CO-CREATION IN TEACHING ENGLISH TO TERTIARY STUDENTS

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Abstract: Innovative teaching approaches that encourage active learning are becoming increasingly popular in the ever-changing educational landscape. One such paradigm that has attracted a lot of interest is co-creation, an educational strategy that stresses student engagement and collaborative learning. This study aims to investigate co-creation implementation in teaching Basic Grammar, Basic Writing, and Translation. Then, this research also aims to analyze the effect of the implementation of co-creation in the classroom. The study utilized qualitative research methodology and was conducted at STAIN Mandailing Natal, focusing on students enrolled in the English Language Education Program. Data was collected through focus group discussions, observations, and interviews. The findings highlighted various co-creation techniques used, such as peer feedback, collaborative projects, and grammar prompts, which have resulted in positive outcomes for students, including increased engagement, collaboration, autonomous learning, and critical thinking skills. Overall, the incorporation of co-creation in the classroom has enhanced the academic experience for students in the English Language Education Program. Further exploration is recommended to understand its full potential and applicability across different educational settings and subjects. Besides, future researchers could focus on quantifying the effects of co-creation on student outcomes and delve into potential challenges and solutions in its implementation.

Keywords: *co-creation, grammar, writing, translation, tertiary students*

INTRODUCTION

The trend of teaching currently has changed, a few decades ago lecturers dominated the class and students just listened passively, however nowadays the students are "learning- centered". The new method puts learners as the "attention-focused" which posits students to participate actively and independently (Zarandi, 2022). This idea mostly supports the students to elaborate their knowledge and experience, especially in higher education (tertiary level) without depending too much on guidance from the lecturer or teacher (Giner & Rillo, 2016). The lecturers act as facilitators and let the students explore their creativity and express their ideas independently. Moreover, the role of a teacher as guidance or mediator is a modern educational approach that shifts the teacher's role from being the primary source of information to a guide who facilitates and supports students' learning experiences. This approach promotes active learning, critical thinking, and independent problem-solving skills.

The co-creation method of teaching has garnered significant attention and diverse

perspectives in the field of education over the past few decades (Bovill, 2019). This approach emphasizes the importance of teaching communities (Lubicz-Nawrocka, 2017),while also prioritizing learner-focused and personalized instruction (Mincu, 2012) that caters to individual learning needs (Zmuda et al., 2015). The primary focus of this approach centers on the concepts of collaboration and self-authorship. The technique offers a significant advantage that is highly valued by students. It provides unique services that are not available through other methods (Witell et al., 2011). Furthermore, Kaminskiene et al. (2020) argue that co- creation is a dynamic process that relies on the principles of partnership and collaboration, involving a shift in roles between students and lecturers as they engage with the educational curriculum.

The term "co-creation" pertains to an approach known as "student-centered learning," emphasizing the importance of active involvement from both students and teachers in the design and implementation of the educational process. It recognizes the notion that students are not solely recipients of knowledge but rather engaged contributors in the educational process they are encountering (Meinking & Hall, 2020). Students who engage in co-creation activities cultivate a heightened sense of ownership and empowerment, thereby fostering increased interest, motivation, and accountability toward their educational journey(Qi et al., 2023).

In the setting of English language education, co-creation is learner-centered and draws on principles of dialogism and exploratory talk. It emphasizes the relationship between language learner and teacher, content and language integrated learning (CLIL), and language for specific purposes (LSP) (Finch, 2023). In addition, the concept of co-creation has the potential to transform the methods and outcomes of language skill acquisition. This method facilitates enhanced student engagement with English language materials, active involvement in discussions, uninhibited expression of ideas, and collaborative efforts on projects or assignments (Selfa-Sastre et al., 2022). Consequently, it has the potential to facilitate an in- depth understanding of the linguistic system while simultaneously cultivating fundamental aptitudes such as analytical reasoning, solution-oriented thinking, and collaborative abilities.

