



# Alignment of Assessment Tasks with the Intended Learning Outcomes in “EPP” and “EMS” courses of ELESP UNJ: A Content Analysis

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## Abstract

*This study aims at investigating the extent to which assessment tasks (ATs) and intended learning outcomes (ILOs) in Phonetics & Phonology (EPP) and English Morphology & Syntax (EMS) courses of ELESP are well aligned, and how their alignment with the knowledge (KD) and cognitive process dimension (CPD) is. Deductive qualitative content analysis techniques were implemented on the RPS document and assessment tools. It was found that 83% of the ATs in the EPP course are well-aligned with the ILOs. They support the students' ability to Remember (8,82%), Understand (20,59%), and Apply (41,18%) the Conceptual (82,35%) and Procedural (17,65%) knowledge, while Analyze and Evaluate cover 2,94% and 26,47% respectively. However, the ATs tested students' ability to Understand (25%) and Apply (75%) Conceptual (95%), and Metacognitive (5%) knowledge resulting in a misaligned teaching and learning exercise. In the EMS course, three out of six items (50%) of ATs are partially aligned, while only one AT (17%) is well-aligned with the ILOs. The ILOs support the students' ability to Understand (50%) Conceptual (66,67%) and Metacognitive (33,33%) knowledge while the Analysis covers 50%. However, the ATs tested students' ability to Understand (66,67%) and Apply (33,33%) Conceptual (100%) knowledge was misaligned.*

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## INTRODUCTION

Effective educational program performance is determined not just by the assessment itself, but also by the standard of the assessment (Van der Vleuten, Sluijsmans, & Joost, 2017). A successful assessment should be aligned with intended learning outcomes in the curriculum, as well as the teaching methods. The concept is well-known as the ‘constructive alignment’ (Biggs J., 2003).



When there is a lack of positive coordination between curriculum goals, learning/teaching practices, and assessment, assessment's effectiveness as a driving force for learning is hindered (Biggs J., 1996). Poor assessment quality has serious consequences for students. It can have impacts on students' learning and performance, teachers' teachings and feedback to students, as well as program and institutional responsibility. As a result, educational institutions must ensure that assessment quality is maintained well (Gerritsen-van Leeuwenkamp, Brinke, & Kester, 2017).

As a systematic gathering, review, and use of data on educational programs for the objective of improving student learning and development (Banta & Palomba, 2015), assessment can come as a formative and summative assessment. Assessment Tasks (ATs) in this study refer to "course assignments" for which certain marking and grading are applied and affect student success in the respective course that occurs at the end of the unit/course (summative assessment). Given at the end of a unit or term to indicate student progress (Earl, L. M., & Katz, M. S., 2006), its goal is to assess or summarize the student's understanding (Brown, 2004). This study took the mid-test and final tests of the two courses to measure whether students have successfully passed the intended learning outcomes (Kibble, 2017).

Assignment should be in line with the learning objectives, which Biggs' (2014) introduces as the concept of "constructive alignment" stressing that the focus of the content of the assessment tasks (ATs) of a course should match that of the intended learning outcomes (ILOs). This will help ensure that student learning achievement will be measured regarding the intended learning outcomes. ILO itself is supposed to specify the focus and scope of course content, ie., stating explicitly what knowledge students are to learn and what they should be able to do with that knowledge (Anderson & Krathwohl, 2001; Krathwohl, 2002; Graves, 2014; McMillan, 2018). In other words, ILO specifies the 'learning target' or what students should know and be able to do, that students are expected to achieve/master by the end of the course (Nation & Macalister, 2010; Graves, 2014; McMillan, 2018).

