

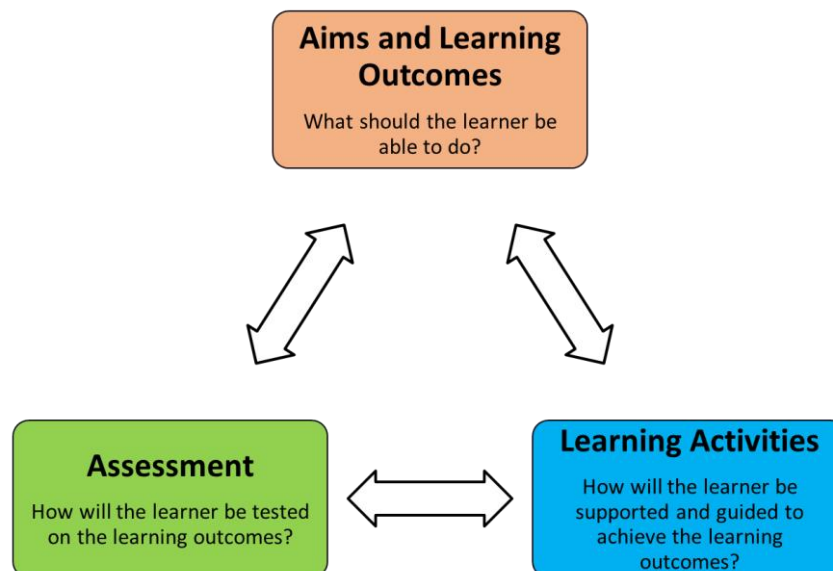
Concept: Constructive Alignment

Brief overview of concept:

Constructive alignment, proposed by Professor John Biggs (Biggs, 1999, 2003)¹, focuses on defining the intended learning outcomes (ILOs) we want our students to achieve, then aligning our teaching and assessments to enable ILOs to be met.

“In constructive alignment we systematically align the teaching/learning activities, and the assessment tasks to the intended learning outcomes, according to the learning activities required in the outcomes” (Biggs & Tang, 2007, p.7).

At its core is the importance of designing assessment activities that enable individuals to fully demonstrate the learning outcomes of a course; it is therefore an outcomes based model. In this approach to demonstrate how well individuals have met the learning outcomes assessment criteria also need to be aligned.



In the EAT Framework (2022) the concept of alignment is developed much further and is evidenced throughout the framework. For example:

- To understand what good is (AL1) you need a good understanding of what products are needed to meet the required learning outcomes.
- In AD 2 which is all about designing assessment it is about ensuring that LOs, assessment criteria and assessment tasks are all aligned.

¹ Note the constructive alignment model is attributed to [Biggs \(1999, 2003\)](#) but the essentials were formulated by [Tyler \(1949\)](#) some 50 years earlier – and elaborated in the 1980s by [Shuell \(1986\)](#). At its most basic, the model requires alignment between the three key areas of the curriculum, namely, the intended learning outcomes, what the student does in order to learn, how the student is assessed.

More broadly, alignment is also looked at in relation to which the assessment learning outcomes and assessment activities align with one another across a programme: Do they enable progression? Does the development of specific learning outcomes take place in the right order? Where is best in a programme to focus on a specific LO? What LOs need to be progressively tested and which ones are discrete to specific units of assessment and why?