Particularly, the English Language Education Program at STAIN Mandailing Natal provides a captivating context for investigating this innovative approach. Although there is an increasing amount of scholarly literature on the concept of co-creation in educational contexts, there remains a scarcity of studies that specifically examine its application in the instruction of Grammar, Writing, and Translation. Understanding how co-creation is being implemented for the students of STAIN Mandailing Natal can provide valuable insights into its effectiveness as a teaching method for English language education. This study aims to explore this gap by investigating how co-creation is implemented in teaching Basic Grammar, Basic Writing, and Translation at the English Language Education Program of STAIN Mandailing Natal. It seeks to analyze what strategies teachers use to incorporate student input into their lesson plans and teaching materials, and how these implementation strategies impact student learning outcomes within the classroom setting.

RESEARCH METHOD

Research Design

This study utilizes qualitative research methodology, as advocated by Creswell & Creswell (2012). The objective of qualitative research is to explore and gain an understanding of the meaning that individuals or groups ascribe to a social human issue. The research process encompasses the formulation of inquiries and methodologies, the gathering of data within the framework of participant involvement, an inductive examination of the data that progresses from specific instances to overarching patterns, and the interpretation of the data's significance.

Research Site and Participants

This study was conducted at STAIN Mandailing Natal, specifically within the English Language Education Program. The participants involved in this research study were students enrolled in the English Language Education Program. There was a total of 60 student participants, representing three different classes from three academic years (specifically, semesters II, IV, and VI). The researchers used purposive sampling, a technique that allows them to focus on specific areas of interest and gather comprehensive data on those subjects. This entails the procedure of identifying and selecting individuals or groups who possess exceptional knowledge or expertise in a specific phenomenon of interest (Cresswell & Plano, 2011).

Instrumentation and Data Collection Technique

To acquire the necessary data, the researcher employed three distinct types of instrumentation: focus group discussions, observations, and interviews. The utilization of focus group discussions serves as a valuable tool for gathering preliminary data on co-creation. These discussions aim to explore the perspectives, requisite knowledge, past experiences, extent of trust, and individual requirements of the members involved. Concurrently, an observational study is undertaken to ascertain the actual application of co-creation in the classroom setting, specifically in the context of teaching and learning activities on grammar, basic writing, and translation. The final tool employed was the interview, utilized to gather comprehensive data that surpassed the scope of observation and focus group discussions. In the early stage of this study researcher gathered the students in each class. Researchers conducted group discussions with the students to talk about co-creation in grammar, writing and translation classes. The result of the focus group discussion was written down by the researcher as preliminary data.

Observation Design a system for data collection. Once you have focused your evaluation think about the specific items for which you want to collect data and then determine how you will collect the information you need. There are three primary ways of collecting observation data. These three methods can be combined to meet your data collection needs. Recording sheets and checklists are the most standardized way of collecting observation data and include both preset questions and responses. These forms are typically used for collecting data that can be easily described in advance (e.g.,

topics that might be covered in an HIV prevention lesson). Observation guides list the interactions, processes, or behaviors to be observed with space to record open-ended narrative data. Field notes are the least standardized way of collecting observation data and do not include preset questions or responses. Field notes are open-ended narrative data that can be written.

RESULTS AND DISCUSSION

A. IMPLEMENTATION OF CO-CREATION IN TEACHING ENGLISH

This study aims to investigate the implementation of co-creation in teaching Basic Grammar, Basic Writing and Translation. Then, this research also aims to analyze the effect of the implementation of co-creation in the classroom. The findings of this study are presented as follows. The implementation of co-creation for the English Language Education Program STAIN Mandailing Natal for Translation subject consists of communicative peer feedback and collaborative translation projects. For the next subject, there are 3 activities of co-creation for Grammar subjects: collaborative sentence construction, peer grammar editing and interactive grammar games. Last, for basic writing subjects the co-creation that is applied by the students are pair correction and collaborative paragraph building. The implemented co-creation types can be presented as follows:

Table 1
The Implemented Co-Creation in the Classroom

No	Subjects	The Implemented Co-creation
1	Translation	- Communicative Peer Feedback - Collaborative Translation Project
2	Basic Grammar	- Pictorial grammar prompts - Peer grammar editing
3	Basic Writing	- Pair sentence correction - Collaborative sentence building

Based on research question 1 how the implementation of co-creation in the classroom for 3 subjects, the researchers highlighted 6 types of implemented co-creations.