The level of difficulty in tasks needs to be considered also, given from the easiest to the hardest so that students can feel challenged but at the same time successful with their own learning. Thus, Bloom's Taxonomy should be taken into account. The matrix of Revised Bloom's Taxonomy (RBT) provides two dimensions: the knowledge dimension is on the vertical axis, and the cognitive process dimension is on the horizontal axis. The cells are formed by the intersections of the two axes. The noun(s) or noun phrases in the objects are represented by rows, whereas the verb(s) are represented by columns. The knowledge dimension is realized in the formulation of objectives in the form of 'nouns' which represent the focus of the learning. It covers four levels of categories, from concrete to abstract: (A) factual knowledge (A.1. Knowledge of terminology, A.2. Knowledge of specific details and elements); (B) conceptual knowledge (B.1. Knowledge of classifications and categories, B.2. Knowledge of principles and generalizations, B.3. Knowledge of theories, models, and structures); (C) procedural knowledge (C.1. Knowledge of subject-specific skills and algorithms, C.2. Knowledge of subject-specific techniques and methods, C.3. Knowledge of criteria for determining when to use appropriate procedures); and (D) meta-cognitive knowledge (D.1. Strategic knowledge, D.2. Knowledge about cognitive tasks, including appropriate contextual and conditional knowledge, D.3. Self-knowledge) (Anderson & Krathwohl, 2001; Krathwohl, 2002).

The cognitive process dimension in RBT includes six categories: (1) remembering with subcategories 1.a Recognizing (identifying) & 1.b Recalling (retrieving); (2) understanding with subcategories 2.a Interpreting (clarifying, paraphrasing, representing, translating), 2.b Exemplifying (illustrating, instantiating), 2.c Classifying (categorizing, subsuming), 2.d Summarizing (abstracting, generalizing), 2.e Inferring (concluding, extrapolating, interpolating, predicting), 2.f Comparing (contrasting, mapping, matching), 2.g Explaining (constructing models); (3) applying with subcategories 3.a Executing (carrying out), 3.b Implementing (using); (4) analyzing with subcategories 4.a Differentiating (discriminating, distinguishing, focusing, selecting), 4.b Organizing (finding, coherence, integrating, outlining, parsing, structuring), 4.c Attributing (deconstructing); (5) evaluating with subcategories 5.a Checking (coordinating, detecting, monitoring, testing), 5.b Critiquing (judging); and (6) creating with subcategories 6.a Generating (hypothesizing), 6.b Planning (designing), 6.c Producing (construct). The cognitive process dimension describes the level of thinking processes, from 'simple' to 'complex', from Lower-Order Thinking (LOT) to Higher-Order Thinking (HOT) (Anderson & Krathwohl, 2001; Krathwohl, 2002). For practical use in the field, the dimensions of cognitive processes are contained in the form of 'verbs' which are used to describe behaviors that students must be able to demonstrate as a result of their learning.

In terms of alignment, Amer (2006) in his research stated three levels of alignment. (1) Complete alignment (well-aligned) is when the objective and assessment task instruction, all fall into the same cell (eg., apply procedural knowledge). (2) Partial alignment (partially aligned): when the objective and assessment task instruction may all fall into the same column but differ in terms of the row in which they are classified (eg., B2 and C2). Similarly, the objective and AT instruction may all fall into the same row (i.e., type of knowledge), but differ in terms of the column in which they are classified (i.e., cognitive process category). And (3) Misalignment (misaligned): when the objective and AT instruction may all not fall into both the same column and row (eg., A2 and D3).

A relevant study has been conducted by Ahmar Mahboob (2008). The research is about assessment in higher education: A case study of one course in Australia. The result of the study showed that the coordinator had planned the unit aims to be aligned with the assessment. It was also stated that, in most cases, students found the assessment to be beneficial in accomplishing their learning goals because it was aligned with the unit's goals. Another research related to this study has been conducted by Fitzpatrick et al. (2015) about the Alignment of Learning Objectives and Assessments in Therapeutics Courses to Foster Higher-Order Thinking. The alignment of content and cognitive processes was found to be unsatisfactory—as 50% of the ATs were not aligned with the course objectives. They did not correlate with the objectives in the course syllabus. Moreover, the results of research from Jideani & Jideani (2012), FitzPatrick, Hawboldt, Doyle, & Genge (2015), and Kabouha & Elyas (2015) on the alignment of curricula and subject units of the study programs are the focus of their respective research shows that the alignment between the objectives and assessment of learning in subject units still do not meet the minimum expectations. OECD/ADB (2015) found that despite the need for urgent changes in the quality of higher education instructional facilities, relatively little attention is given to conducting empirical studies on teaching and learning processes in Indonesian higher education institutions.

