

Verbal instructional modeling: An intervention to improve students' perceived level of confidence in critical thinking skills

Adeva Jane Esparrago-Kalidas^{1*}, Edralin C. Manla², Xenia Jo B. Agot², Leila Cashmire A. Blanco², Nicole A. Carrasco², Mark Rey O. Frasco²

¹ Xavier University – Junior High School, Philippines

² Xavier University – Ateneo de Cagayan, Philippines

*Corresponding author's email: aesparrago@xu.edu.ph

*  <https://orcid.org/0000-0003-2937-6522>

*  <https://doi.org/10.54855/ijli.23223>

® Copyright (c) 2023 Esparrago-Kalidas, A. J. et al.

Received: 18/03/2023

Revision: 13/05/2023

Accepted: 16/06/2023

Online: 20/06/2023

ABSTRACT

Keywords: critical thinking, modeling, observational learning, confidence, Verbal Instructional Modeling

Verbal instructional modeling is a concept put forward by Albert Bandura (1977) under Observational Learning which assumed that when certain explanations and descriptions were presented, learning was enhanced. This study banks on this concept and confirms whether Verbal Instructional Modeling helped improve the perceived confidence of Grade 10 students from a private school in the Philippines in terms of their critical thinking skills. The study made use of a practical action research design and used a 6-point Likert Scale Questionnaire. Employing convenience sampling, the researchers collected the data pre- and post-implementation, describing the perceived level of confidence of the participants before and after the intervention. The data was then analyzed and interpreted with the use of the T-test. The study's results confirmed that Verbal Instructional Modeling improves the respondents' perceived confidence level in their critical-thinking skills. Therefore, the researchers recommend continued use of Verbal Instructional Modeling in classroom interactions.

Introduction

A student behaves, approaches challenges, and engages with others are significantly influenced by their self-confidence (Shore, 2019). One of the foundational elements of academic success is favorable or high self-esteem because it gives a solid framework for learning. Low-esteem learners tend to study less, concentrate less, and not take chances. This means that a student's degree of confidence is a significant factor in determining their academic success. A student's grades will result directly if he or she starts to lose confidence in class. He or she may even alter his or her ambitions, dreams, and plans. Students with poor self-esteem could feel unworthy of accomplishing their goals or that doing so is impossible.

CITATION | Esparrago-Kalidas, A. J., Manla, E., Agot, X. J., Blanco, L. C., Carrasco, N., & Frasco, M. R. (2023). Verbal Instructional Modeling: An Intervention to improve students' perceived level of confidence in critical thinking skills. *International Journal of Language Instruction*, 2(2), 37-51. DOI: <https://doi.org/10.54855/ijli.23223>

This self-esteem drop was apparent when students returned to face-to-face classes after almost three years of studying online. In the junior high school the researchers have studied, students have reported feeling anxious, unprepared, and frustrated when it comes to their overall classroom and learning experience. This drop in self-esteem is brought about by several factors, including ambiguity concerning academic achievement, the sudden disruption of their social life, and future careers, among others (Aristovnik et al., 2020).

Moreover, as the COVID-19 pandemic started, educational institutions closed, and online classes became the norm. However, studies show that the online education system has not produced adequate results for the students and that they lack confidence in their ability to succeed after mastering the material covered in the online lectures. Many students suffer from poor self-esteem, which in turn results in insufficient participation and inadequate improvement even after spending a lot of time in class. Students are most likely to have low self-confidence when it comes to accomplishing tasks, especially when there is no further explanations/instruction from the teacher (Gopal, Singh, and Aggarwal, 2021).

As a response to these difficulties present, the researchers chose to study modeling, specifically Verbal Instructional Modeling, and its effect on students' perceived levels of self-confidence, particularly in their critical thinking skills. Both modeling and the use of models in educational contexts have always been widely used as instructional strategies. Singh (2022) notes that "most teachers use it every day even without being consciously aware of it." An example would be a music teacher who shows his/her students how to play a specific musical instrument or the steps of solving a mathematical problem (Creekmore, 2019). Reading aloud is also one of the examples of modeling in the classroom.

