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Modeling Constructive Alignment, Integration and Differentiation in Science Modules: A Blended Learning Tool in a Flexible Educational Landscape

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Abstract The study analyzed the constructive alignment of the learning competencies, learning activities, and assessment in the Learner's Packet for third-grade Science. The use of integration and differentiation in the Learning Packets was also explored. The analysis results were used to develop the Learning Exemplar to model constructive alignment, integration, and differentiation. The second quarter content, performance standards, and learning competencies in the Simplified Module Intended for Learning Encounters (SMILE) Learner's Packet used by the third-grade students in Department of Education Naga City Division in the Philippines during the Covid-19 pandemic school years were the ones subjected to the analysis. The language errors and validation of the Learning Plan exemplars were beyond the scope of the study. The descriptive evaluative research was used to analyze the constructive alignment, whereas the descriptive developmental research was applied in the development of the Learning Plan Exemplars. Qualitative descriptive research was used in describing the constructive alignment, integration, differentiation, and the different approaches in developing the Learning Exemplar. Document analysis and the Evaluation Guide developed by the researcher were used in gathering data. The study revealed that Learning competencies, learning activities, and assessments in the Learner's Packet were partially aligned. There were minimal integration and no differentiation done in the Learner's Packet. The Learning Plan Exemplars were developed modeling constructive alignment, integration, and differentiation with the use of RAISE (Review-Activate-Immerse- Synthesize-Evaluate) learning plans, Differentiated Instruction (DI), UbD (Understanding by Design) Framework and 5Es (Engage, Explore, Explain, Elaborate, and Evaluate) format.

Keywords: *constructive alignment, integration, differentiated instruction, UbD, 5Es, RAISE*

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1. Introduction

A one-size-fits-all approach to teaching and learning is no longer appropriate in the education landscape. The lack of differentiation, limited integration, and partial constructive alignment of learning competencies, learning activities, and assessment in the Third Grade Learner's Packets made learning hard for students. In addition, this rendered the Learning Packets difficult to navigate, and the overwhelming number of activities made the learners unmotivated and ended up not answering or complying without learning (Bustillo & Aguilos, 2022) [1]. Prior studies on Self-Learning Modules (SLM) and Learner's Packets (LP) centered on teachers' difficulties in producing modules and students' inability to demonstrate their learning in SLM or LPs. According to Castroverde and Acala (2021) [2], it is difficult for teachers to prepare, monitor student learning, evaluate output, and provide feedback to learners during the COVID pandemic school years.

No study was available regarding the development of modules that engage the students in constructively aligned materials, integration, and differentiation. It is in this context that the current study was undertaken. To address the mentioned issues, educators need more than a single teaching-learning framework like constructive alignment, integration, differentiated instruction, and other learning innovations to meet the needs of diverse learners. Constructive alignment, as an approach to curriculum design and delivery, seeks to optimize learning by ensuring congruence between the predetermined competencies or learning outcomes, learning activities, and assessment (Biggs, 2003) [3]. Integration enhances students' learning experiences by dissolving traditional subject boundaries to create authentic learning experiences and, in the process, meet diverse learning needs (Dowden & Brough, 2017) [4]. It resituates topics/content, competencies, or skills into relevant and meaningful

contexts, making the learning activities more relevant, relatable, and engaging to children.

This research intends to broaden the understanding of constructive alignment in all lesson plans, emphasizing the value of interdisciplinary integration and modeling differentiation to favorably affect and impact student learning. Without reservation, the researcher asserts that a One-Size-Learner Packet-Fits-None.

1.1. Theoretical Framework

Figure 1 shows the theories that support modeling constructive alignment, integration, and differentiation.

Constructive Alignment Theory. The study's first concern was analyzing the constructive alignment in the Learning Packet. The Theory of Constructive Alignment (Biggs, 2003) [3] shows the vital link between the learning objectives/outcomes and assessment, between objectives and instructional activities and materials, and between assessments and instructional activities and materials. This theory is also the underpinning concept in designing and developing the exemplar lessons in the Learning Plan Exemplars to achieve intended learning outcomes or the predetermined competencies.