The previous studies above and most articles about the alignment of learning objectives and assessments on the internet focus on either identifying the knowledge dimension or cognitive process dimension only. Thus, this study focused on examining the alignment between assessment tasks with learning objectives in terms of both dimensions. To be specific, this study aims at investigating the extent to which ATs and ILOs in EPP and EMS courses of ELESP are well-aligned, and how the alignment between the courses' ATs and ILOs in terms of their knowledge dimension and cognitive process dimension is.

## RESEARCH METHOD

The research data were collected using deductive qualitative content analysis (DQCA) techniques (Hsieh & Shannon, 2005; Elo & Kynga, 2008; Gavora, 2015; Mayring, 2014) to the RPS document and assessment tools. It is used when assessing the value of something based on the framework. It is suitable to map the alignment of learning content in this study with a mixed research approach or mixed methods.

The RBT matrix or RBT table (Table 1) is used as the framework of reference for collecting and interpreting data. The validity of the data in the steps of processing, organizing, and interpreting the data is supported by the use of the RBT matrix which is derived from the theory of learning objectives from Anderson & Krathwohl (2001). The research data of this study consists of two categories of generic data; (1) ILO, and (2) AT, both of which were extracted from the official RPS (Rencana Pembelajaran Semester) document published by ELESP UNJ. Summative assessment in this study refers to AT that occurs at the end of a unit/course/program for which certain marking and grading are applied and affect student success in the respective course. On the other hand, ILO in this study refers to those indicators of achievement of the course labeled as CPMK (Capaian Pembelajaran Mata Kuliah).

Analysis was carried out on each data category to identify (1) KD and (2) CPD based on the RBT Matrix. First, each ILO is placed in its appropriate cell or cells of the RBT matrix. The verbs and nouns in the ILO statement are utilized to position the objects in the correct cell. Second, each AT instruction is also placed in the proper cell, depending on cues provided by verbs and nouns included in the AT instruction. Third, using clues from included verbs and nouns, each AT is placed in its appropriate cell. Fourth, each derived from the analysis of the ILO and AT instruction is compared. Similar steps were used in the analytical procedure to identify the 'knowledge' type of topic and the 'cognitive demand' to get an idea of the alignment in terms of their KD and CPD.

**Table 1. RBT (Revised Bloom's Taxonomy) Matrix**

Knowledge Dimension	Cognitive Process Dimension					
	1 Remember	2 Understand	3 Apply	4 Analyze	5 Evaluate	6 Create
A. Factual	A1	A2	A3	A4	A5	A6
B. Conceptual	B1	B2	B3	B4	B5	B6
C. Procedural	C1	C2	C3	C4	C5	C6
D. Metacognitive	D1	D2	D3	D4	D5	D6



The steps of the data analysis were carried out by referring to the descriptive-qualitative content analysis model of Hsieh & Shannon (2005) and Mayring (2014) as follows:

1. Mapping the data that has been obtained based on the category/sub-category.
2. Checking the validity of the data, both 'formatively' and 'summatively'.
3. Reducing the data by tabulating it based on the nominal frequency and percentage of occurrence of categories/sub-categories that are the focus of the study.
4. Conducting a frequency analysis to see the central tendency that appears in the data.
5. Interpreting the meaning of the findings by referring to the research question and the research context.

