

Content-Based Instructional Module in Teaching Oral Communication in Context for Grade 11 Science, Technology, Engineering, and Mathematics (STEM) Senior High School Students

Milcah Shem V. Magsino

Research and Development Office, CSTC College of Sciences, Technology and Communications, Inc.,
Sariaya, Quezon, Philippines

Author Email: milcahshem@gmail.com

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Abstract. This study developed a content-based instructional module for teaching Oral Communication in Context to Grade 11 STEM Senior High School students. It aimed to (1) determine students' communicative needs through needs analysis, (2) develop an instructional module based on these needs, (3) evaluate its quality, and (4) assess its acceptability to students. Using a descriptive method with purposive sampling, 30 respondents participated in the needs analysis, 32 in development and evaluation, and 161 in the acceptability test. Findings revealed that students' preferred fields of study included Engineering, Nursing, Architecture, Medicine, and Biology. Desired topics emphasized decision making, critical analysis, independent thinking, problem solving, and negotiation. In skills development, public speaking ranked highest for speaking, sentence construction, and cohesion for reading, summarizing for writing, and listening for main ideas. The module evaluation by teachers and material developers showed high ratings across objectives (3.87), content (3.85), format and language (3.84), activities (3.80), and assessment (3.89). Students rated it acceptable in content (3.44), format and language (3.46), activities (3.43), and highly satisfactory in assessment (3.51). Overall, the module was positively received and ready for validation and try-out. Teachers are encouraged to use content-based activities to enhance students' communicative competence further.

Keywords: Content-based instruction; Instructional materials; Needs analysis; Oral communication.

1.0 Introduction

Communication is a learned skill that assists people in looking back at their past, surviving the present, and planning the future. It allows people to communicate with one another and interpret their environment. As Last (2016) stated, nobody knows how much poor communication costs businesses, industries, and governments each year, but estimates range in the billions. Poorly worded emails, inefficient communication, careless reading or listening to directions, unread documents due to bad design, hastily presenting incorrect information, and sloppy proofreading are all examples of costs that are unavoidable. Students and teachers face difficulties because they are unfamiliar with the specialist content, and the sentence structures are far too complex. In response to this reality, content-based instruction can help enhance learners' communicative needs.

On the other hand, communicative skills learning can be complex and challenging for teachers and learners, but it can also be captivating and persuasive. It may be something that a school wants to try out for one or two lessons, or something that a school should consider implementing across the curriculum. According to Emanuel (2011), four critical problems have been identified during an assessment of oral communication in Alabama: (1) College students today are not receiving an adequate education in oral communication. (2) Oral communication is being downgraded to a unit within another course discipline. (3) When a communicative course is encompassed in the general education curriculum, it is usually narrow in scope rather than broad. (4) Many college professors who teach communication courses do not hold a graduate degree.

From the content-based teaching material produced in developing student communication skills, it can be assumed that students' communication skills are increasingly grounding teachers in academic content across disciplines. According to Crandal (2000), preparing students whose pedagogical experience involves language-based education in science, mathematics, etc., is challenging for language teachers. It deepens students' comprehension of linguistics, mathematics, and science concepts and creates learning settings that promote their cultural identities, language and literacy development, and academic attainment. It also necessitates teacher training in all subject areas to meet the needs of English language learners. On the other hand, core subject teachers have various perspectives on their role in improving the communication skills needed for their discipline (Fiocco & Fleming, 2007). Developing content-based material for subjects can benefit academic success and higher achievement, specifically for English language learners.

In response to this reality, the researcher developed a content-based instructional module in oral communication in context for Grade 11 Science, Technology, Engineering, and Mathematics (STEM) Students, with a focus on language form and content. The developed material was based on the needs analysis through a survey questionnaire. The acceptability of the material was analyzed after its development. The researcher used the Content-Based Instruction approach in teaching Oral Communication in Context to develop a module that will be used for one semester.