1. Co-creation in Translation Subject

a. Communicative Peer Feedback

Communicative Peer Feedback translation needs collaboration with classmates. Based on the data from observation and interview, this activity was selected by participants to collaborate with partners to share, revise and comment on their work on their translation subject. Three steps should be assigned by the participants namely, preparation, feedback giving and revision making. In the first step, the lecturers assigned the students to translate the text. The themes of the text were various such, as news, social media, and short story. Before translating the text, the students received an introductory explanation from the lecturer dealing with the regulation of the translation and the type of the text being translated. The second step was peer feedback where each student was assigned to a translation draft to be corrected. They asked to pay more attention to grammatical errors, word choice and contextual adaptation by marking or labelling the place where the errors occurred. The students also requested to provide global comments on the paper. In the last process, the students revised the translation based on feedback.

b. Collaborative translation

The utilization of collaborative translation projects offers students the chance to engage in collective efforts to translate a single text or a collection of texts. This collaborative approach provides individuals with the opportunity to engage with a wide range of perspectives and strategies, thereby strengthening their problem-solving abilities as they collectively address a variety of translation challenges. Collaborative translation brings people to work in a team and enables the participants to share their work with a partner.

Based on the observation in the classroom, the students enjoyed working with their partner since they could share their experience and knowledge to solve the work. There are several benefits of doing collaborative translation, building communication, saving costs, and advancing consistency. In the first place, collaborative translation is a way of keeping communication alive and productive during the process of translation. It means that the utilization of collaborative translation enables the consolidation of all members of your localization team onto a unified platform. It enables the coordination of all team members towards common goals and simplifies the overall supervision of localization processes.Next, collaborative translation exploits minimizing the time allocation and budgeting. One person takes more time and budget when translating the long and complicated passage, but if the work is done with more people, the lesser the cost and the more effective the result of translation. The participants of the study sit in a group, and then the lecturer assigns them short a story text which consists of 1000-word length to be translated into L2. During the translation activity, the students do dialogue and serious discussion related to the topic. Each of them expressed their opinion in turn they have one negotiated meaning.
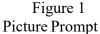
2. Co-creation in Basic Grammar Subject

a. Constructive peer correction

Constructive peer correction is a collaborative process in which students provide feedback on each other's written work. This practice is commonly used in grammar classes to enhance students' expertise in mastering grammar. This means that students engage in the critical evaluation of one another's written work, with the specific aim of identifying and addressing grammatical errors and areas that could benefit from improvement. In the context of grammar, a potential practice for students to enhance their grammar skills involves engaging in a collaborative activity. Specifically, upon finishing the grammar exercise, students can exchange their work with a fellow student. The purpose of this exchange is for the partner to critically evaluate the accuracy and clarity of the written piece. This process enables the reviewing student to enhance their comprehension of grammatical rules while providing the writer with feedback on their application of these rules in real-life situations. With time, both parties will probably observe enhancements in their writing abilities as they progressively acquire proficiency in recognizing and evading prevalent errors. The lecturers distributed grammar exercises on a piece of paper to the participants. Then she asked the students to answer the question.

b. Pictorial grammar prompt

The process of constructing sentences using visual prompts is a cognitive task that necessitates the integration of visual stimuli and linguistic processing. The students are presented with an image and are expected to participate in a collaborative effort to construct sentences that effectively describe the visual content portrayed in the image. In this scenario, the educator presents an image to the students, subsequently dividing them into groups. The students actively participate in group discussions and independently record sentences that describe the different elements portrayed in the picture. After conforming to the specified time limit, the groups proceed to present the sentences they have formulated to the entire class. These activities have a dual purpose: to reinforce grammar rules and to foster teamwork and communication skills among learners.

