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## Constructive Alignment Approach: Enhancing Learning and Teaching

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**ABSTRACT:** *The main focus of this paper is grounded in the assumption that the constructivist approach to learning and teaching is absent from the educational practices of a reasonable number of higher education (HE) institutions. Learning and teaching practices in some of these institutions are still based on the traditional approach (Livingstone, 2014). Teacher-centered strategies are still employed, where the teachers impart knowledge and students are passive learners and therefore they are not given the opportunity to have autonomy over their learning. In this way, students are not experiencing enough chances to interact and communicate while doing their defined assignments. Accordingly, this paper outlines/pinpoints the specifications of the constructive alignment approach which could be used to put an end to this daunting situation in HE organizations through designing/developing the existing programs to meet the 21<sup>st</sup> century cognitive skills perspectives. In my experience, constructive alignment framework could enable educational practitioners to create /develop programs based on the actual needs of the target learners in different contexts. Also, the involved staff could plan learning and teaching activities applying this approach in the given daily lessons. Furthermore, Biggs and Tang (2011) note that quality learning ensures that learners use the right cognitive skills required to gain knowledge and this could pave the way for their lifelong learning.*

**KEYWORDS:** constructive, alignment, approach, learning, teaching

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### INTRODUCTION

It is relatively good for higher education institutions as well as vocational training centers to replace their current traditional approaches of learning and teaching and embrace more modern approaches through applying the principles of constructive alignment framework to: create spaces for students to be constructive in their learning process, to help students pursue significant educational experiences and this undoubtedly will improve and maximize their learning outcomes. This paper entails six main sections covering the main specifications of constructive alignment approach. Following this introduction, I will elaborate some perspectives of the constructive alignment approach noted by some researchers in the existing literature. Then in section III, I will explain the aspects/principles of constructive alignment in terms of constructivism, alignment and

deep learning approaches. Then, section IV demonstrates how to apply constructive alignment strategy in teaching and preparing new lesson plans including learning-teaching activities. After that, section V will focus on the benefits of using constructive alignment approach based on the conclusions/findings of some educational practitioners in different contexts. Finally, section VI indicates the constraints of constructive alignment application and what teachers need to apply it properly.

### **Constructive Alignment Interpretations**

Biggs and Tang (2011) define the constructive alignment as the unity between intended learning outcomes (ILOs), learning and teaching activities (LTAs), and assessment tasks (ATs) in an educational program, where the connections between them are aligned intrinsically on the basis of the learning activities expressed in the outcomes statements. Accordingly, it is utilized to be an approach to curriculum design that optimizes the conditions for learning, where the teaching activities of the teacher and the learning activities of the student are both directed towards the same goal. In addition to this, Shuell (1986) assumes that teaching will be more productive when there is consistency between what instructors want students to learn, how they teach and how they assess students' academic performance. Therefore, educational psychologist John Biggs formulated a course design model called constructive alignment (henceforth CA) in 1994 to describe this consistency. Biggs (cited in White, 2012:18) pinpoints that:

*the fundamental principle of constructive alignment is that a good teaching system aligns teaching method and assessment to the learning activities stated in the objectives so that all aspects of this system are in accord in supporting appropriate student learning.*

As demonstrated below in Figure 1 by Biggs (1999), the concept of this system is that alignment between teaching and learning activities and assessment tasks will result in better student learning which means achieving the intended learning objectives.