2.0 Methodology

2.1 Research Design

This study employed descriptive research methods. It was used to gather information regarding the study's current state. It encompasses studies that claim to give facts about the nature and status of something. Descriptive research adds context to the quality and significance of developing instructional material to teach content-based instruction. Questionnaires were used to gather data for the communicative needs analysis. Also, to evaluate and assess the acceptability level of the developed material.

2.2 Research Locale

This study was conducted in the Sariaya East District Division of Quezon, where the researcher currently resides. Sariaya is located in the southwestern part of Quezon Province (CALABARZON). The researcher has taught Oral Communication in Context in Grade 11 for the past three years. Based on the findings of poor test results in communicative skills in speaking, the researcher decided to create a content-based instructional material for Grade 11 Science, Technology, Engineering, and Mathematics. One of the difficulties in teaching an oral course is the lack of a specific textbook on which to base the program. Teachers choose materials from various sources that must be updated each semester.

2.3 Research Participants

The respondents were senior high school teachers (24) and instructional material developers (8) from Quezon's Sariaya East District Division. In addition, thirty (30) Senior High School STEM students from the College of Sciences, Technology, and Communications, Inc. were chosen because the study primarily focused on developing content-based instructional material.

2.4 Research Instrument

The researcher utilized a needs analysis, which is a survey checklist. The purpose of this was to know the communicative needs of the respondents. The significant results based on the needs analysis served as grounds

for the Content-Based Instructional Material in Teaching Oral Communication in Context for STEM Senior High School Students. Also, the researcher conducted a semi-structured interview scheme to evaluate the instructional module. As a result, the interview was partially structured based on the various elements that constitute the material (i.e., the material for the students, the explanation for the teacher, and the checklist).

Furthermore, how the teachers thought they could use the material in their lessons was one of the goals of the material under evaluation. These topics had to be commented on by the teachers. There are more topics to cover, and the exact order of topics is not determined ahead of time. Because this is the first exploration of how teachers perceive the material, it is necessary to question them on certain elements as openly as possible and to allow them to identify key aspects. As a result, this semi-structured interview format was chosen because it allows the teachers to mention elements that were not anticipated in advance. The researcher constructed the questionnaire and submitted it to her adviser for comments and suggestions on the layout, format, and layout structures. Then, seek expert assistance for proper guidance and advice. The positive results indeed indicate that the questionnaire was valid.

2.5 Data Gathering Procedure

This study was focused on developing content-based instructional material for Grade 11 STEM Senior High School students. The approval letter to conduct the research was secured first. After seeking approval, the validated instruments were administered. The survey questionnaire was given through Google Forms to determine the students' communicative needs. Results were used as the basis of the content-based instructional module intended for Grade 11 STEM Senior High School students. Experts evaluated the developed instructional material to improve the module's content during its development. Finally, the researcher assessed the students' acceptability of the developed material.

2.6 Ethical Considerations

This study considered the ethical standards of research. The participants have an option whether they want to answer or not at any point in time. They were given informed consent to know the purpose, benefits, and funding of the study before they agreed to or declined to join. Also, the personal identities remained anonymous. Lastly, to ensure that the research is free from plagiarism, the results will be accurately represented.

3.0 Results and Discussion

3.1 Grade 11 STEM Students' Preferred Field to Study

Table 1 presents the needs analysis in the field that the Grade 11 STEM students would like to study. Based on the table, the respondents ranked Engineering as the most important, scoring 122. It was followed by Nursing, Architecture, Medical Doctor, and Biology as the least important. It connotes that engineering education can create opportunities for more interrelated STEM education, including perspectives on STEM education and the incorporation of its disciplines.

Table 1. *Grade 11 STEM Students' Preferred Field to Study*

Indicators	Score	Rank
Engineering	122	1
Nurse	64	2
Architecture	62	3
Medical Doctor	48	4
Biology	39	5

STEM evolved into an educational concept that sought to integrate the teaching of science, technology, engineering, and math in schools rather than teaching each in isolation, as had been the norm in previous decades. More importantly, a central aspect of STEM education is the application of these subjects to real-world problems, encouraging critical and problem-solving thinking.