Imagine a scenario wherein an English teacher asks her students to write a synthesis paper without teaching them how to make one. The students do not know what the final product and the goal should look like, nor do they know the process or steps they need to go through to come up with the assignment. Without a clear model of expectation, the students will not be able to do what is expected of them (Riches, 2019). In a similar manner, Singh (2022) noted that modeling will give the students a high possibility of getting the right outcome. This is the reason why a purposeful integration of modeling and the use of models in instruction is a must. Until the learners know how to properly demonstrate and master the task, their teacher should give them assistance and support (Lipscomb et al., 2010). Teklu and Terefe (2022) also mentioned that the more the teacher demonstrates or performs modeling, the less likely there will be misunderstandings in the classroom.

Modeling will reduce the number of errors in the students' work because it somehow creates a roadmap for learning. It would be best to provide students with explanations along with demonstrations for them to achieve the desired results. Riches (2019) believed that nothing gives a class more confidence than watching their teacher modeling the task required of them.

Despite the mentioned benefits and advantages of modeling and the use of models, there is no sufficient information about the use of models in research subjects and its effect on the students' perceived level of confidence in their critical thinking. Learning by observation is an essential indicator of effective education. Therefore, it is fitting to evaluate how modeling improves the

learners' performance based on their perceived level of confidence as to their critical thinking. Moreover, it is also very important to determine what factors affect the said modeling in terms of its effectivity with regard to the students' performance and to what extent it shall be implemented for better results. These factors are very crucial in the performance of every learner to ensure that it scaffolds their skills and does improve their overall capabilities.

Literature review

Self-Confidence and Modeling

According to Verma (2017), self-confidence is notably one of the most known driving causes of how people get motivated, which is apparent in how they behave and think on a daily basis. The phrase "self-confidence" has also been used to refer to how people perceive their capacity to perform at a specific level. Being self-confident, therefore, is necessary, especially in learning as students perform better and achieve more because they know they can.

In a supportive environment that promotes performance achievements, people's expectations are greatly influenced by their level of confidence in their ability to perform the skill. This is because the accomplishments that they received and obtained and the skills they mastered serve as one of their motivations to become confident. Self-confidence can help students improve their participation, enjoy the learning process, reduce test anxiety, increase their interest in goal-seeking, help them be more comfortable with their lecturers and classmates and as well as help them share their experiences and opinions in the class. (Akbari & Sahibzada, 2020).

One of the means of developing self-confidence comes in the form of modeling. Modeling is a teaching strategy where the learners are shown by their teachers in a clear and detailed manner on how they will complete their tasks. According to Coleman (2020), utilizing modeling in the classroom will immensely be useful as a teaching tool and will also serve as effective classroom management.

Students who need extra help in completing the task or the assignment will ask their teachers considerably less frequently if they illustrate how it should be done. Salisu and Ransom (2014) asserted that using models as learning tools has two main advantages: it gives students accurate and practical representations of the knowledge they need to solve problems in a particular field, and it facilitates their understanding of the field of knowledge because it is presented in a visual way. In a study by Gage & Berliner (as cited in Salisu & Ransom, 2014), it was found out that students who were able to see or study a model before class discussions can actually remember at least 57% of questions about the lesson contents compared to students who were given the same instruction yet not given the opportunity to see any models. Coleman (2020) also mentions how "modeling gives a clear picture in a student's mind as to how to manage the task at hand... will give them the confidence in how to finish the assignment." In other words, it lessens their difficulty in completing the assignment. Through this guidance, students will be steered in the right direction because it is very frustrating when instructions are already given, yet students still do not have any idea of what they are working toward and how they are going to start. Modeling can remove frustrations like these and can contribute to the betterment of classroom management (Coleman, 2020).