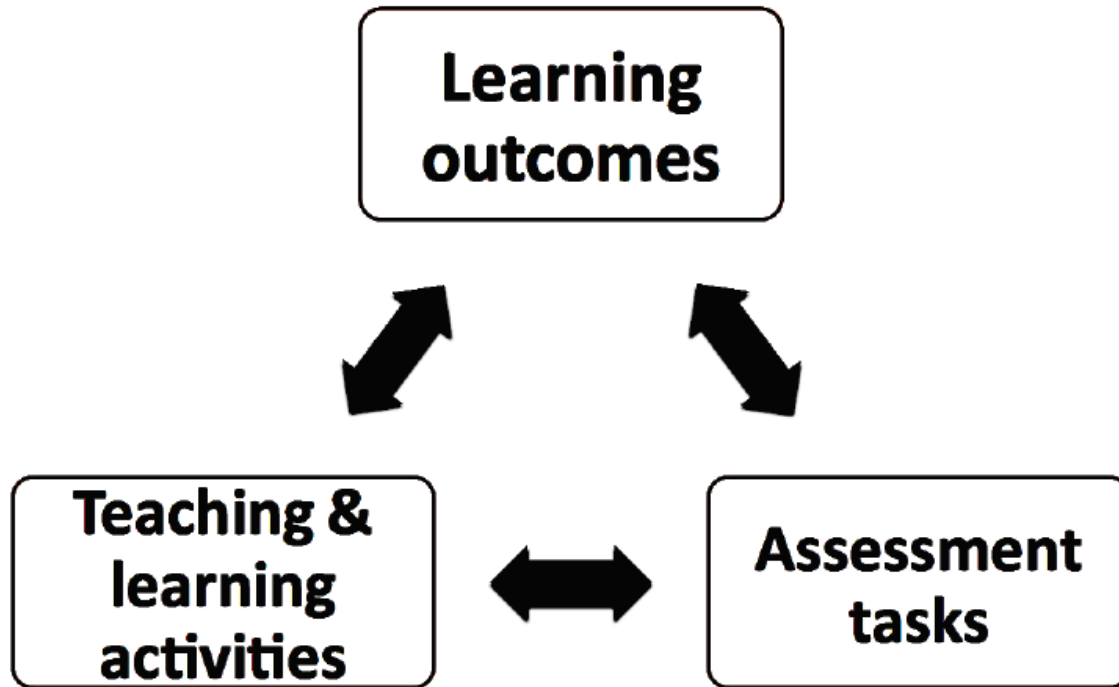


Figure1: Constructive alignment model of course design (adapted from White 2012:17).

I totally agree with Kabouha's (2015) conclusion that constructive alignment approach provides an effective framework for constructing program elements in a systematic approach to obtain high-level learning outcomes because the learners' performance and practice are based on authentic tasks that are relevant to the main goal of the program. In my perspective, the CA could be an effective solution to improve the language program in my professional context program as the real goal of the course is driven from actual language needs of the trainees. More importantly teaching and learning activities could be aligned with assessment tasks to enhance learning process and achieve the intended objectives. In short, most researchers consider that constructive alignment is a principle stating that teachers should try to align (1) what the students need to do, in order to learn, with (2) what is being assessed. In other words, Constructive alignment is based on the relationship among (1) active learning, (2) intended learning outcomes and (3) assessment activities.

### **Constructive Alignment Aspects**

The main principles of the CA are based on the fact that the learner is the center of the learning process and that learning is based on what the student does with a teacher playing an advisory and facilitative role. Duffy and Cunningham (1996, cited in White 2012) postulate that learners should have the opportunity to construct knowledge instead of being the receivers of knowledge through instruction. Constructive alignment is constructive because it is based on the theory of

constructivism (the first aspect) which indicates that students should construct meaning from the activities they do to learn. The second aspect, alignment, reflects the learning activities in the intended outcomes, expressed as a verb that has to be activated in the teaching to achieve the outcome. Once the verbs (such as reflect, hypothesize, solve, generate) are defined, it becomes clear what the LTAs to engage the student might be, and what the student needs to complete in the ATs. In this way, ATs verify that the learning outcomes have been achieved and therefore, the LTAs as well as the ATs should be designed to meet the ILOs.

In addition to this, Biggs & Tang (2007:52) point out that the CA entails two main aspects because “*it was based on the twin principles of constructivism in learning and alignment in the design of teaching and assessment.*” The first aspect, it is constructive because it implies the constructivist theory in which students are the constructors of their knowledge and skills through applying the given learning activities. The second aspect, alignment principle is explained by Biggs (cited in Dames, 2012) noting that:

*Alignment in constructive alignment reflects the fact that the learning activity in the intended outcomes, expressed as a verb, to be activated in the teaching of the outcome is to be achieved and in the assessment task to verify that the outcome is achieved. (p.38).*

Dames (2012, cited in Kabouha, 2015) adds another significant aspect of CA approach assuming that constructive alignment cannot be achieved or implemented in an educational system which does not allow to change or amend its module descriptors. This reinforces that learning is a lifelong process which empowers students to construct their knowledge through their lifetime.

Furthermore, Biggs (2009) believes that CA theory resonates deep learning concept and it helps implement this concept; deep learning process requires a strong teaching technique which results from applying constructive alignment principles. Lawrance and Snyder (cited in Kabouha, 2015:84) conclude that deep learning “*leads to understanding and long term retention of concepts so that they can be used for problem solving in unfamiliar concepts.*” In my norm, this leads to better learning for the intended outcomes and achieve a successful learning process in an interesting way as the learners construct their knowledge themselves and this may enhance their learning motivation.

### **Constructive Alignment Application**

In application of constructive alignment, teachers should begin with what the student knows in order to urge the student to compare the old or known information or to process from the new and unknown information and this allows the student to grasp new information more quickly. In this strategy, the teacher aligns the planned learning activities with the learning outcomes taking into their account the following:

- language instructors should design their lesson plans in such a way that instructional objectives, learning and teaching activities, and assessment strategies employed in evaluating students learning are well aligned with one another.
- the alignment of performance standards, instructional objectives, and assessment strategies is necessary to achieve an accurate evaluation of students’ academic performance.
- Teachers should ensure that the assessment improves the process of learning and teaching. For instance, when the lesson is aligned, higher cognitive processing will be required and thus the assessment tasks will require higher order thinking skills and not simple recall of information (as noted by Biggs, 2003).