3.2 Grade 11 STEM Students' Preferred Topics to Study

Table 2 presents the analysis of the topics the respondents would like to study. Rank 1 shows that Decision Making is the primary topic, and Negotiation is the least important.

Table 2. *Grade 11 STEM Students' Preferred Topics to Study*

Indicators	Score	Rank
Decision Making	106	1
Critical Analysis	90	2
Independent Thinking	82	3
Problem Solving	82	4
Negotiation	45	5

A curriculum that focuses on technology and engineering can lead to a discrepancy in the emphasis placed on the various STEM disciplines, with engineering and technology frequently gaining more prominence. At the same time, science and mathematics become contexts or tools for design. It is evident in the instructional materials that teachers and students use that focus on the general field nowadays.

Table 3 presents the communicative needs analysis on the macro skills that the respondents would like to improve. In terms of speaking, Public Speaking ranked first, with verbal interpretation as the most important, and describing things when you do not know is the least important. As stressed by Raja (2017), despite being competent in their field, professionals worldwide struggle due to a lack of good public speaking skills. Their evaluations and appraisals are frequently inaccurate representations of their professional competitiveness; thus, students must overcome public speaking anxiety before transitioning from academic to professional life.

Table 3. *Grade 11 STEM Students' Preferred Topics to Study*

Indicators	Score	Rank
Speaking		
Public speaking	108	1
Grammar	58	2
Pronunciation	53	3
Dealing with communication problems	52	4
Describing things when you don't know the exact word	50	5
Reading		
Sentence construction and cohesion	90	1
Reasoning and background knowledge	70	2
Working memory and attention	65	3
Comprehension	64	4
Vocabulary	54	5
Writing		
Summarizing	63	1
Paraphrasing	62	2
Planning, Revising and Editing	58	3
Taking notes on talks	52	4
Sentence construction	40	5
Listening		
For the main idea/ key points	85	1
To natural speech	72	2
Reflecting	69	3
To radio, TV, and Internet broadcasts	66	4
To people from non-English speaking countries	64	5

In terms of reading skills, Sentence construction and cohesion ranked first, with verbal interpretation as the most important and vocabulary as the least important. Likewise, a study by Alsalami (2022) stated that the students' English sentence construction ability is low, as evidenced by the sentence structure used and the number of incorrect sentences constructed.

In terms of writing skills, summarizing ranked first, with verbal interpretation as the most essential and sentence construction as the least important. Stevens et al. (2018) claimed that the central idea and summarizing instruction could help struggling readers improve their primary idea identification and reading comprehension. According to Osman (2009), theme-based language instruction is located near the language-driven end of the continuum of the three CBI models. As a result, teachers extract language activities corresponding to the content material. They believe that by using this method of instruction, language learners will improve their paragraph structure, communication, and grammar skills, as well as their vocabulary mastery.

In terms of listening skills, the main idea/key points ranked first, with verbal interpretation as the most important,

and to people from non-English-speaking backgrounds as the least important. In formal educational settings, the quality of student listening impacts learning (Canpolat et al., 2015). Uninterested students attend reluctantly, wanting time to pass quickly and the class to end as soon as possible. In such cases, students become passive and, despite appearing to be listening, do not employ listening strategies that promote productive and long-term learning.

3.3 Evaluation of Content-Based Instructional Module

Based on the communicative needs of the students, the researcher developed content-based instructional materials for Grade 11 STEM students. As a result, below is a discussion of the evaluation of the instructional material.

In terms of Objectives

Table 4 presents the respondents' evaluation of the content-based instructional module's objectives. As illustrated in the table, the respondents find it entirely relevant to the topics of each lesson of the modules and take into account the needs of the students, with the highest weighted mean of 3.91. Similarly, in an interview, most respondents evaluate the "alignment of the objectives" (E2, E9, E10, and E4). Objectives address the needs and requirements of the subject, but upon looking at the module, it is better to have transition statements to help students request a transfer. It will also create an avenue for students to question or gain an opportunity to integrate these into the different disciplines and expand learning (E2). There is a visible alignment with the objectives (E9), the objectives are closely aligned with standards (E10), and the contents of the module adhere to CBI. The samples provided are aligned in the allied fields of STEM. Hence, target learners could relate to and contextualize the concepts and illustrations embedded in the learning materials (E24).

