I supposed to gain from this?” is a question students frequently ask after finishing their course unit¹, reflecting students' experiences in the current Estonian higher education. Learning outcomes - the “what” that students are supposed to gain from any course unit, are considered to be the starting point of the process of planning the potential teaching methods and assessments, which lead to the desired learning outcomes (Biggs & Tang, 2011).

Learning outcomes are the skills, knowledge or attitudes students ought to develop as a result of their learning (Biggs & Tang, 2011). A design of learning outcomes, which focuses on the development of students, helps universities to provide more individualised learning paths for diverse groups of learners, supports economic and labour market needs, is valuable for improving the quality of higher education (Leuven Communiqué, 2009) and supports the implementation of student-centred learning paradigm (Adam, 2008). Although this vision of learning outcomes is used as the foundation for the national policies and quality frameworks implemented around Europe since the Bologna process in 1999 (Cedefop, 2017), there is little evidence of the benefits resulting from the implementation of learning outcomes in these suggested ways. Brooks, Dobbins, Scott, Rawlinson, and Norman (2014), for example, argue that there is still lack of convincing evidence for

learning outcomes leading to student-centred learning. Their study revealed that learning outcomes help students to focus their learning, but it does not necessarily mean that learning outcomes support students in being active, autonomous, responsible, and self-directed learners (Brooks, Dobbins, Scott, Rawlinson, & Norman, 2014). Similarly, it is pointed out that while different verbs, denoting the required depth of thinking and abilities of students, can be used in designing the learning outcomes, it is not given that a particular design will inevitably add any expected value to students' learning (Cedefop, 2017). There is a substantial gap in the literature which highlights the lack of evidence regarding whether the design of learning outcomes has any effect on students learning.

To address this issue, the current paper aims at contributing to the understanding of how the design of learning outcomes relates to students' perceptions of their achievement of the intended learning outcomes (henceforth learning outcomes), their motivation, satisfaction and engagement of the studied course units in the Estonian higher education settings.

2. Learning outcomes political and educational perspective

Although learning outcomes have been implemented for decades, researchers are continuously debating whether learning outcomes

* Corresponding author at: School of Educational Sciences, Tallinn University, Narva mnt 25, Tallinn, 10120, Estonia.

E-mail addresses: kkumpas@gmail.com (K. Kumpas-Lenk), eve.eisenschmidt@tlu.ee (E. Eisenschmidt), anneli.veispak@gmail.com (A. Veispak).

¹ ‘course unit’ according to the ECTS Users' Guide (2015) denotes a self-contained, formally structured learning unit that is part of a curricula and has explicit set of learning outcomes, defined learning activities and appropriate assessment criteria. This is equivalent to the term ‘course’ used in Northern America and to the term ‘subject’ used in the Estonian system.

primarily support the educational process or if they exist simply to satisfy bureaucratic needs (Brooks et al., 2014; Hadjianastasis, 2017; Hussey & Smith, 2008).

The underlying idea of designing learning outcomes is to clarify the goals of the learning process from students' perspective. The Bologna process policies regulate the use and the design of learning outcomes, but also aim at measuring how successful the implementation of its regulations has been (Murtonen, Gruber, & Lehtinen, 2017). Therefore, it has been argued that learning outcomes tend to serve universities as easily measurable markers of quality assurance (Hussey & Smith, 2008). Hence, the obligation of designing learning outcomes in the context of the quality assurance has been criticised as adding bureaucratic burden to teachers (Hussey & Smith, 2008; Murtonen et al., 2017) and is seen as a monitored indicator of academic teaching ability (Seema, Udam, Mattisen, & Lauri, 2017). This might explain why it is asserted that imposing national standards (e.g. qualifications frameworks) for how learning outcomes ought to be used, may limit teachers' and higher education institutions' autonomy, creativity and enthusiasm (Melton, 1996).

However, from the educational perspective, it is clear that learning outcomes, irrespective of whether they are designed in accordance with general policies or not, are just words on paper, unless they reflect the actual activities undertaken in learning situations. The idea is captured in Biggs' (2014) concept of constructive alignment, which states that in order to engage students, the teaching- and assessment methods must be planned to constructively enable the achievement of the designed learning outcomes. The starting point in the constructive alignment is the design of learning outcomes, which provide transparency in intentions and guiding principles for planning the assessment and teaching methods. The planned activities in learning outcomes are ought to reflect teachers' intentions what students should achieve as a result of their learning (Biggs & Tang, 2011).

Although the outcomes-led format of planning has been mandated in higher education for almost 20 years, the research shows that teachers are still struggling in designing learning outcomes that engage students (Cedefop, 2017; Dean & Wright, 2017; Hadjianastasis, 2017) and students have not clearly understood how learning outcomes benefit their learning (Brooks et al., 2014). These results seem to imply that the fundamental purpose that learning outcomes are ought to serve, has gotten lost in the processes of policy regulated quality assurance and indicate how learning outcomes have become more of a "mechanical tool" in the higher education pedagogy (Hussey & Smith, 2008).