## RESULTS AND DISCUSSION

**Table 2. The alignment between the ATs and ILOs in the EPP course**

EPP LO1.x & AT1.x		
ILO	AT	Alignment
LO1.1	AT1.1	Misaligned
LO1.2	AT1.2	Partially aligned
LO1.3-LO1.7	AT1.3-AT1.7	Well-aligned
LO1.8	AT1.8	Partially aligned
LO1.9-LO1.18	AT1.9-AT1.18	Well-aligned
Well-aligned		15 (83%)
Partially aligned		2 (11%)
Misaligned		1 (6%)
Total		18 (100%)

The following are some samples of how the learning content is analyzed:

*LO1.8: "Students can identify the phonemic and phonetic transcriptions of words"*

Based on the Knowledge Dimension and the Cognitive Processes in the RBT, the verb of the sample of ILO statement above Identify is at the level 1. Remember the cognitive process, and 'the phonemic and phonetic transcriptions of words' is B.3. Knowledge of theories, models, and structures, a subcategory of B. Conceptual Knowledge. Thus, this ILO is placed, in the RBT matrix, in cell B1.

*AT1.8: "Write each of the following words in phonetic transcription."*

Based on the Knowledge Dimension and the Cognitive Processes in the RBT, the verb of the sample of AT instruction above Write is at level 3. Apply the cognitive process, and '(words) phonetic transcription' is B.3. Knowledge of theories, models, and structures, a subcategory of B. Conceptual Knowledge. Thus, this AT instruction is placed, in the RBT matrix, in cell B3 of the RBT matrix.

From the ILO & AT content analysis above, it can be concluded that the alignment between AT1.8 with LO1.8 is partially aligned. According to (Amer, 2006), partial alignment is when the objective and AT instruction may all fall into the same row (i.e., type of knowledge), but differ in terms of the column in which they are classified (i.e., cognitive process category).

Table 3. The distribution of knowledge dimension and cognitive processes in the ILOs of the EPP course

ILO - English Phonetics and Phonology							
KNOWLEDGE DIMENSION	COGNITIVE PROCESS DIMENSION						TOTAL
	Lower Order Thinking Skill			Higher-Order Thinking Skill			
	1 Remember	2 Understand	3 Apply	4 Analyze	5 Evaluate	6 Create	
A. Factual	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
B. Conceptual	8,82%	2,94%	41,18%	2,94%	26,47%	0,00%	82,35%
C. Procedural	0,00%	17,65%	0,00%	0,00%	0,00%	0,00%	17,65%
D. Metacognitive	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
<b>TOTAL</b>	<b>8,82%</b>	<b>20,59%</b>	<b>41,18%</b>	<b>2,94%</b>	<b>26,47%</b>	<b>0,00%</b>	100,00%
		<b>70,59%</b>			<b>29,41%</b>		

Table 4. The distribution of knowledge dimension and cognitive processes in the ATs of the EPP course

AT - English Phonetics and Phonology							
KNOWLEDGE DIMENSION	COGNITIVE PROCESS DIMENSION						TOTAL
	Lower Order Thinking Skill			Higher-Order Thinking Skill			
	1 Remember	2 Understand	3 Apply	4 Analyze	5 Evaluate	6 Create	
A. Factual	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
B. Conceptual	0,00%	20,00%	75,00%	0,00%	0,00%	0,00%	95,00%
C. Procedural	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
D. Metacognitive	0,00%	5,00%	0,00%	0,00%	0,00%	0,00%	5,00%
<b>TOTAL</b>	<b>0,00%</b>	<b>25,00%</b>	<b>75,00%</b>	<b>0,00%</b>	<b>0,00%</b>	<b>0,00%</b>	<b>100,00%</b>
		<b>100,00%</b>			<b>0,00%</b>		

In the EPP course, overall, it was found that one of eighteen items (6%) of AT is not aligned with the course's ILOs, and two of eighteen items (11%) of AT are partially aligned, the rest ATs (83%) are considered well-aligned with the ILOs. On other hand, in the distribution of KD and CPD in the ATs of the EPP course, the lecturers produced ILOs for the ability of students to Remember (8,82%), Understand (20,59%), and Apply (41,18%) Conceptual (82,35%) and Procedural (17,65%) knowledge. Lecturers expected students to move beyond mere recall and recognition of knowledge to higher-order cognitive processes of Analyze (2,94%), and Evaluate (26,47%). However, the ATs tested students' ability to Understand (25,00%) and Apply (75,00%) Conceptual (95,00%), and Metacognitive (5,00%) knowledge resulting in a misaligned teaching and learning exercise.