Table 4. *Evaluation of Content-Based Instructional Module in terms of Objectives*

Statements	Weighted Mean	Descriptive Analysis
1. The objectives are relevant to the topics of each lesson of the modules.	3.91	Completely Evident
2. The objectives take into account the needs of the students.	3.91	Completely Evident
3. The objectives stated are specific, measurable, and attainable.	3.87	Completely Evident
4. The objectives are clearly stated in behavioral form.	3.84	Completely Evident
5. The objectives are well-planned, formulated, and organized.	3.84	Completely Evident
Average Weighted Mean	3.87	Completely Evident

Moreover, the respondents evaluate the objectives as completely evident, as they are specific, measurable, and attainable (3.87), well-planned, formulated, and organized (3.84), and clearly stated in behavioral form (3.84). The respondents indicate that the objectives are action-oriented and achievable, so there is no need for any revisions. (E12), and the consistency of the arrangement of objectives must be followed from the first lesson to the last. It must be following KSA or might be in Bloom's Taxonomy (E29).

In addition, E20 stated: "*Based on my evaluation, there is a very minimal error in terms of punctuation in the last objective of Lesson 2&4. While in the 2nd objective of Lesson 3, the word "evaluates" should be changed to "evaluate" to make it grammatically correct. I also observed the need to paraphrase the third objective of Lesson 3 and the fourth objective of Lesson 9 and 10 to state your goals clearly.*"

As a whole, the obtained data generated an average weighted mean of 3.87 in terms of objectives and was verbally interpreted as Completely Evident. The result connotes the areas that should be developed in the instructional module in terms of the objectives. Some areas of concern are the standard number of competencies, grammar, and punctuation. The standardized format of the module is the primary consideration in creating its objectives.

In terms of Content

Table 5 presents the respondents' evaluation of the content of the instructional module. As illustrated in the table, the respondents evaluate *completely evidence* that topics and ideas presented from one lesson to the next are coherent and integrated, with the highest weighted mean of 3.93. Likewise, in an interview, most of the respondents evaluated the module as "easily understood, organized and informative" (E17, E23, E26, and E18); it depends upon the content of the modules if it is easily understood by the learners (E17) I think there is no need to revise or modify since the module itself is organized and informative (E23) the module is substantial and very informative at the same time. The facts are also presented, and the assessment tools (E26) are easily understood

by the student's reading comprehension (E18).

Table 5. *Evaluation in terms of the Content-Based Instructional Module's Content*

	Statements	Weighted Mean	Descriptive Analysis
1	The topics and ideas presented from one lesson to the next are coherent and integrated with each other.	3.93	Completely Evident
2	The content is logically developed and organized, i.e. lessons are arranged from simple to complex, from observable to abstract.	3.91	Completely Evident
3	The content of each lesson is directly relevant to the defined objectives.	3.87	Completely Evident
4	The topics are supported by illustrative examples that are suited to the students.	3.81	Completely Evident
5	The length and structures of sentences are suited to the comprehension level of the target users.	3.75	Completely Evident
Average Weighted Mean		3.85	Completely Evident

Moreover, the respondents evaluate the *evidence* as completely evident, which is logically developed and organized, i.e., lessons are arranged from simple to complex, from observable to abstract (3.91). The content of each lesson is directly relevant to the defined objectives (3.87). The topics are supported by illustrative examples that are suited to the students (3.81). The length and structures of sentences are suited to the comprehension level of the target users (3.75). The respondents suggest the use of Infographics. [with the use of] Infographics. Sometimes, it is too wordy, it is difficult to read (E25), and using more infographics helps a lot (E25)

In addition, E20 suggests that: *"It is already interactive and well-researched. However, in terms of the presentation of the parts: Let's Explore, Let's Work and Learn Together, Let's Practice, Self-Assessment, and Let's Reflect, I have noticed some inconsistencies, as some lessons lack certain parts. I recommend that these parts be finalized and utilized consistently in all lessons.*

As a whole, the obtained data generated an average weighted mean of 3.85 in content and was verbally interpreted as *Completely Evident*. The result connotes the areas that should be developed in the instructional material in terms of the content. Some areas of concern are the use of Infographics, presentation, and transitions between parts.