3. Students' perceptions of learning outcomes

Although students are at the heart of the concept of learning outcomes, not many studies have explored students' perceptions of their learning experiences in the outcomes-led educational settings (Hadjianastasis, 2017). The results of those studies are not always unanimous. On one hand, it was found that an outcomes-led- and a "regular" course unit did not radically differ in students' experiences, reflecting a similar level of satisfaction (Deneen, Brown, Bond, & Shroff, 2013). In another study, on the other hand, students have evaluated learning outcomes both to restrict and splinter their knowledge, as well as to support their learning (Brooks et al., 2014).

Although from slightly different perspectives in different studies, students' perceptions give valuable feedback to the design of learning outcomes. Kyndt, Berghmans, Dochy, and Bulckens (2014) for example, reported that students dislike a course design where the curriculum was presented as a list of topics that should be memorised. However, being in control of the progress of the course unit and being able to choose the learning approaches to achieve the learning outcomes, related to students higher levels of satisfaction.

Several studies have concluded that learning outcomes, when designed within a narrow spectrum, limit students' learning and result in a lack of intellectual challenge (Brooks et al., 2014; Van der Horst &

McDonald, 1997) and reduce students engagement with their studies (Hadjianastasis, 2017). Reduced level of engagement is reflected in unsatisfactory preparation for classroom activities, reduced participation, declining attendance, and greater reliance on teachers for knowledge acquisition (Baron & Corbin, 2012). Disengaged students are more likely to experience difficulties and are at high risk of dropping out of studies (Fredricks, Blumenfeld, & Paris, 2004; Wilson et al., 2014).

4. Design of learning outcomes

Teachers are responsible for preparing the teaching and learning events by indicating what skills, knowledge, and attitudes students should develop as a result of their learning (Biggs, 2014). Brophy (2013) emphasizes that students should constantly be challenged with tasks that include skills and knowledge beyond their current level of mastery to keep up their motivation and engagement. Brophy's views are in accordance with the general principles of student-centred learning, which state that the aim of teaching is to stimulate students in becoming active and autonomous learners (Prosser & Trigwell, 1999). Autonomy is one of the psychological needs, which fosters motivation for and engagement with any activity currently at hand (Ryan & Deci, 2000). Even though teachers are considered as the key agents in designing student-centred learning environments (Morcke, Dornan, & Eika, 2013), the aim of becoming active and autonomous in learning sets new responsibilities for both teachers and learners. New responsibilities might cause reluctance, as transforming the ways of thinking and learning may be difficult, uncomfortable and take time (Prosser & Trigwell, 1999). Donche and Van Petegem (2011) add that before teachers are able to support students in becoming autonomous learners, teachers themselves need to master the desired competencies which facilitate autonomy and responsibility in learning. Similarly, Hadjianastasis (2017) has found that teachers design learning outcomes without paying much attention to how the designed learning outcomes may affect the way they teach and most importantly, how students learn.

It is evident that without a supportive system and preparation, it may be difficult for teachers to adjust and change their views of learning and teaching, especially when they are most familiar with a teacher-centred paradigm (Biggs, 2014; Hadjianastasis, 2017; Struyven, Dochy, & Janssens, 2010). To understand how learning outcomes affect students' learning, it would be relevant to take a closer look of what constitutes the design of learning outcomes relative the levels of cognitive demand.

4.1. Bloom's Taxonomy of cognitive demand

While designing the content and delivery of the course unit and its learning outcomes, university teachers must consider the specific requirements of the discipline in question as well as ways of how to challenge students to develop their cognitive abilities. There are several models which help teachers to design learning outcomes e.g. Solo taxonomy (Biggs & Tang, 2011), Kirkpatrick's four level organisational training evaluation framework (Praslova, 2010), taxonomy of significant learning (Fink, 2013). However, Bloom's Taxonomy of cognitive demand has been widely used and suggested as a guiding tool for designing learning outcomes in the Bologna process (Booker, 2007). Hence, in the current study, a revised version of Bloom's Taxonomy (Krathwohl, 2002) was used for classifying learning outcomes.

Bloom's Taxonomy is a hierarchical framework, which allows classifying the verbs and nouns in learning outcomes between six potential levels (i.e. 1. Remember, 2. Understand, 3. Apply, 4. Analyse, 5. Evaluate, 6. Create), where the first is considered the lowest and sixth level the highest of cognitive demand.

According to Bloom (1978), learning should be challenging and lead students to incrementally achieve higher order levels of the taxonomy.

Download English Version:

<https://daneshyari.com/en/article/6848931>

Download Persian Version:

<https://daneshyari.com/article/6848931>

[Daneshyari.com](https://daneshyari.com)