According to Biggs, the fundamental principle of constructive alignment is that a sound teaching system aligns teaching methods and assessment to the learning activities stated in the objectives so that all aspects of this system support appropriate student learning (Ali, 2018) [5]; (Brabrand, 2008) [6]. In constructive alignment, the intended learning outcomes or objectives are stated first; then, the outcomes are aligned to teaching and learning activities and assessment. In formulating the learning outcomes or objectives, the level of cognitive learning must be identified, which is expressed in terms of the behavioral verb to develop. The objectives or outcome statements use a behavioral verb students need to perform to achieve the best outcome. The verbs describe the learning activities students must undertake to attain the intended learning outcome. The Revised Bloom's Taxonomy, as the basis for the statement of objectives or intended outcomes, has six levels of learning (Love & Stobbaugh, 2019) [7]. These are remembering, understanding, applying, analyzing, evaluating, and creating. The teaching and learning activities are the second element in constructive alignment. Both terms are focused on the processes to engage students to learn and to attain the learning objectives or intended learning outcomes. These purposeful content and activities are intentionally selected to allow learners to develop their knowledge, skills, attitude, and experiences to achieve the intended learning outcomes. As the students perceive the activity as meaningful, they become more motivated to learn. Assessment is the third element in constructive alignment. These tasks occur before, during, or after the learning events, showing evidence of learners' progress toward achieving the learning outcomes. Assessment is about judging the whole performance against predetermined criteria. It measures the extent and how well the students complete the intended results. Biggs and Tang (2011) [8] also pointed out that constructive alignment to work effectively needs to be embedded in a supportive environment because the brain continuously grows and develops given the proper environment.

Differentiated Instruction Theory. The theory of Differentiated Instruction (DI) is another theory supporting the present study. Carol Ann Tomlinson designed a learning model and an instructional approach that best fits the learning diversity of students (Tomlinson & McTighe, 2006) [9]. Differentiation means tailoring instruction to meet individual needs (Tomlinson, 2014) [10]. DI is a teacher's proactive response to learners' needs and educators' efforts to create the best learning experience for students; hence, it is considered teaching with the learners in mind (Breen, 2019) [11]. It gives impetus to the pivotal role of teachers to best guide the students to succeed in their academic journey.