Figure 1
Picture Prompt

Source: [https://images.app.goo.gl/TGWPDZZHwCXFzyih8]

Students' sentence:

1. *The girl with pink clothes plays with a doll, and the girl with yellow clothes plays with a plane.*
2. *He bikes bicycle in the field and plays with friends.*

3. Co-creation in Basic Writing Subject

a. Pair sentence correction

Pair correction refers to sentence improvement which involves grammatical practices within the sentences. The students modified or revised the sentences which were detected as incorrect grammar such, as misspellings, unsuitable subject-verb agreement, improper tenses, pronoun ambiguity, incorrect use of singularity and plurality, and many other grammatical problems. The activity mentioned above was performed by students to enhance their sentence ability to build sentences. Sentence correction in pairs refers to the practice of two students mutually reviewing and correcting each other's work in a sequential manner. The individual submitted their work to their partner and requested corrections. The correction related to grammatical errors within the sentences.

Pair sentence correction is a collaborative process wherein two students engage in co- creation to fix incorrect sentences. Each student is assigned an individual paper with a distinct topic for their writing assignment. To make necessary revisions, the participants engage in the process of modifying their written work. Subsequently, they allocate time to thoroughly review the content, followed by making appropriate corrections. The lecturers establish the designated timeframe for students to respond to the question.

In this instance, the lecturer takes the role of a guide, specifically adopting a "guide on the side" approach. The concept of the "guide on the side" refers to an instructional approach where students are encouraged to adopt a more active role in their learning process, surpassing the level of effort generated by their mentor,

teacher, or lecturer. An alternative designation for this practice is student-centered learning. The lecturer adopts a student- centered approach, allowing for increased autonomy and prioritizing the facilitation of student-led learning and discovery. Most of the collaborative work is conducted, allowing students to explore their abilities without excessive reliance on their instructor's guidance. In practical application, the students actively engaged with one another to collaboratively correct sentences. This approach proves beneficial for students as it promotes experiential learning and facilitates the exchange of ideas. They may engage in discussions, critical thinking, or problem-solving activities to apply their knowledge in practical situations.

The following are examples of sentence corrections made by the students. In Class A of the second semester of the English Language Education Program STAIN Mandailing Natal for the academic years 2023-2024, the students have been assigned by the lecturer to compose ten sentences. The researcher presented an example of co-creation in the form of peer sentence correction, which was the outcome of students' collaborative efforts within the classroom.

- Student A wrote sentences: *There are three <u>reason</u> I do not like spider.*

Student A subsequently gave the tasks to their partner, student B. After carefully reviewing the text, Student B noticed an error or grammatical errors. One of the errors occurred as demonstrated in the previously mentioned example. Student B has corrected the mistake as follows:

- Student B wrote*: There are three <u>reasons</u> I do not like spider.*

b. Collaborative Sentence Building

Collaborative sentence building is type of co-creation that occurred on the classroom where the students worked together to build sentence. This activity is an individual action that consisted of two or more students in one group. By doing collaborative sentence writing, the students might explore their ability to engage the sentences within different atmosphere. The students should encounter the impediments and challenges that accompany this approach, including the imperative for efficient communication and coordination, as well as the possibility of encountering conflicts pertaining to content and style.

The students of the English Language Education Program at STAIN Mandailing Natal are interested in engaging in collaborative sentence writing activities. They are seeking a collaborative activity that involves brainstorming, discussion, and the unification of different ideas. It is evident that the incorporation of co-creation as an activity and fostering meaningful conversations are essential for students. Both parties involved in this case, namely student A and student B, should exert greater effort to identify and develop their writing ideas. The most efficient approach involves utilizing brainstorming techniques, wherein individuals contribute their ideas, which are subsequently gathered and organized to identify the most suitable solution.