In terms of Format and Language

Table 6 presents the respondents' evaluation of the content-based instructional module's format and language. As illustrated in the table, the respondents evaluated that *"the font size and font style of the instructional modules are readable,"* with the highest weighted mean of 3.94. However, in an interview, most of the respondents suggest *"the font, size, color, pictures, illustrations, and diagrams"* (E1, E23, E13, E20 and E24) *"to enlarge some font size in your illustration and diagram"* (E1), *"I think the color of the border should be replaced with not so striking color"* (E23), *"I like how you started the activities with the entrance ticket and ended it with the exit ticket. There are also activities related to the experiences of the respondents. As for the module's presentation, I would like to suggest that you change the color. However, the layout is nice"* (E13), and *to make the module more appealing and engaging. I believe that adding more relevant pictures/illustrations in the discussion part would somehow lighten the mood and aid learners' understanding of the lesson"* (E20).

Table 6. *Evaluation in terms of Content-Based Instructional Module's Format and Language*

	Statements	Weighted Mean	Descriptive Analysis
1	The font size and font style of the instructional modules are readable.	3.94	Completely Evident
2	The illustrations, pictures, and captions are properly laid out for easy reference.	3.88	Completely Evident
3	The instructions in the instructional modules are concise and easy to follow.	3.84	Completely Evident
4	The language used is clear, concise, motivating, and easy to understand.	3.81	Completely Evident
5	The format/layout is well-organized, which makes the lessons more interesting.	3.75	Completely Evident
Average Weighted Mean		3.84	Completely Evident

Furthermore, the respondents evaluate *completely evident* in which the illustrations, pictures, and captions are correctly laid out for easy reference (3.88), the instructions in the instructional modules are concise and easy to follow (3.84), the language used is clear, concise, motivating, and easy to understand (3.81), and the format/layout is well-organized, which makes the lessons more interesting (3.75). The respondents supported by E24 that the interface of the learning material is suited to the target audience.

In addition, E6 and E31 stated: “Make use of more STEM-related terms. (E6) Since this is a module intended to be used by STEM students, you can make use of jargon that is commonly used in the field of science, technology, and Mathematics. Add illustrations” (E31).

The obtained data generated an average weighted mean of 3.84 in terms of format and language, and was verbally interpreted as *Completely Evident*. The result connotes the areas that should be developed in the instructional material regarding the format and language. Some areas to develop are the font size in illustrations and diagrams, the color, adding more relevant pictures/illustrations, and using jargon and STEM-related terms.

In terms of Activities

Table 7 presents the respondents' evaluation of the content-based instructional module's activities. As illustrated in the table, the respondents evaluate *completely evident* that in terms "the concepts are suitable to the learner's level of development, needs, experience and context and the performance task develops 21st century skills and higher order cognition (i.e. critical thinking, creativity, learning by doing)" with the highest weighted mean of 3.91. However, in an interview, most of the respondents suggest the "use of variety of activities and incorporating and specifying Gardner's Multiple Intelligences (E2, E4, E12 and E20) [make use of] variety of activities (E2), activities and performance task should be inclined with the target students (STEM) (E4), the module uses variety of activities that support the lesson objectives and keep the students engaged (E12) and incorporating and specifying Gardner's Multiple Intelligences in some activities in the module would make it more learner-centered. In doing so, learners will be free to perform an activity parallel to their intelligence/s and center of interest (E20).