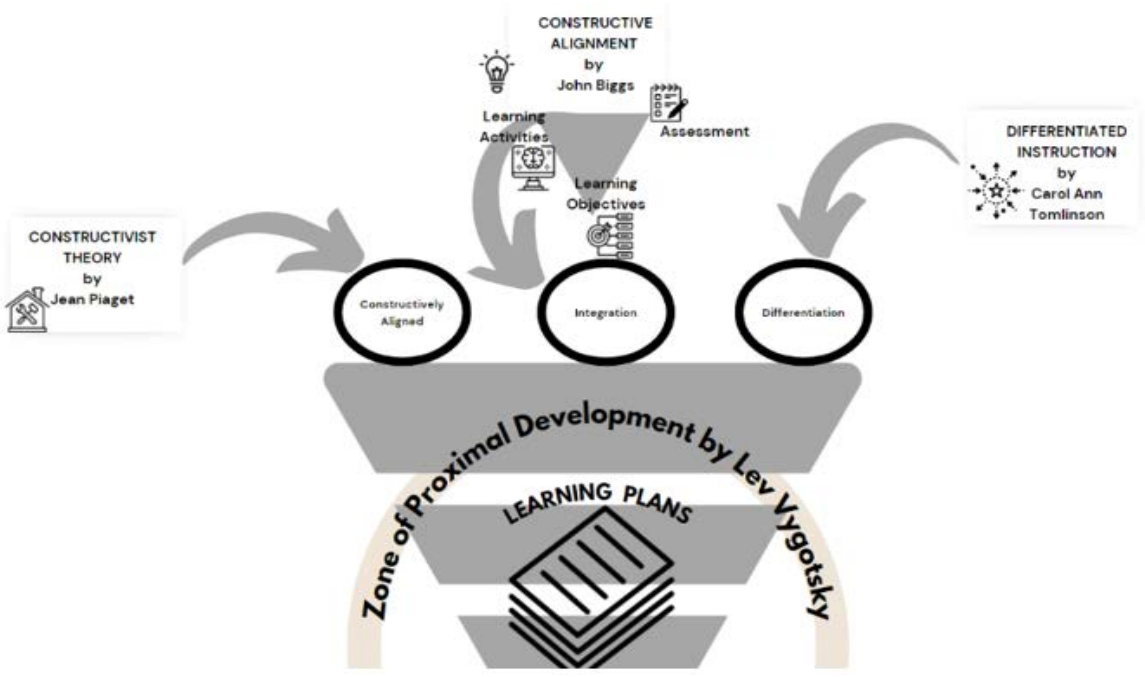

Figure 1. Theoretical Framework

Differentiated Instruction is an appropriate approach for student populations that are more academically diverse. Students differ in their circumstances, experiences, and readiness to learn. Students have various learning styles, abilities, and personalities; they differ socially, emotionally, and academically and have varying readiness, interest, and prior experiences (Tomlinson & Eidson, 2003) [12]. Cognizant of these circumstances, teachers must respect the dignity of learners and be aware of the students' diverse learning needs, as they can impact instruction delivery and how they can guide the students to learn best. Differentiation is vital in this study because for instruction to be most effective, teachers must intentionally differentiate the learning content (the what of the lesson), process (the how of the lesson), product (the learner-produced result), and affect/environment in anticipation of and response to student differences in readiness, (learner's strengths, weaknesses, and gaps), interest, and learning profile (Tomlinson, 2016) [13].

DI is flexible and responsive to the varied needs of students. However, it requires teachers to thoroughly understand how their students learn best, so they can choose the most effective methods and determine students' best learning styles (Tomlinson, 2015) [14]. From this point of view, teachers must recognize that the traditional classroom instruction approach does not meet students' needs and readiness levels. As such, teachers must replace the one-size-fits-all approach with differentiated instruction and relinquish the traditional role of authoritarians. Teachers must meet the students where they are to move them forward and maximize their learning capacities.

Zone of Proximal Development Theory. The Zone of Proximal Development Theory (ZPD) of Vygotsky (1978), as cited by Kirschner and Hendrick (2020) [15], emphasized that students need to constantly practice, check for understanding or skill, and give them just-in-time and level-appropriate assistance. The Zone of Proximal Development is defined as the gap between what the learner has mastered and what they can potentially master with the support of a teacher. While the word proximal refers to skills, a student is close to mastering them. So, to foster student development based on ZPD theory, the teacher must have a more dynamic role that creates a purposeful learning environment that maximizes more opportunities for meaningful learning experiences. The teacher provides supportive activities known as scaffolding to guide the learner to accomplish a new task or skill. In this way, ZPD theory accommodates differentiation based on readiness level. As a learning process, ZPD increases student knowledge when they are optimally engaged in an academic task slightly beyond what they can accomplish. There will be a productive connection to connect what they know to what they do not know.

Constructivism. The development of exemplar modules would best fit under the theory of Constructivism, which is based on how students learn. According to the principles of Constructivism, the learners construct their knowledge by bringing prior learning to the situation. The students draw from prior knowledge to develop their new learning and understanding. Constructivism emphasizes the learner's active role in understanding and making sense of the information (Loveless, 2022) [16]. Constructivist teaching is learner-centered, where students are actively involved in knowledge construction rather than passive learners. As Biggs and Tang (2011) [8] cited, learners, construct knowledge with their activities and interpret concepts and principles in terms of the "schemata" they have already developed. Therefore, the teacher is responsible for setting up a learning environment by providing appropriate activity that encourages students to perform those learning activities and assess their performance against those intended learning outcomes.

The Constructive Alignment Theory, Differentiated Instruction Theory, The Zone of Proximal Development Theory (ZPD), and Constructivism best fit in developing exemplar modules. The modules' objectives/competencies, instructional activities, and assessments must be constructively aligned. When developed by applying differentiation and integration, the instructional activities would enable the students to engage in learning actively. The students could apply prior knowledge, transfer knowledge, and build a deeper understanding of the curriculum, which is the heart of the constructivist learning theory.

1.2. Conceptual Framework

The Figure 2 presents the conceptual framework that guided the conduct of the study, hence the use of the methodological framework in the title of the figure.