Effective communication is essential for this process, as it involves transitioning from a dialogue format to an open discussion. During the discussion, one student

presents their idea, while another student verifies the information before reaching an agreement. Another crucial aspect that requires attention is the implementation of metacognitive practices, including higher-order thinking and critical perspectives. Moreover, Metacognition pertains to the cognitive capacity to identify and understand individual thought processes. In the context of writing, metacognitive processes refer to the practice of analyzing and reflecting on an individual's strategies for planning, drafting, revising, and editing written work.

The stages of collaborative sentence building can be presented as follows:

1. The lecturers present various topics on the whiteboard, focusing specifically on the local culture and indigenous knowledge of Mandailing Natal. These topics include traditional cuisine or foods, customs, cultural attractions, and recreational destinations in Mandailing Natal. The purpose behind the nomination of these themes is to recognize and appreciate the cultural value they hold, while also fostering a sense of pride and appreciation among students for their traditions.
2. The lecturers proceed to choose the students according to their respective groups. The group was comprised of four to five students.
3. The lecturers request that the students compose a minimum of ten sentences for each group within a designated time frame of 30 minutes.
4. The lecturers allow the students to collaborate in their respective groups without any disruptions. In this context, it signifies that lecturers grant students the opportunity to engage in discussions and independently determine the most effective strategy to complete their assignments.
5. During class, lecturers often select a group member to serve as a model for their work. They proceed to write the sentences on the whiteboard and provide explanations to the rest of the class. The lecturers encourage active participation from other groups, which may include constructive criticism, sharing opinions, and providing additional information.
6. The lecturers explain the errors made during group work to the entire class. This activity is carried out to familiarize students with the proper structure and composition of sentences, ensuring that they are well-prepared for future discussions without any errors.

The lecturers have the role of the observer and facilitator who will guide them when they face serious problems.

c. Type of co-creation attributes

In these types of translation, the attributes of the co-creations that occurred namely collaborative output, learning community and partnership and metacognitive process. As a tangible outcome of collective work, collaborative output is a crucial component of collaboration and cooperation and can be an effective instrument for combining the varied skills, perspectives, and knowledge of individuals or groups to accomplish collective objectives. While in terms of learning community and partnership, the participants achieved greater knowledge from their peers. Both learning communities and partnerships play important roles in promoting education and fostering collaboration among individuals, institutions, and organizations to

enhance learning experiences and outcomes. Learning communities focus on the social and collaborative aspects of learning, while partnerships emphasize cooperative efforts to address broader educational challenges.

Lastly, metacognitive process means the participants think critically and view the problem from different angles and perspectives in searching of solution. Metacognitive processes play a crucial role in the translation process as they assist translators in establishing objectives, monitoring their work, self-regulating, evaluating their translations, and adapting to various issues. Translators in this case were the sixth-semester students of the English Language Education Program STAIN Mandailing Natal who leveraged a strong understanding of metacognition and actively applied it are more inclined to generate translations of superior quality that effectively fulfil the intended objectives and task requirements.

B. THE EFFECTS OF CO-CREATION IMPLEMENTATION

The Value of Co-Creation for Learning

Bovill (2017) highlighted five values of co-creation for curriculum, especially for the teaching and learning process. They are as follows: (a) active and reflective participation, (b) turning teachers' role as the facilitator, (c) dynamic interactive process, (d) various channels for teaching and (e) awareness and responsibility of the students. This communicative peer feedback was beneficial for the students, especially for dialogue, teamwork, and communication. Based on the data derived from focus group discussions and observations, it has been identified that the implementation of co-creation in English teaching for basic grammar, basic writing, and translation yields six distinct effects. The key elements include collaboration, autonomous learning, engagement, critical thinking, and creativity.

The first is collaborative activity which is conducted by the students and lecturers and students with another student. The students work with their teammates in the classroom, mostly in small groups consisting of 2-4 students, to share ideas related to the material given by the lecturer. Bovill et al. (2014) argued that co-creation exploits collaboration among the students reciprocally where each of them has their contribution to sharing the idea, working together, and building confidence.