There are many possibilities for employing modeling in a language-learning classroom. For instance, when a teacher demonstrates, they describe and follow through the cognitive processes involved, especially in reading and writing. The typical demonstration process includes modeling, describing, and showing how writing and reading generate cognition. A good example of this is when a teacher demonstrates how to write a piece in front of the class on an overhead projector (Salisu & Ransom, 2014). Aside from verbal instruction, visuals that support the instruction also make a great modeling tool. In order for students to visualize the ultimate product and know what they are working toward, completed examples of previous assignments should be provided. These can be used by teachers to explain expectations for their students (Coleman, 2020). Since verbal instructions can be overwhelming and ambiguous, video explanations of assignments will make it much easier for English Language Learners (ELLs) to understand them. Therefore, when teachers provide video explanations explaining how to execute the activity at hand, ELLs will be able to perform and do it successfully. Aside from that, ELLs will feel less anxious and confused while working on the task if a teacher also demonstrates the instructions and provides examples (Coleman, 2020).

This is especially true if a task is to be completed independently by the students. As Riches (2019) mentions, it is inspiring for a class to watch the instructor model what is expected of them first. Modeling or demonstrating how to perform, for instance, science experiments or physical education exercises, how to properly pronounce or articulate the foreign language you are teaching, and how to solve mathematical equations or word problems allows the learners to feel at ease doing and performing these tasks because these were demonstrated or modeled first to them. The teachers should also take note when modeling or when using models as a scaffolding approach. Learners do it at their own pace after teachers have modeled it for them. The teachers should also repeat the models to learners with learning difficulties. According to Salisu and Ransom (2014), modeling is necessary to improve one's self-confidence in accomplishing certain performances or tasks as it gives a higher possibility of successfully accomplishing said undertaking. In turn, students should be observant and be mindful of how the models behaved and demonstrated the skills in order for the modeling to become very effective.

Critical Thinking and Modeling

To put it plainly, critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating. This is in line with a multidisciplinary approach to assisting pupils in the development of higher-order thinking. One of the greatest educational proponents, Benjamin Bloom, saw the progression of critical thinking as a sequential process, where one must successfully finish one level before moving on to the next. He laid this out in his taxonomy, where Knowledge is defined as the capacity to recollect (remember) the proper language previously learned, particular facts, and strategies for addressing specifics (conventions, trends and sequences, classifications and categories, criteria, methodology), as well as generalizations and field abstractions (principles and generalizations, theories and structures). Comprehension, a step higher than Knowledge, is the process of understanding informative materials' meanings. Application is the utilization of formerly gained knowledge in fresh, practical contexts to address issues with a single, correct

solution. Higher-order thinking skills (HOTS) begin with Analysis, which is carving up informational materials into their component sections, looking at and attempting to figure out how such information arrives at different conclusions by determining the motivations and drawing conclusions. This is followed by Synthesis is the creative or divergent application of previous skills and knowledge to create or produce an authentic piece, and Evaluation which refers to the process of determining the worth of a piece of information based on personal values or opinions to create a final product with a specific purpose, and there is no real right or wrong answers (Dasmo, 2020). The elements of a theoretical model must be put into practice in order to achieve the ultimate objectives of a critical thinking model, specifically, to encourage people to develop mature critical thinking and logical reasoning skills. There is no question that teachers have been exposed to certain particular frameworks, models, and practices for critical thinking abilities in actual educational settings.

The challenge, therefore, is to have teachers incorporate critical thinking skills into their lesson plans and provide their students the chance to recognize the material they are working with, analyze it, classify it, and think about its parallels and contrasts. An article from Fahim and Eslamdoost (2014) suggest ways on how to include critical thinking activities into classroom activities, such as giving students the time and space to brainstorm through discussions; expecting them to identify tasks and problems to solve for themselves; giving them a chance to compare and contrast and categorize the current situations; and, finally, encouraging creativity and avoiding teacher-prepared projects.

Research has shown that modeling examples have been demonstrated to be an effective way to teach complicated abilities and develop critical thinking skills, especially in unstructured settings. In a study by Pedersen & Lui, as cited in Frerejean et al. (2018), it was found that when students see a teacher think aloud in a problem-based learning situation, their problem-solving skills improved the most, compared to when the teacher provided direct instruction or gave no advice. Accordingly, it is also important that students fully comprehend the roles, purposes, and limitations of models. Models are helpful learning tools that can be utilized to enrich explanations, initiate conversation, provide representations of complex topics visually, and develop mental models.