The framework used the input, process, and output (IPO) model since the study resulted in the development of exemplar modules. The input includes the Department Orders issued by the DepEd relative to instructional materials development, Curriculum Guide, the Most Essential Learning Competencies (MELCs), and the Learner's Packets in third-grade Science. The Curriculum Guide served as a reference for the different topics in the various third-grade subjects. These were used in the design of integration and the development of differentiated instruction. Another input was the Most Essential Learning Competencies (MELCs). This served as a guide to address the instructional needs of learners while ensuring that the curriculum standards were maintained and achieved. The Learner's Packet for grade three Science was another vital input in this study. This was the object of the constructive alignment analysis, integration, and differentiation in the lessons or activities in the said learning packets.

An evaluation guide was developed before analyzing the constructive alignment of the learning competencies, learning activities, and assessment. This guides the researcher in describing the learning competencies, learning activities, and learner packet assessment. The researcher developed the guideline through item pooling from the literature readings. Some items were lifted from the Guidelines for Evaluating Self-Learning Modules (DepEd Order No.001 s. 2021) [17]. Experts in Science education, differentiation, and integration further validated the guideline. The experts comprised a State University of New York-College of Brockport professor, seasoned researchers, professors, curriculum development experts from the Central Bicol State University of Agriculture,

and a Chief Executive Officer of a private elementary school. After describing the learning competencies, learning activities, and assessment, determining their constructive alignment followed. The Revised Bloom Taxonomy Table was used in determining the constructive alignment between the learning competencies, learning activities, and assessment (both formative and summative). The Revised Bloom's Taxonomy guided the selection of the behavioral verbs to establish alignment or coherence among the three crucial instructional elements. Then, the next phase was the determination of the integration and differentiation done in the different activities of the Science Learner's Packet.

The analysis results were the basis for developing the Learning Plan Exemplars. The exemplar modules considered constructive alignment, integration, and differentiation of the activities in Science. This learning plan would be helpful to students and Science teachers because varied activities are constructively aligned, with appropriate integration and applied differentiated instruction. Using appropriate learning resources like these exemplar modules can make a better learning tool applicable in various teaching-learning landscapes.

1.3. Objectives of the Study

Every student deserves the best opportunity to develop their skills and knowledge. For too long, schools were designed for mythical average learners at the expense of students with unique needs (Tomlinson, 2017) [18]. This reality was exacerbated by the COVID-19 pandemic that disrupted education on a large scale. With mandatory stay-at-home orders, education approaches shifted to remote teaching and learning.

Modular learning became the urgent response to ensure the continuity of education. It employs Self-Learning Modules (SLMs) in print or digital format, whichever is applicable in the learner's context. The modules were either prepared by a Curriculum and Instruction committee or by the teachers teaching the subject assigned by the Department of Education (DepEd). Before use, the SLMs are evaluated to ensure conformance to the quality standards for learning resources set by the DepEd and to provide the students with quality learning materials to help them grow mentally and equip them with the right life skills. Unfortunately, what had been aimed to be flexible and responsive, modular learning became "one size fits all" learning. Hence, Pe Dangle and Sumaoang (2020) [19] urge that modules be re-evaluated, particularly their activities. This idea concurred with Fouts (2015) [20], who asserted that when the activities fail to address learners' varying academic needs and interests, the students may become anxious and frustrated. Trying to alleviate such confounding reality, this paper intends to (1) analyze the constructive alignment of the learning competencies, learning activities, and assessments in the Third Grade Science Learning Packets and (2) develop an exemplar module in Science promoting constructive alignment, integration, and differentiation of instruction.