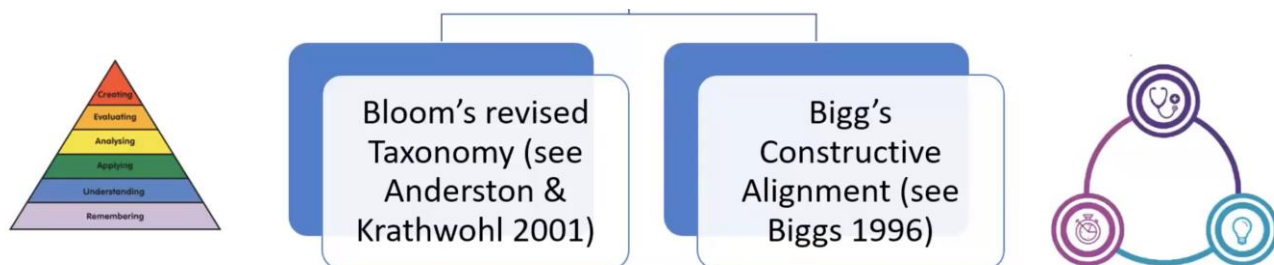
We can also look at alignment from a feedback perspective (AL1). Does the feedback given to students align with the intended learning outcomes and assessment criteria for a specific task. (AF1). From a design perspective does formative feedback precede summative feedback; this can also be seen as an alignment issue.

Do feedback opportunities all align to enable students to be able to judge the quality of their work for themselves (AF4). This about programming all the feedback activities so they align to maximise student understandings. For example, opportunities for students to test their own understandings of quality (AF2), work with others to develop shared understandings of quality (AF3).

Constructive alignment is a student-centred and active learning approach, that capitalises on the powerful effect of assessment to promote deep learning and enhance the quality of learning and teaching in higher education. The key concept underpinning constructive alignment is that the learning is constructed by the activities of the students, not through the actions of the teacher. Assessments should be designed to focus on evaluating how well students have met the learning outcomes, not on how well they can relay back information they have been given in class or asked to read.

A related concept to explore the relative quality of learning is that of educational taxonomies. Various educational taxonomies are available for mapping different levels of understanding. The “SOLO” (Structure of the Observed Learning Outcome) taxonomy can be used to classify learning outcomes in terms of their complexity, with the aim of assessing the quality of a student’s work rather than just quantifying how many bits they got right or wrong. Each learning outcome contains a verb, such as “explain” or “apply” to describe a learning activity for students to perform that will best enable them to demonstrate a specific cognitive skill.

The revised version of Bloom’s taxonomy (Anderston & Krathwohl, 2001) is the most used tool for setting ILOs in Higher Education. Educational taxonomies can, and should, be used to build different levels of complexity into our ILOs and to develop effectively aligned marking criteria.



Students should be able to use constructively aligned marking criteria to assess the quality of their own work and that of others. If done well this can improve student assessment literacy and self-regulation. Glossaries can be created and added to marking criteria to ensure all terms (e.g. the meaning of verbs like “critique”) are clear and examples provided. Constructive alignment has been shown to improve both student satisfaction and grades.

References

- Anderson, L. W., & Krathwohl, D. R. (2001). *A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives: Complete Edition*. New York: Longman.
- Biggs, J. (1996) Enhancing teaching through constructive alignment. *Higher Education* **32**: 347–364 <https://doi.org/10.1007/BF00138871>
- Biggs, J. (1999). *Teaching for quality learning at university*. Buckingham: SRHE/OU Press.
- Biggs, J. (2003). Aligning Teaching for Constructing Learning. *The Higher Education Academy*, 1(4). <https://www.researchgate.net/publication/255583992>
- Biggs, J. (2014). Constructive alignment in university teaching. *HERDSA Review of Higher Education*, **1**, 5-22.
- Biggs, J., & Tang, C. (2007) *Teaching for Quality Learning at University*. 3rd Edition, McGraw Hill, UK
- Larkin, H., & Richardson, B. (2013): Creating high challenge/high support academic environments through constructive alignment: student outcomes. *Teaching in Higher Education*, **18**(2): 192-20.
- Shuell, T. J. (1986). Cognitive Conceptions of Learning. *Review of Educational Research*, **56**(4), 411–436. <https://doi.org/10.3102/00346543056004411>
- Tyler, R.W. (1949). *Basic principles of curriculum and instruction*. Chicago: University of Chicago Press.



Co-funded by the
Erasmus+ Programme
of the European Union

This project has been funded with support from the European Commission (Grant Number: 2020-1-UK01-KA203-079045). This Web site reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.