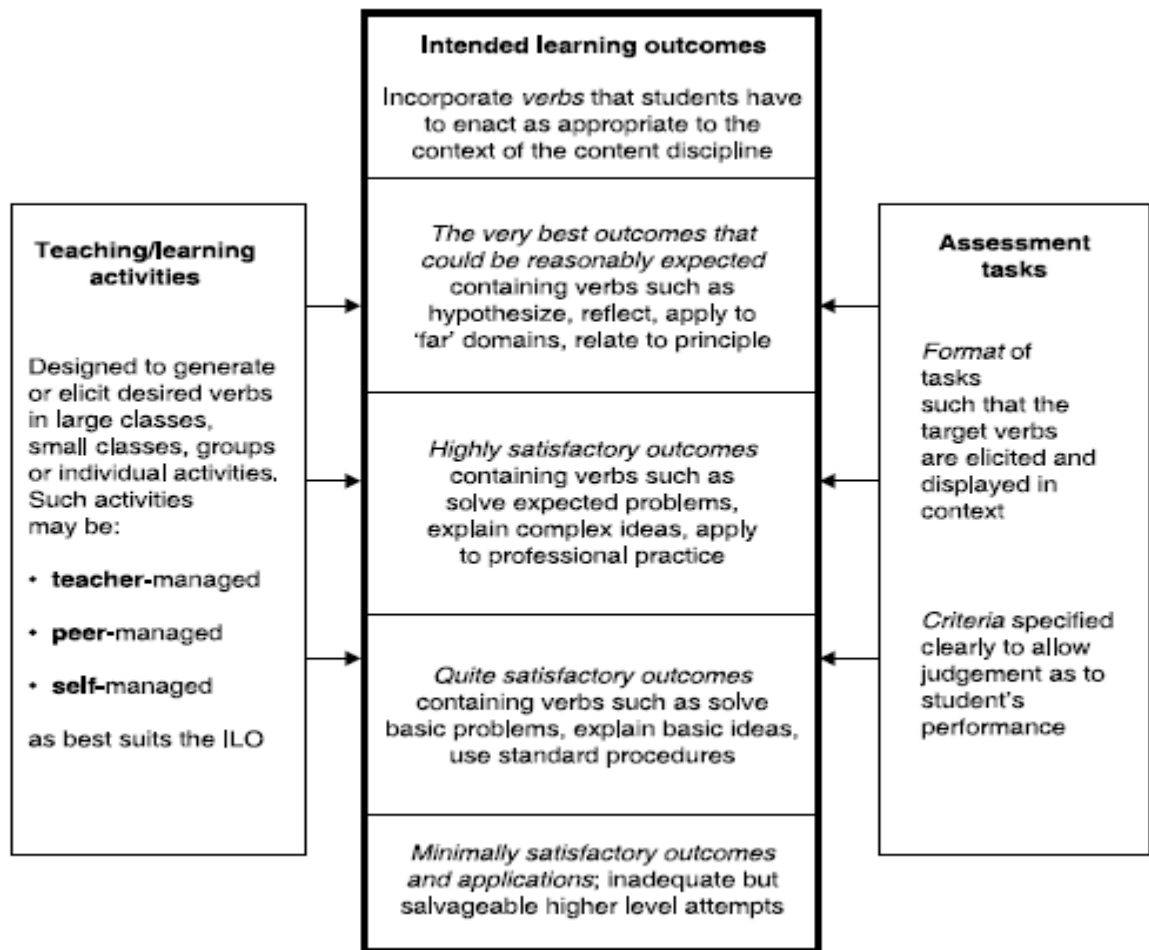


Figure2: aligning intended learning outcomes, teaching and assessment tasks (adapted from Biggs and Tang, 2011:105)

As shown in figure 2 above, Biggs and Tang (2011) present a general framework for teaching according to constructive alignment system. After defining the intended learning outcomes (ILOs), teaching and learning activities (TLAs) should be developed or designed in such a way which enables students to involve in these activities to construct their knowledge or skills identified in the ILOs. Next, we create assessment tasks (ATs) by using the same verbs expressed in the ILOs to tell us how well students meet the descriptors expressed in the ILOs. In this way, ILO, teaching and assessment are aligned.