The implication is that the utilization of the co-creation method facilitates effective collaboration among students at STAIN Mandailing Natal during classroom activities. The students demonstrate active participation in the process of knowledge development when they notice a fellow peer displaying a deficiency in a specific area. In this scenario, the team leader takes on the role of a facilitator, responsible for providing guidance and clarifying the subject matter for their colleagues. The highly qualified student in the group took on the role of a mentor, facilitating the group's comprehension of the subject matter through the application of generative conversation, a personalized methodology, and active participation in academic discussions.

Collaboration within an educational environment presents numerous advantages for students, such as the opportunity to broaden their knowledge acquisition, enhance their communication skills, and improve their problem-solving abilities.

Collaboration enables students to be exposed to a diverse array of perspectives and ideas, thereby enriching their comprehension and interpretation of a subject or educational material. Students have the valuable opportunity to acquire knowledge from their peers, thereby gaining access to a diverse range of perspectives and ideas that they may not have encountered on their own. This process facilitates the cultivation of critical thinking abilities.

The next impact of implementation of co-creation in teaching is autonomous learning of the students. Learner autonomy refers to the principle that learners should gradually take on more responsibility for their learning and the strategies they use to acquire knowledge. The concept of autonomous learning is widely acknowledged for its capacity to enhance the personalization and concentration of the learning process. Consequently, it is widely believed that customizing the learning experience to cater to the unique needs and preferences of individual learners leads to improved learning outcomes.

The process of autonomous learning skills, commonly referred to as self-authorship, encompasses cognitive, interpersonal, and intrapersonal growth (Magolda, 1999). As a person pursuing education in the 21st century, university students must embrace the concept of self- authorship. Co-creation catalyzes transforming the learning process by leveraging the principles of independent learning and self-authorship. In this approach, students posit personal responsibility for their learning journey. In essence, students may perceive the concept of acquiring knowledge through a smart and efficient approach, free from the influence of their peers and even instructors.

As independent learners, students possess the autonomy to acquire knowledge and process it in a simplified manner, enabling them to effectively assimilate and apply their understanding. Based on the data gathered from the focus group discussion, it was found that students perceive a sense of dependency when the lecturer exerts excessive pressure or provides excessive assistance. The students are seeking to independently address the problem at hand, minimizing the need for significant involvement from their partner or mentor. The researchers discovered that students encounter difficulties when it comes to expressing their unique perspectives during discussion sessions. It has been suggested that presenting one's perspective is an integral aspect of the learning process, as it can enhance one's cognitive abilities.

In a more detailed explanation, Magolda and King (2004) highlighted three dimensions of self-authorship as follows: Cognitive maturity, specifically in the epistemological dimension, refers to the perspective of perceiving knowledge as contextual and constructed through the utilization of pertinent evidence within a specific context. This ingredient is essential for attaining various learning outcomes. (b) Intrapersonal Dimension of Integrated Identity: The capacity to engage in introspection, examination, and selection of enduring values. Mature relationships in the interpersonal dimension involve demonstrating respect for one's own culture as well as the cultures of others. It also entails engaging in productive collaboration to effectively negotiate and integrate multiple perspectives and needs.

In addition, the next impact of the implementation of co-creation is students' engagement with others. In this case, the term "engagement" is synonymous with "partnership". The objective of both terms is to foster student engagement, promote

mutual respect among peers and instructors, and encourage community involvement. Lubicz- Nawrocka (Lubicz-Nawrocka, 2017) advocated that co-creation stimulates the learning community to engage and develop ownership, empathy, respect, and authentic and relevant learning activity. The collaboration between educational institutions and community organizations yields mutual benefits for all stakeholders involved. Partnerships have the potential to enhance, bolster, and even revolutionize the individual partners, leading to enhanced program quality, optimized resource utilization, and increased alignment of goals and curriculum (Harvard Family Research Project, 2010).

Based on the observational data obtained from observation and focus group discussions, it is evident that the students perceive co-creation as a catalyst for enhancing their respect for both their peers and the lecturers. There exist two distinct categories of partnership, namely personal and interpersonal. Engagement refers to the establishment of community partnerships, wherein students collaborate to promote academic and social achievement. The utilization of this instrument plays a crucial role in fostering connection among individuals, with the ultimate objective of achieving favorable results.