Self-Esteem and Critical Thinking

Self-esteem is tied to critical thinking and vice versa. Self-esteem boosts critical thinking as without self-esteem, people cannot trust their own decisions and solutions- both of which are crucial parts of critical thinking (Richardson, 2016). This is also supported by a study from Iran by Khavanin et al. (2021) which showed a direct and significant relationship between critical thinking and the self-esteem of students. It also suggests promoting and improving students' critical thinking by strengthening and raising self-esteem. Finally, Barkhordary, Jalalmanesh, and Mahmodi (2009) as cited in Demirag (2019), discovered strong correlations between student critical thinking and self-esteem. This means that the more confident a student is in his or her abilities, the better they perform said abilities.

Critical thinking is also linked to better self-esteem. In a study done in 2022, Gavilan-Martin et al mention that there is a positive relationship between effective personality, one of its

components being self-esteem, and critical thinking, with the traits "being enthusiastic", "developing positive self-esteem" and "having self-confidence" correlating most strongly with critical thinking. A similar study conducted by Demirag (2019) zoomed in on the components of critical thinking closely related to self-esteem and found that students' inquisitiveness and open-mindedness positively predicted self-esteem and had the highest association with self-esteem compared to the rest of the subscales of critical thinking which include analyticity, truth-seeking, and systematicity. While this study does not go into these components specifically, it is helpful to note that critical thinking helps in developing students' self-esteem as well.

It is with this knowledge that the researchers postulate that modeling improves the comprehension of topics and the perceived level of confidence of the learners. It makes learning ideas easier to understand, and students can successfully model their own practice after the teacher's examples without any uncertainty that might otherwise encourage poor self-confidence. Furthermore, while the literature states that confidence has an influence on the students' academic standing, there is still a gap in research and literature linking modeling and perceived level of confidence, specifically among Filipino learners.

Research Questions

This study sought to discover whether Verbal Instructional Modeling improved the perceived confidence of students in terms of critical thinking. Specifically, it sought to answer the following questions:

1. What are the learners' perceived levels of confidence in critical thinking before the intervention?
2. What are the learners' perceived level of confidence in critical thinking after the intervention?
3. Is there a significant difference in the learners' perceived level of confidence in critical thinking before and after the intervention?

Methods

Pedagogical Setting & Participants

The study was conducted at a private school in Cagayan de Oro City, Mindanao, Philippines. The researchers used the convenience sampling technique in order to come up with 25 students from the Grade 10 level from the said institution who are currently taking the English Research subject. The researchers utilized this sampling because the participants were available, accessible, and willing to participate.

Furthermore, since the participants of the study are minors, the inclusion criteria of this study were confined to those participants whose parents have signed the Informed Consent Forms to ensure that the participants have been provided full approval to participate in this study. This also ensured that the data collected and processed from the participants was constant throughout the study's implementation phase. The exclusion criteria of this study were to those participants whose parents did not sign the Informed Consent Forms. The withdrawal criteria are to those participants who wish to withdraw consent and unprocessed data previously supplied at any time.

Design of the Study

The study made use of a practical action research design. Action Research is a formative study of progress commonly practiced by teachers in schools. Basically, action research is a spiral process that includes problem investigation, taking action & fact-finding about the result of an action. It enables a teacher to adopt/craft the most appropriate strategy within its own teaching. (Yasmeen, 2008).

A highly interactive method, action research is often used in the social sciences, particularly in educational settings. Particularly popular with educators as a form of systematic inquiry, it prioritizes reflection and bridges the gap between theory and practice. Due to the nature of the research, it is also sometimes called a cycle of action or a cycle of inquiry. The main purpose of practical action research is to address school-wide problems. Since it is only a small-scale research project, it gives emphasis on a specific issue and is usually conducted by teachers. This study did not just allow educators to identify problems, gather information, and analyze the data collected but also to reflect on their own practices. They were given the opportunity to develop and implement an action plan/intervention through this action research that might help them solve the problem. For instance, they can develop innovative approaches to enhance their work in the classroom and throughout the school.