Table 7. Evaluation in terms of Content-Based Instructional Module's Activities

	Statements	Weighted Mean	Descriptive Analysis
1	The performance task develops 21 st century skills and higher order cognition (i.e. critical thinking, creativity, learning by doing)	3.91	Completely Evident
2	The concepts are suitable to the learner's level of development, needs, experience and context.	3.91	Completely Evident
3	The activities have written and performance tasks that are differentiated based on the target user's multiple intelligences and readiness levels.	3.78	Completely Evident
4	The activities contain essential instructional design elements that contribute to the achievement of learning objectives.	3.69	Completely Evident
5	The module uses various motivational strategies to hook the target user's interest and engagement.	3.69	Completely Evident
Average Weighted Mean		3.80	Completely Evident

Furthermore, the respondents evaluate the activities as *completely evident*, as they have been written. Performance tasks that are differentiated based on the target user's multiple intelligences and readiness levels (3.79) contain essential instructional design elements that contribute to the achievement of learning objectives (3.69). The module uses various motivational strategies to engage the target user (3.69). However, E3 suggests that the activities must focus on how they can apply the different communication strategies/techniques in their chosen field, as a needs analysis has been conducted.

In addition, E31 stated: “Are the activities designed for face-to-face classes? If so, consider our present situation in the education system. Do you think group activities can still be possible?”

As a whole, the obtained data generated an average weighted mean of 3.80 in activities and was verbally interpreted as *Completely Evident*. The result connotes the areas that should be developed in the instructional material regarding activities. Areas for development include adding a variety of activities and modifying existing activities and performance tasks that are aligned with the target students (STEM).

This finding supports Nardo and Hufana's (2014) assertion that learners' activities in language lessons should be genuine and meaningful. Language materials should be contextualized, which means that rather than separating or creating discrete bits of language and materials, they should be introduced in a significant setting. According to Richards (2001), the material provides the fundamentals for the subject matter, the stability of skills taught, and the types of language rehearsal in which learners participate.

In terms of Assessment

Table 8 presents the respondents' evaluation of the content-based instructional module assessment. As illustrated in the table, the respondents evaluated that "*the assessment activities are aligned with the specific objectives and contents, and the assessments are aligned with specific objectives and contents,*" with the highest weighted mean of 3.94. Likewise, in an interview, E20 further supported that the assessment activities were well-crafted and supported with appropriate rubrics to guide the learners. There is no need for revision, and E24 sees that rubrics are evident throughout the learning materials.

Table 8. *Evaluation in terms of the Content-Based Instructional Module's Assessment*

	Statements	Weighted Mean	Descriptive Analysis
1	The assessment activities are aligned with the specific objectives and contents.	3.94	Completely Evident
2	The assessments are aligned with specific objectives and contents.	3.94	Completely Evident
3	The module provides sufficient assessment activities that will help the learners track his/her progress and mastery of the target competencies.	3.91	Completely Evident
4	The module contains assessments that have clear examples, instructions, and/or rubrics to serve as guide on how these will be used.	3.84	Completely Evident
5	The assessment activities ensure active engagement of the learner.	3.84	Completely Evident
	Average Weighted Mean	3.80	Completely Evident

Furthermore, the respondents evaluate that the module provides sufficient assessment activities that will help the learners track their progress and mastery of the target competencies (3.91). The module contains assessments with clear examples, instructions, and rubrics to guide how these will be used (3.84). The assessment activities ensure the active engagement of the learner (3.84). However, E3 suggests that for some activities, it is better if examples are given. For instance, in Lesson 5, there should be some examples that they can follow to pattern their answers. Similarly, E14 suggests that assessment should show evidence of the student's demonstration of the competency.

As a whole, the obtained data generated an average weighted mean of 3.89 in assessment and was verbally interpreted as *Completely Evident*. The result connotes the areas that should be developed in the instructional material regarding assessment. Some of the areas to develop are giving activities with examples and demonstrating the competencies. Assessment activities must allow students to demonstrate the extent to which they have met or exceeded the specified learning outcomes, according to the UCL (2025). Formative assessments, guided marking, peer review, and the opportunity to practice essential assessment procedures should all be provided to students regularly.