According to the research conducted by Fredricks, et al. (2004), there are three distinct categories of Student Engagement: Behavioral Engagement, Emotional Engagement, and Cognitive Engagement. Behavioral engagement encompasses the involvement of students in both classroom activities and extracurricular pursuits. The types of engagement that occurred in the classroom can be presented as follows:

Table 2 Types of Engagement

No	Type of engagement	Descriptions
1	*Behavioral*	- Asking or answering questions from the lecturer - Paying attention to the lecturer - Respecting other's opinion when discussion
2	*Emotional*	- Students care about their learning - Interest, enthusiasm, and excitement about what they are doing in the classroom - Students motivated by the material and explanation - Willing to participate in the learning process
3	*Academic*	- Being curious, wanting to understand something - Psychological or intellectual investment in learning - Use strategies that lead to deep learning

The last effect of co-creation for English Language Education Program of STAIN Mandailing Natal was the development of critical thinking skills and metacognitive awareness. According to Bovill et al. (2014), the authors posited that the process of co-creation facilitates the cultivation of metacognitive awareness to the learning content. They possess the capacity to engage in thoughtful reflection and constructive critique of the educational content. This implies that students have the potential to understand the information presented by their lecturers and actively seek out the most efficient methods to fully grasp the underlying concepts within the materials. The students, as active learners, engage in the process of making logical connections between ideas and manipulating them to form their conceptions. Lau and Chan (2015) note that individuals who possess critical thinking skills can draw logical conclusions based on their existing knowledge, effectively utilizing information to address challenges, and actively seeking out pertinent sources of information to enhance their understanding. In addition, Lau and Chan (2015) added criteria for logical thinking in the following table:

Table 3
Types of Critical Thinking

No	Type of critical thinking	Description
1	Logical connection	Students are understanding the logical connections between ideas toward the material given by lecturer
2	Constructing argument	identifying, constructing, and evaluating arguments
3	Reasoning	Students can detect inconsistencies and common mistakes in reasoning
4	Problem solving	The students find solution of the problems systematically
5	Relevance idea	Students can identify the relevant and crucial information of ideas
6	Belief and values	Students reflecting on the justification of one's own beliefs and values.

Based on the findings of this study, students used critical thinking when running co-creation in the classroom. The students use logical connections to analyse the lecturer-assigned information. Students can identify grammar errors in their writing. In a subsequent activity, students can correct grammatical errors and write an argument as to why the problem occurred and what solutions or words is appropriate for rectifying that error. It signifies that the pupils have a thorough understanding of the subject matter and have used critical thinking to gain insight and knowledge.

CONCLUSION

In summation, the current investigation has explored the execution of co-creation within the pedagogical domain, specifically focusing on Basic Grammar, Basic Writing,

and Translation. The research underscores a variety of co-creation techniques, including communicative peer feedback, collaborative translation projects within the Translation domain, pictorial grammar prompts, and peer grammar editing within the Basic Grammar d, as well as pair sentence correction and collaborative sentence building within the Basic Writing. The primary intent of these co-creation activities is to amplify students' collaborative, communicative, and problem-solving abilities within the learning environment. The incorporation of co-creation within the classroom setting has been observed to yield numerous positive outcomes for students. These encompass active engagement, collaboration, autonomous learning, interaction with peers, and the cultivation of critical thinking abilities. Collectively, these benefits contribute to a more dynamic, effective, and engaging academic experience for students, particularly within the English Language Education Program at STAIN Mandailing Natal. Therefore, it can be concluded that co-creation, when adeptly applied within an educational setting, can serve as a powerful tool to enhance the learning experience. It not only fosters active participation and autonomous learning but also nurtures critical thinking skills, underscoring the imperative role of co-creation in modern pedagogy. This study, hence, stands as a testament to the potential of co-creation as a catalyst for educational transformation, illuminating the path for future research in this domain.

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