Table 5. The alignment between the ATs and ILOs in the EMS course

EMS LO2.x & AT2.x		
ILO	AT	Alignment
LO2.1	AT2.1	Well-aligned
LO2.2		Partially aligned



LO2.3	AT2.2	Partially aligned
LO2.4	AT2.3	Partially aligned
	AT2.4	
LO2.5	AT2.5	Misaligned
LO2.6	AT2.6	Misaligned
Well-aligned		1 (17%)
Partially aligned		3 (50%)
Misaligned		2 (33%)
Total		6 (100%)

The following are samples of how learning content is analyzed:

*LO2.4: “Upon completion of this course, students should be able to analyze English clause structure of phrases of noun, verb, adjective, adverb, and preposition;”*

Based on the Knowledge Dimension and the Cognitive Processes in the RBT, the verb of the sample of ILO statement above Analyze is at the level 4. Analyze (4. a Differentiating—discriminating, distinguishing, focusing, selecting) of the cognitive process, and 'clause internal structure: noun, verb, adjective, adverb, and the preposition' is B.1. Knowledge of classifications and categories, a subcategory of B. Conceptual Knowledge. Thus, this ILO is placed, in the RBT matrix, in cell B4.

*AT2.4: “Of the seven sentences in the text, select five sentences and then analyze the functions of the sentence whether they belong to the subject (S), predicate (P), object (O), complement (C), or adverb (A) by rewriting completely the sentences.”*

Based on the Knowledge Dimension and the Cognitive Processes in the RBT, the verb of the sample of AT instruction above Analyze is at level 2. Understand the cognitive process. The verb "analyze" of AT2.4 here is not solely at the level of analyzing in the cognitive process dimension, because based on the AT instruction above, it means the students are required to determine that something belongs to a category. Thus, the verb "analyze" in AT2.4 is at the level of understanding. And 'the functions of the sentence (S, P, O, C, A)' is B.1. Knowledge of classifications and categories, a subcategory of B. Conceptual Knowledge. Thus, this AT instruction is placed, in the RBT matrix, in cell B2 of the RBT matrix.

From the ILO & AT content analysis above, it can be concluded that the alignment between AT2.4 with LO2.4 is partially aligned. According to (Amer, 2006), partial alignment is when the objective and AT instruction may all fall into the same row (i.e., type of knowledge), but differ in terms of the column in which they are classified (i.e., cognitive process category).

In the EMS course, overall, it was found that two of six items (33%) of AT are not aligned with the course's ILOs, and three of six items (50%) of AT are partially aligned, the rest ATs (17%) are considered well-aligned with the ILOs. On other hand, in the distribution of KD and CPD in the ATs of EMS course, the lecturers produced ILOs for the ability of students to Understand (50%) Conceptual (66,67%), and Metacognitive (33,33%) knowledge. Lecturers expected students to move beyond mere recall and recognition of knowledge to a higher-order cognitive process of analysis (50,00%). However, the ATs tested students' ability to Understand (66,67%) and Apply (33,33%) Conceptual (100,00%) knowledge resulting in a misaligned teaching and learning exercise.