3.4 Acceptability of Content-Based Instructional Module

In Terms of Content

Table 9 presents the respondents' acceptability of the content-based instructional module. Based on the table, the respondents *highly acceptable* that in terms of the content of each lesson is directly relevant to the defined objectives and the content develops my academic writing skill by helping me become mindful of my strengths and weaknesses with the highest mean of 3.55 but just *acceptable* that the length and structures of sentences are suited to my comprehension level with the lowest mean of 3.32.

As a whole, the obtained data generated an average weighted mean of 3.44 in content and was verbally interpreted as *Acceptable*. It connotes that the students consider the module content relevant to their academic writing skills, but consider the length and structure of the sentences that can suit their understanding and comprehension level. To enhance the current module being used in Oral Communication for Grade 11, this study introduced BL as a learning mode. The language mentioned above, teaching problems were addressed through an instructional program dubbed the Blended Learning Assignment and Speaking Tasks (BLAST). Not only have the students had more accessible access to assignments, but also, they have been able to explore the topics. The experience provided on the BLAST Website facilitated the demonstration of the expected outcome in terms of oral communication.

Table 9. *Acceptability of Content-Based Instructional Module in Terms of Content*

	Statements	Weighted Mean	Descriptive Analysis
1	The content of each lesson is directly relevant to the defined objectives.	3.55	Highly Acceptable
2	The content develops my academic writing skill by helping me become aware of my strengths and weaknesses.	3.55	Highly Acceptable
3	The topics are supported by illustrative examples that are suited to the students.	3.51	Acceptable
4	The paragraph structures facilitate smooth flow of ideas and concepts.	3.49	Acceptable
5	The content is logically developed and organized, i.e. lessons are arranged from simple to complex, from observable to abstract.	3.43	Acceptable
6	The content of each lesson is simple and easy to understand.	3.42	Acceptable
7	The topics and ideas presented from one lesson to the next are coherent and integrated with each other.	3.42	Acceptable
8	The module consists variety of topics relevant to my future career.	3.37	Acceptable
9	The topics integrates desirable values and traits.	3.38	Acceptable
10	The length and structures of sentences are suited to my comprehension level.	3.32	Acceptable
Average Weighted Mean		3.44	Acceptable

In Terms of Format and Language

Table 10 presents the acceptability of the respondents in terms of the content-based instructional module's format and language. Based on the table, the respondents found the format/layout highly acceptable, which makes the lessons more interesting, with the highest mean of 3.54, but found the illustrations, pictures, and captions to be correctly laid out for easy reference, with the lowest mean of 3.37.

Table 10. *Acceptability of Content-Based Instructional Module in Terms of Format and Language*

	Statements	Weighted Mean	Descriptive Analysis
1	The learning activities are presented clearly.	3.55	Highly Acceptable
2	The format/layout is well-organized, which makes the lessons more interesting.	3.54	Highly Acceptable
3	The font size and font style of the instructional modules are readable.	3.50	Acceptable
4	The lessons of the modules are presented in a unique and original form.	3.45	Acceptable
5	The presentation of each lesson is attractive and interesting to the students.	3.45	Acceptable
6	The vocabulary used in the module is appropriate to my level of comprehension and experience.	3.45	Acceptable
7	The topics are presented in a rational and sequential order.	3.43	Acceptable
8	The language used is clear, concise, motivating, and easy to understand.	3.43	Acceptable
9	The instructions in the instructional modules are concise and easy to follow.	3.42	Acceptable
10	The illustrations, pictures, and captions are properly laid out for easy reference.	3.37	Acceptable
Average Weighted Mean		3.46	Acceptable

As a whole, the obtained data generated an average weighted mean of 3.46 in terms of format and language and was verbally interpreted as *Acceptable*. It connotes that the students consider the format or layout of the module, which adds to their interest in the lessons, but they still want more illustrations, pictures, and captions for easy reference.