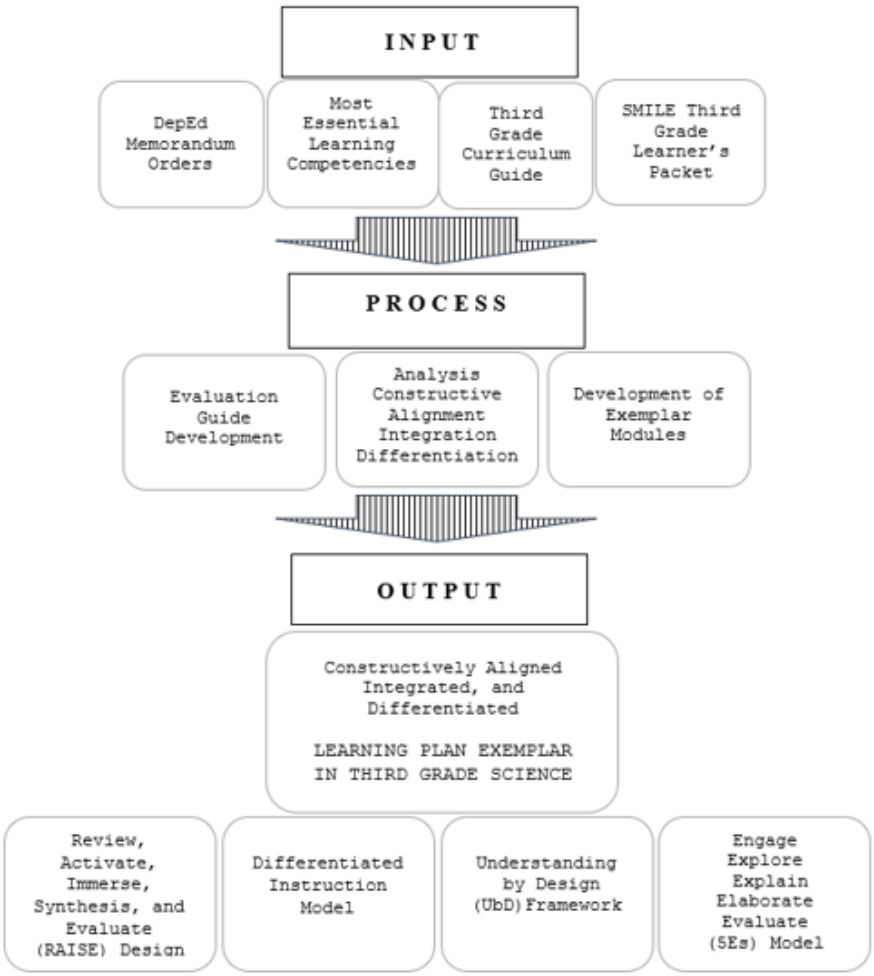

Figure 2. Conceptual Framework

2. Materials and Methods

The study employed descriptive evaluative, descriptive developmental research, and qualitative descriptive research to analyze the constructive alignment of the learning competencies, learning activities, and assessments of the Learner's Packet in Science, explored the integration and differentiated instruction in the same learning materials, and develop Learning Plan Exemplars. Documentary analysis and an evaluation guide were used in gathering data. The evaluation guide was subjected to validation by experts. The percentage technique was used in the treatment of data, while the rest were qualitatively described.

Documentary Analysis. Several documents were reviewed and analyzed pertinent to constructively aligning the learning competencies, learning activities, assessments, integration, differentiated instruction, and module development. The documents perused were the Most Essential Learning Competencies (MELCs), a curriculum guide for third-grade subjects, DepEd Orders on developing and evaluating modules, and the Learner's Packets in third-grade Science.

The Evaluation Guide. The researcher developed the Evaluation guide by item pooling from the literature reviewed. After this, validation was done by experts in curriculum development, research, differentiated instruction, science teaching, module development, and managing schools. The guide described learning competencies and objectives, learning activities, assessments, integration, and differentiation.

3. Results and Discussion

The cognitive levels decoded from the learning competencies, learning activities, and assessments were used to determine their constructive alignments. Figure 3 presents the comparative cognitive levels of the learning competencies, learning activities, and assessments. It can be noted that the items in all three essential elements of instruction were mainly constructed in the lower-level cognitive levels (remembering, understanding, and applying). A few items were designed for analyzing and evaluating. There was no item formulated to develop the Creating Level. These findings are consistent with Prihastuti and Widodo (2019) [21] that teachers tend to ask more questions requiring recall and rarely questions requiring reflection; such practice might delay the development of students' cognitive skills.

The module writers must have used a low level of cognition because the third-grade learners are still very young and unprepared to handle a higher level of cognition like analysis, evaluation, and creation. According to Nadler (2021) [22], this notion must be corrected because challenging students through higher-order questioning is one of the best ways to stimulate learning and enhance brain development, regardless of age.