### **Benefits of Applying Constructive Alignment**

21<sup>st</sup> century learning and teaching should be based on constructive alignment framework for the following benefits:

- aligning between teaching and learning activities and assessment tasks will result in better student learning. (Biggs, 1999).
- aligned teaching systemizes what good teachers have always done. (Biggs and Tang, 2003)
- aligning of teaching, learning and assessment with the ILOs results in the learner being ‘trapped’ unable to escape without learning what was intended (Biggs, 2003)
- producing a successful outcomes-based curriculum.
- helping students develop critical thinking, problem-solving, active and reflective use of knowledge. (Chau 2013)
- helping language educators to get students actively involved and assess them in ways that enhance the quality of learning.” (White, 2012).
- being effective in constructing new knowledge based on prior learning and experiences of the learners.
- shifting the learning environment from teacher-centered to student-centered.
- being the starting point when designing a language course, or a learning module that is based on what students should know and be able to demonstrate at the end of a particular course.
- aligning between what we want, how we teach and how we assess makes teaching much more effective.

- providing a useful framework for constructing learning by aligning teaching, if students are to achieve desired outcomes such as developing functioning knowledge or professionally relevant understanding. (Biggs, 2003)
- helping students to be actively involved in building up their knowledge of the target language through the use of authentic interactional tasks in a meaningful conversational environment.
- implementing the concept of deep learning which leads to understanding and long term retention of concepts. (Lawrence & Snyder, 2009)
- being applicable at all levels of university teaching (curriculum, module, course, learning unit, individual lecture).

To conclude, constructive alignment theory, as noted by Biggs, is "one of the most influential ideas in higher education. If any university intends to remain credible and authentic, then it must embrace educational sustainability through a using cutting-edge curriculum which will guarantee the promotion of positive learning, the ignition of learner enthusiasm for learning, and the provision of a strong foundation for creativity, application and life-long learning.

### **Constraints of Constructive Alignment Application**

As believed by Biggs and Tang (2007:61), there are some reasons for not using constructive alignment principles in teaching so far due to the following:

- Traditional transmission theories of teaching ignore alignment because "*The aim is to get a spread between students, not to see how well individuals have learned what they were supposed to have learned*" and therefore, there is no connection between what is taught and what is tested.
- Some instructors believe that "*there is nothing wrong with current practice*" and they even do not seek to elicit their students' feedback to improve it.
- Some administrative factors make alignment difficult, but not impossible, such as resource limitations, large classes with mass lecturing and multiple-choice testing. To apply constructive alignment, such policies and practices need to be amended.
- Teachers had no idea about constructive alignment theory, or they might know the principle, but they do not know how to apply it.
- The initial stages of setting up an aligned teaching system require careful consideration and possibly also redesign of the curriculum. This can be a challenge in educational settings where planning time is a scarce resource, such as in compulsory education/curriculum.

To solve some of the above-mentioned obstacles, Biggs in figure 3 below demonstrates the importance of raising teacher assessment literacy level before starting applying the CA approach; the involved teachers should be well-trained on how to create assessment tasks based on the intended learning outcomes to be used for learning and teaching activities before applying constructive alignment approach. In short, I strongly agree with Biggs' assumption that increasing teachers' assessment literacy may facilitate applying CA approach.

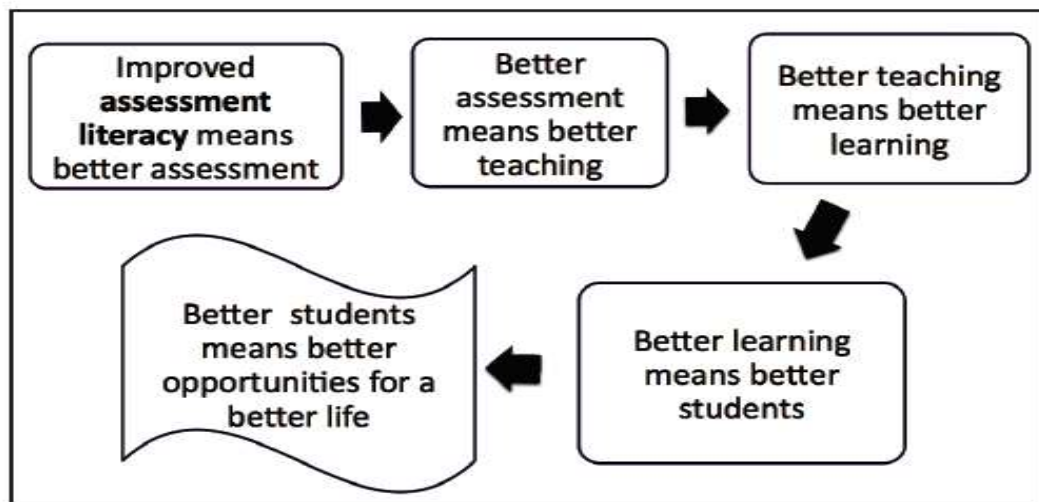


Figure3: Impact of teacher assessment literacy on student learning (Biggs 1999, cited in White, 2012:19).

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