In Terms of Activities

Table 11 presents the acceptability of the respondents in terms of content-based instructional module activities. Based on the table, the respondents *accepted* that the activities in the module improved their communication skills, with a mean score of 3.50. Still, they found the module *acceptable* in terms of using various motivational strategies to engage the target user, with the lowest mean of 3.35.

Table 11. Acceptability of Content-Based Instructional Module in Terms of Activities

	Statements	Weighted Mean	Descriptive Analysis
1	The activities in the module improve my communication skills.	3.50	Acceptable
2	The activities and examples in the module foster my creativity.	3.47	Acceptable
3	The module can be used as an independent source material.	3.47	Acceptable
4	The performance task develops 21 st century skills and higher order cognition (i.e. critical thinking, creativity, learning by doing)	3.45	Acceptable
5	The consolidated parts of the module provided opportunities to practice the lessons learned.	3.45	Acceptable
6	The activities are suitable my level of development, needs, experience and context.	3.43	Acceptable
7	The activities have written and performance tasks that are differentiated based on the target user's multiple intelligences and readiness levels.	3.41	Acceptable
8	The activities in the module raise my interest and curiosity in my desired career.	3.37	Acceptable
9	The activities encourage collaborative work (group and pair work).	3.36	Acceptable
10	The module uses various motivational strategies to hook the target user's interest and engagement.	3.35	Acceptable
Average Weighted Mean		3.43	Acceptable

As a whole, the obtained data generated an average weighted mean of 3.43 in activities and was verbally interpreted as *Acceptable*. It connotes that the students consider the activities that can enhance their communicative skills, but they are still looking for motivational strategies that can hook their interest and engagement.

In Terms of Assessment

Table 12 presents the acceptability of the respondents regarding the assessment of the content-based instructional module. Based on the table, the respondents found the assessment in the module highly acceptable learned with a mean of 3.57, but found the question number adequate for the topic, with a mean of 3.35.

Table 12. Acceptability of Content-Based Instructional Module in Terms of Assessment

	Statements	Weighted Mean	Descriptive Analysis
1	The assessment in the module helps me evaluate what I have learnt.	3.57	Highly Acceptable
2	The assessment activities ensure active engagement of the learner.	3.53	Highly Acceptable
3	The evaluation matched the content of the topic.	3.52	Highly Acceptable
4	The assessment develops higher order thinking skills.	3.50	Acceptable
5	The module provides sufficient assessment activities that will help me to track my progress and mastery of the target competencies.	3.49	Acceptable
6	The assessments are aligned with specific objectives and contents.	3.48	Acceptable
7	The module contains assessments that have clear examples, instructions, and/or rubrics to serve as guide on how these will be used.	3.48	Acceptable
8	The key answer for the question is adequate from the topic.	3.48	Acceptable
9	The assessment in the module increase my desire to learn communicative skills.	3.46	Acceptable
10	The number of the question is adequate from the topic.	3.43	Acceptable
Average Weighted Mean		3.51	Highly Acceptable

As a whole, the obtained data generated an average weighted mean of 3.43 in activities and was verbally interpreted as *Acceptable*. This connotes that the students consider the assessment can help them assess their learning, but they still want more questions to answer that are adequate for the topic.

4.0 Conclusion

The students are mostly taking STEM tracks to take engineering courses. The communicative needs of the students are primarily related to decision-making. The senior high school teachers show positive perceptions of the development of the instructional module. The students show interest and engagement with the developed instructional material for their discipline. The developed content-based instructional module is ready for validation and initial try-out. It contributes to the Oral Communication teachers and can be used in flexible learning and face-to-face modality. Also, the developed content-based instructional module can be used as a reference for developing other modules across the discipline. It provides lessons that emphasize content-based instruction in fields such as Accountancy, Business, and Management (ABM), and Information and

Communication Technology (ICT). Students may be acquainted with content-based communicative activities to better appreciate their chosen field. Curriculum developers may include competencies to strengthen the teaching and learn oral communication in context.

5.0 Contribution of Authors

The researcher is the sole author of this study.

6.0 Funding

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7.0 Conflict of Interest

The researcher declares no conflicts of interest regarding the publication of this paper.

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