Constructive alignment. Data in Table 1 also shows that the cognitive levels of the formative assessment in the learning activities and summative assessments did not match the cognitive levels of the learning competencies. Items formulated in the summative assessments have fewer matching items in the formative assessments. Some assessment items were formulated at higher cognitive levels than those intended to be developed in the learning competencies. These account for the mismatch of learning activities with assessments (Shaltry, 2020) [23]. The mismatch of items in the formative and summative assessments failed to support the development of the desired learning outcomes in the eight Learner's Packets.

Since the cognitive levels of some items in the summative assessments do not match items in the formative assessments or jibe with the intended learning competencies, their constructive alignment was not achieved. Due to partial construction alignment, it is inferred that the learning packets limit the students' learning opportunities to develop the intended competencies.

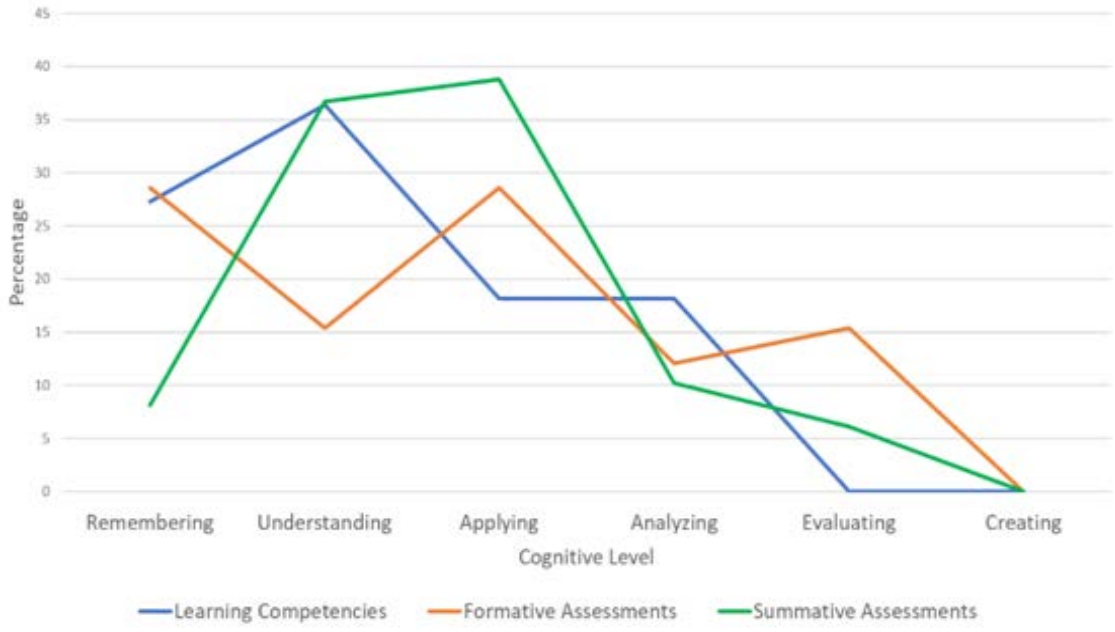

Figure 3. Comparative cognitive levels of the learning competencies, learning activities, and assessments

Table 1. Alignment Between Learning Competencies, Learning Activities (Formative Assessments), and Summative Assessments