Table 6. The distribution of knowledge dimension and cognitive processes in the ILOs of EMS course

ILO - English Morphology and Syntax							
KNOWLEDGE DIMENSION	COGNITIVE PROCESS DIMENSION						TOTAL
	Lower Order Thinking Skill			Higher-Order Thinking Skill			
	1 Remember	2 Understand	3 Apply	4 Analyze	5 Evaluate	6 Create	
A. Factual	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
B. Conceptual	0,00%	16,67%	0,00%	50,00%	0,00%	0,00%	66,67%
C. Procedural	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
D. Metacognitive	0,00%	33,33%	0,00%	0,00%	0,00%	0,00%	33,33%
<b>TOTAL</b>	<b>0,00%</b>	<b>50,00%</b>	<b>0,00%</b>	<b>50,00%</b>	<b>0,00%</b>	<b>0,00%</b>	<b>100,00%</b>
		<b>50,00%</b>		<b>50,00%</b>			

Table 7. The distribution of knowledge dimension and cognitive processes in the ATs of EMS course

AT - English Morphology and Syntax							
KNOWLEDGE DIMENSION	COGNITIVE PROCESS DIMENSION						TOTAL
	Lower Order Thinking Skill			Higher-Order Thinking Skill			
	1 Remember	2 Understand	3 Apply	4 Analyze	5 Evaluate	6 Create	
A. Factual	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
B. Conceptual	0,00%	66,67%	33,33%	0,00%	0,00%	0,00%	100,00%
C. Procedural	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
D. Metacognitive	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
<b>TOTAL</b>	<b>0,00%</b>	<b>66,67%</b>	<b>33,33%</b>	<b>0,00%</b>	<b>0,00%</b>	<b>0,00%</b>	<b>100,00%</b>
		<b>100,00%</b>		<b>0,00%</b>			

As all the results previously discussed the alignment between ATs with ILOs in EPP and EMS courses, also happened in the research from Jideani & Jideani (2012), FitzPatrick, Hawboldt, Doyle, & Genge (2015), and Kabouha & Elyas (2015) on the alignment of curricula and subject units of the study programs that are the focus of their respective research shows that the alignment between the objectives and assessment of learning in subject units still do not meet the minimum expectations. The ILOs and ATs in the courses do not fully meet the concept of constructive alignment, considering that the alignment between ATs and ILOs as discussed above are not all well-aligned. The concept of "constructive alignment" from Biggs (2003; 2014) and "understanding-by-design" from Wiggins & McTighe (2005) emphasizes the importance of alignment between the main components of the curriculum and learning to get maximum learning achievement. The components of objectives and assessment tasks in a learning system need to be designed in such a way as to automatically direct students to learn to master the desired knowledge,





skills, and attitudes as described in the formulation of the objectives of the educational or learning program. Moreover, the number of ILO statements in the courses exceeds the number of ILO recommendations—a maximum of five items (Race, Brown, & Smith, 2005; Christison & Murray, 2014; McMillan, 2018).

Assessment's effectiveness as a driving force for learning is hindered when there is a lack of positive coordination between curriculum goals, learning/teaching practices, and assessment (Biggs J., 1996). Poor assessment quality has serious consequences for students. Poor assessment quality can have an impact on students' learning and performance, teachers' teachings and feedback to students, as well as program and institutional responsibility. Students will have an erroneous 'picture' of what is important for them to learn and what learning performance is expected of them if the focus of the content of the learning goals or intended outcomes and the assessment tasks are mismatched. This will have an impact on how they approach and manage their learning. Teachers' feedback on student learning performance will become ineffective as a result, and their efforts to assist students in learning will never be successful. Grades assigned to student performance are also deceptive since they reflect mastery of a target competence other than the one specified in the learning objective statements. As a result, educational institutions must ensure that assessment quality is maintained well (Gerritsen-van Leeuwenkamp, Brinke, & Kester, 2017). That is, institutions are accountable for ensuring that graduates' exit competencies correlate satisfactorily with the educational criteria or goals established by the institution for each educational program.