NO.	LEARNING COMPETENCY	LEARNING ACTIVITY (FORMATIVE ASSESSMENT)						SUMMATIVE ASSESSMENT						ALIGNMENT
		1RM	2UN	3AP	4AN	5EV	6CR	1RM	2UN	3AP	4AN	5EV	6CR	
1	Describe the functions of the sense organs of the human body. (Comprehension)	11	-	8	-	4	-	-	3	2	-	-	-	Partially Aligned
2	Describe animals in their immediate surroundings. (Comprehension) Identify the external parts and functions of animals. (Knowledge)	4	-	4	-	1	-	2	-	1	-	1	-	Partially Aligned
3	Classify animals according to body parts and use. (Analysis) State the importance of animals to humans. (Knowledge)	3	1	3	2	1	-	-	-	3	-	-	-	Partially Aligned
4A	Describe the parts of different kinds of plants. (Comprehension)	2	1	-	2	-	-	2	2	1	-	1	-	Partially Aligned
4B	State the importance of plants to humans. (Application)	1	-	9	-	3	-	-	2	8	-	-	-	Partially Aligned
5A	Compare living with nonliving things. (Analysis)	1	3	1	1	-	-	-	10	-	-	-	-	Partially Aligned
6	Identify the basic needs of humans, plants, and animals. (Knowledge)	-	-	-	3	2	-	-	1	3	-	1	-	Partially Aligned
7	Explain how living things depend on the environment to meet their basic needs. (Comprehension) (Application) Recognize that there is a need to protect and conserve the environment.	4	9	1	3	3	-	-	-	1	5	-	-	Partially Aligned
	TOTAL	26	14	26	11	14	-	4	18	19	5	3	-	
	PERCENT	28.57	15.38	28.57	12.08	15.38	-	8.16	36.73	38.78	10.20	6.12	-	

Legend:
1RM – Remembering/Knowledge
2UN – Understanding/Comprehension
3AP – Applying/Apply
4AN – Analyzing/Analyze
5EV – Evaluating/Evaluate
6CR – Creating/Create.

The learning activities must be synchronized with the learning objectives and assessments to hit the learning outcomes/targets/ objectives/ goals (Ali, 2018) [5]. As such, Loughlin et al. (2021) [24] and Hailikari et al. (2021) [25] advised teachers to align teaching methods and assessments to the learning activities so that all aspects of the system support appropriate student learning.

So, a deliberate effort is required from the module developers and even the classroom teachers using the modules to provide the learner with a specified goal, a well-designed learning activity or activities that are appropriate for the tasks, and a well-designed assessment for the benefit of the learners (Hauke, 2017) [26]. When all these factors are factored in by the teachers in their instruction or developing modules, then constructive alignment will be satisfied, which could create a condition for high-level learning (Gallagher, 2017) [27].

Integration in the Learner's Packets. The learning activities show some integration from Arts, English, and Mother Tongue Based Multilingual Education (MTBLE). Interestingly, all the modules show real-life connections. However, the activities in the eight packets used images only, except for Learner's Packet 2, since song lyrics appeared in one of the activity tasks. Surprisingly, the promotion of diversity, equity, inclusion, and belonging was reflected in Learner's Packet 3 in the abstraction part, citing that some people need animals for emotional support.

Furthermore, pictures of people like a baby and grandparents were used in Learner's Packet 5. Learner's Packets 3 planned to make the students internalize the importance of animals to humans. Learner's Packets 7 purported to students that they can explain why the environment needs to be protected and conserved.

Differentiation in the Learner's Packets. The eight Science Learner's Packets for third grade are not differentiated. It is created in a one-size-fits-all format. Since the learning packets were created without considering the students' diversity, the modules' developers did not address the learning needs of all the students. According to Tomlinson (2023) [28], students are not the same; they have different backgrounds, readiness, interest, and learning profiles. This information teachers need to know and consider when creating a learning plan.

Development of the Learning Plan Exemplars. The literature review was conducted to gain more perspective on developing instructional materials. The literature gathered on the development of a module or any instructional materials, constructive alignment, integration, differentiation, models of UbD, 5Es, and RAISE. Other materials gathered were MELCs, a third-grade Curriculum Guide, and DepEd Orders pertinent to developing and evaluating self-learning materials. These materials were organized to facilitate the development of the Exemplars. The Science lessons were selected from the second quarter term. The lessons integrated into the exemplars were from different subject areas of the third-grade level. The selection also includes identifying competencies from other subjects that can be integrated into the activity in the Learning Plan Exemplar.

An outline was prepared for creating the Learning Plan Exemplars. This is also the phase where the presentation of activities was planned, such as using the UbD, 5Es, and RAISE. The type of differentiation was also considered in the development of activities. Not all activities were created by the researcher. Some available activities that suit integration and differentiation were adopted; however, proper acknowledgment of the sources was done.