The result of the distribution of knowledge dimension and cognitive processes represented in the ILOs and ATs of the courses means considering that most of the verbs used in formulating the intended learning outcomes contain one or more of the verbs under "Understand, Apply and Analyze". More cognitive processes (interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining) are associated with "Understand" than any other category. Understand is defined as the ability to derive meaning from instructional communications, including oral, writing, and graphic communication, and is emphasized in national and international standards as a prerequisite for all subsequent learning. Apply (executing and implementing) is the ability to carry out/use a method for a familiar task or a new task. Knowledge of conceptual is more complex than knowledge of factual and includes (1) knowledge of classifications and categories, (2) knowledge of principles and generalizations, and (3) knowledge of theories, models, and structure. Analyze is a process of breaking down material into its component pieces and determining how those parts relate to one another and with a larger structure or purpose and includes (1) differentiating, (2) organizing, (3) attributing (Anderson & Krathwohl, 2001). Anderson and Krathwohl (2001) also added classification, principle, and theory contain the highest amount of intelligence across a wide range of disciplines; it translates to understanding the interrelationships between the basic pieces of a bigger structure that allow them to work together. Knowing how to make or accomplish anything is referred to as procedural knowledge. It provides methods, techniques, algorithms, and skills as well as criteria for determining whether adequate Procedural Knowledge should be used (Anderson L. W., 2005). When a student devises a method of reaching a goal by reformulating the problem into a more familiar shape, recognizing the similarity, and applying a learned procedure to solve a problem, they have acquired procedural knowledge.



The assessment tasks differed from course to course in the cognitive process (25,00% to 75,00%) dimension (Remember to Create) and the knowledge (5,00% to 100,00%) dimension (Factual to Metacognitive). The overall statistics suggest that the lecturers' assessment tasks assessed more the ability of the students to Understand (25,00% to 66,67%) and Apply (33,33% to 75,00%) Conceptual (95,00% to 100,00%) knowledge. The retrieval of relevant knowledge from long-term memory is known as remembering (recognizing and recalling). Remembering is necessary for effective learning and problem solving, but it also leads to rote learning. Students require to recall what they have learned through rote learning. All of the other cognitive categories lead to meaningful learning (transfer), which needs students to recall as well as make sense of what they have learned (Krathwohl, 2002). Overall the assessment tasks did not go beyond “Understand and Apply” according to the statistics.

Some ATs in the EPP course (5,00%) and ILO in the EMS course (33,33%) were formulated for metacognitive knowledge. Paper and pencil tests are difficult to use to assess metacognitive knowledge. It is best accomplished through classroom discussion, portfolios, reflective diaries, or individual student work examinations (McMahon, 2006). Knowledge of cognition in general, as well as awareness and knowledge of one's thinking, is referred to as metacognitive knowledge (Anderson L. W., 2005). Strategic knowledge, task knowledge, and self-knowledge are all included. Students can be assisted to enhance their metacognitive knowledge and self-knowledge by asking them to track the amount of work they put into completing projects and studying for tests, according to Marzano and others (2001).

### **The Alignment between the ATs and ILOs of EPP and EMS in Terms of Their Knowledge Dimension**

The RBT matrix can be used with any subject matter by replacing topics with categories of knowledge. The knowledge dimension is realized in the formulation of objectives in the form of 'nouns' which represent the focus of the learning. In the EPP course, it was found that one of eighteen items (6%) of assessment tasks is not aligned with the course's intended learning outcomes in terms of its knowledge dimension, the rest assessment tasks (94%) are considered well-aligned with the ILOs. On the other hand, it was found that two of six items (33%) of the assessment task are not aligned with the course's intended learning outcomes in terms of its knowledge dimension in the EMS course, the rest assessment tasks (67%) are considered well aligned with the ILOs.