The Universal Design for Learning (UDL) was also considered in developing the Learning Plans. Pictures, videos, photographs, animated video clips, graphic organizers, word banks, sentence starters, and Quick Response (QR) codes were used to facilitate the development of the student's deep understanding. An appropriate and effective assessment was provided at the end of the plan to check if the learning outcomes could be achieved and aligned. Finally, student feedback is prepared for the students, allowing them to self-assess how they follow through and lead their learning.

Three learning plan exemplars were finally developed. The first exemplar is a Learning Plan using the Understanding by Design and 5Es format. The second exemplar is a Learning Plan using the Review, Activate, Immerse, Synthesis, and Evaluate (RAISE) Design. Furthermore, the third exemplar is a Learning Plan using Differentiated Instruction. All these exemplars were constructively aligned and integrated with appropriate topics and competencies in the second quarter term of Science and other subjects in Grade 3, designed with differentiated activities.

4. Conclusions

From the analysis of the constructive alignment learning competencies, learning activities, and assessments in the Third Grade Science Learning Packets, the following conclusions were drawn: (1) There were discrepancies or incongruencies in the eight Learner's Packets' learning competencies, learning activities, and assessments. Most of the assessment items addressed lower cognitive levels, which may delay the development of students' critical thinking. (2) Integration requires a range of competencies to yield successful outcomes from this complex educational approach which may have accounted for the poor integration in the Learner's Packets. (3) Module developers may not have considered differentiation in the Learner's Packet because they may not be adequately prepared for differentiating instruction or lack sufficient time to prepare for differentiated instructional activities. (4) The development of the Learning Plan Exemplars shows that the Learning Plan Exemplars established that constructive alignment, integration, and differentiation of instruction are possible in a single instructional material. (5) Integration is vital in the Learning Plan Exemplars for the students to experience the personal connection between learning and real life and more in-depth learning by relating knowledge from many different perspectives. (6) Differentiated activities could encourage the involvement of students in the intensive learning process because they are in an environment where differences are honored in the design of learning opportunities to meet individual needs, thereby making learning stick, engaging, and meaningful. (7) Developing the Learning Plan Exemplar using 5Es, RAISE, differentiated instruction models, and UbD frameworks was feasible in creating varied experiences that would optimize students' intellectual growth and development. (8) When there is a coherence of learning objectives, activities, and assessments that work toward the same ends, quality learning and developing meaning in constructing knowledge are achievable.

5. Recommendations

Several recommendations emerged based on the results of this study. (1) It is suggested that the school administrators provide an intensive professional development program using intensive guidance and coaching strategies on constructive alignment, test construction, and developing questions (oral and written), especially on the higher cognitive levels. (2) It is recommended to school heads that in-service training workshops on integration (both vertical and horizontal integration) with hands-on activities should be designed and implemented to optimize the development of students' knowledge, skills, and attitudes. (3) Teachers are encouraged to give utmost consideration to using an integrated approach in teaching, if not all the time, at least at appropriate times since integrated instruction provides meaningful learning experiences to students. If students are engaged, then learning becomes meaningful. It is also suggested that school heads institute mechanisms to ascertain the effectiveness of differentiated instruction,

curriculum alignment, and integration through classroom observations by themselves and other content-specialized instructional leaders, including teacher leaders and instructional coaches, that can evaluate and monitor instruction. (4) Since constructive alignment, integration, and differentiation are feasible for inclusion in the activities of the Learning Plan Exemplars, it is suggested that a similar study may be conducted to cover the remaining learning competencies, content, and performance standards in the first, third, and fourth quarters of Science and other subject areas. (5) Teachers should be provided with professional development and workshop opportunities to implement constructive alignment, integration, and differentiated instruction to enhance their understanding and knowledge. (6) The school administration should support the teachers in creating a conducive environment for learning innovations like differentiated instruction, integration, and constructively aligned instruction through modeling, mentoring, partnerships, and recognition of growth. (7) For teacher training institutions, it is suggested that they include in their curriculum a solid foundation in constructive alignment, integration, differentiated instructional strategies, use of 5Es, RAISE, and UbD frameworks, and module development that would lead to their competency in the field of teaching before embarking on their professional careers. (8) Since the Learning Plan Exemplars were not validated by experts and tried by would-be users, it is suggested that this process be done to gain feedback for its improvement.

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