**Table 8. The alignment between the ATs and ILOs of the EPP course in terms of its KD**

EPP LO1.x & AT1.x (Knowledge Dimension)		
ILO	AT	Alignment
LO1.1	AT1.1	Misaligned
LO1.2-LO1.18	AT1.2-AT1.18	Well-aligned
Well-aligned		17 (94%)
Misaligned		1 (6%)
Total		18 (100%)

**Table 9. The alignment between the ATs and ILOs of the EMS course in terms of its KD**

EMS LO2.x & AT2.x (Knowledge Dimension)		
ILO	AT	Alignment
LO2.1	AT2.1	Well-aligned
LO2.2		Misaligned
LO2.3	AT2.2	Well-aligned
LO2.4	AT2.3	Well-aligned
	AT2.4	
LO2.5	AT2.5	Misaligned
LO2.6	AT2.6	Misaligned
Well-aligned		4 (67%)
Misaligned		2 (33%)
Total		6 (100%)

### The Alignment between the ATs and ILOs of EPP and EMS in Terms of Their Cognitive Process Dimension

For practical use in the field, the dimensions of cognitive processes are contained in the form of 'verbs' which are used to describe behaviors that students must be able to demonstrate as a result of their learning.

**Table 10. The alignment between the ATs and ILOs of the EPP course in terms of its CPD**

EPP LO1.x & AT1.x (Cognitive Process Dimension)		
ILO	AT	Alignment
LO1.1	AT1.1	Well-aligned
LO1.2	AT1.2	Misaligned
LO1.3-LO1.7	AT1.3-AT1.7	Well-aligned
LO1.8	AT1.8	Misaligned
LO1.9-LO1.18	AT1.9-AT1.18	Well-aligned
Well-aligned		16 (89%)
Misaligned		2 (11%)
Total		18 (100%)

**Table 11. The alignment between the ATs and ILOs of the EMS course in terms of its CPD**

EMS LO2.x & AT2.x (Cognitive Process Dimension)		
ILO	AT	Alignment
LO2.1	AT2.1	Well-aligned
LO2.2		Misaligned
LO2.3	AT2.2	Misaligned
LO2.4	AT2.3	Misaligned
	AT2.4	
LO2.5	AT2.5	Well-aligned
LO2.6	AT2.6	Misaligned
Well-aligned		2 (33%)
Misaligned		4 (67%)
Total		6 (100%)



In the EPP course, it was found that two of eighteen items (11%) of assessment tasks are not aligned with the course's intended learning outcomes in terms of its cognitive process dimension, the rest assessment tasks (89%) are considered well-aligned with the ILOs. On the other hand, it was found that four of six items (67%) of assessment tasks are not aligned with the course's intended learning outcomes in terms of its cognitive process dimension in the EMS course, the rest assessment tasks (33%) are considered well-aligned with the ILOs.

## CONCLUSION AND RECOMMENDATION

As the findings stated above, the ILOs and ATs in the courses do not fully meet the concept of constructive alignment, considering that the alignment between ATs and ILOs as discussed above are not all well-aligned. The concept of "constructive alignment" from Biggs (2003; 2014) and "understanding-by-design" from Wiggins & McTighe (2005) emphasizes the importance of alignment between the main components of the curriculum and learning to get maximum learning achievement. The components of objectives and assessment tasks in a learning system need to be designed in such a way as to automatically direct students to learn to master the desired knowledge, skills, and attitudes as described in the formulation of the objectives of the educational or learning program. Moreover, the number of ILO statements in the courses exceeds the number of ILO recommendations—a maximum of five items (Race, Brown, & Smith, 2005; Christison & Murray, 2014; McMillan, 2018).

Some of the assessment tasks are not in alignment with the ILOs, according to the findings. The coordinator or lecturer who created the course outline should be aware of the importance of constructive alignment. This is because when designing a language course or a learning module based on what students should know and be able to demonstrate at the end of a particular course, constructive alignment is the starting point. Teachers must conduct a successful assessment because it is one of the most critical aspects of the teaching-learning process. Due to the need for urgent changes in the quality of higher education instructional activities, much attention should be given to conducting empirical studies on teaching and learning processes in Indonesian higher education institutions. Since this study only focuses on the documents without observing the teaching and learning activities of what happens in the classroom, it is recommended for further study to observe the teaching and learning activities in the classroom. So, formative assessment can be included for further study.

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