Data collection & analysis

The researchers first sent a formal letter to the principal to ask permission to conduct an action research study, and once given permission, a letter with an Informed Assent Form for Minors or Children and Informed Consent Form for Surveys were given to the participants. The researchers informed the participants that they have the right to withdraw from the study at any time, even after the Informed Consent and Assent forms had been signed. Together with the said letters were the Likert Scale Questionnaires which were given through the Grade 10 participants' corresponding English Research teacher. The teacher was the one who disseminated these forms and questionnaires to the participants. Before the actual data gathering, the researchers explained to the respondents the importance of their participation in the study and how their responses would remain confidential. The researchers also simplified several terminologies to the respondents so that they could answer the Likert questionnaire with full knowledge of their responsibility as the subjects of the study. The research instrument used underwent a process of validation and reliability check to ensure the quality and accuracy of the results gathered. To examine and strengthen the reliability of the questionnaire, the researchers administered a pilot-tested it to students from the same level and was computed using Cronbach Alpha. The reliability coefficient was 0.77 which means the reliability level of

the researcher-made instrument is 'Acceptable'. For the actual data gathering, the reliability coefficient before the intervention was 0.73 which means it is 'Acceptable' while the reliability coefficient after the intervention was 0.89, meaning it has a 'Good' reliability level.

The partner English teacher was the one who spearheaded the implementation of the said intervention and was a help to the researchers in finding out what the outcome of the study would be. Before the intervention, the researchers gave an orientation to the respondents to clarify the purpose of the study and for the respondents to understand the terms being used in the study. The partner English teacher then distributed the pre-intervention survey questionnaire to the respondents which the researchers analyzed.

The five-day implementation of the intervention started right after the pre-test. The implementation was limited to five days as this was the number of days the subject area met in the quarter, given the flexible learning arrangement followed by the school. Throughout the five-day implementation, the partner English teacher made use of the proposed intervention by explaining verbally and demonstrating the concepts, topics, and models to the class. The class was also given worksheets that model the product expected from them.

After the intervention, the partner English teacher distributed the post-intervention survey questionnaires. Students were also asked about their experiences during the intervention using a focus group discussion.

The researchers used the total mean of the two tests to describe the respondents' perceived level of confidence in critical thinking before and after the intervention. As they needed to determine whether there was a significant difference between the scores of the students before and after the intervention, a t-test was also utilized.

Results/Findings and Discussion

The results of using Verbal Instructional Modeling as an intervention to improve the learners' perceived level of confidence in Critical Thinking are shown in the tables below in accordance with the following research questions:

- 1. What are the learners' perceived level of confidence in critical thinking before the intervention?*

Table 1. Learners' perceived level of confidence in critical thinking before the intervention

		Mean	Descriptor
1	I am able to produce a more creative product/output compared to the models shown to us.	4.64	High
2	I can easily identify what kind of quality output is expected from us when we are provided with models.	5.23	Very High
3	I can easily organize my thoughts on how to complete the task by analyzing the model first	5.20	Very High
4	Through models/modeling, I can easily comprehend the content/lesson.	5.07	High
5	I am capable of generating original ideas for my output despite being exposed to models/modeling.	4.93	High
6	Having an unfamiliar task/output modeled to us first by the teacher improves my understanding of the lesson/expected output.	4.60	High
7	Having an example assignment already completed to show the finished product creates a picture in my mind so that I'll know what I will be working toward.	5.34	Very High
8	When the teacher models what needs to be done, I ask fewer questions.	4.97	High
9	It makes me easily recall the lecture/new information taught to us when there are models.	5.40	Very High
Overall		5.11	High

Table 1 interprets the perceived level of confidence of the twenty Grade 10 respondents before the intervention based on the total mean of their scores and standard deviation. The total mean of the respondents' answers is 5.11 while the standard deviation is 0.49.

Considering the result of the total mean in the scale range of 4.33-5.16 found on the Data Analysis Plan, it can be inferred that the respondents have a High perceived level of confidence in their critical thinking even before the intervention.

The reason why the total mean of their scores is already High is that most of their answers in every question are Slightly Agree (4), Agree (5), and Strongly Agree (6). Meaning, the respondents are confident enough to believe that they can do the things mentioned in every statement found on the questionnaire. For instance, Statement no. 9 "It makes me easily recall the lecture/ new information taught to us when there are models" got the highest mean since most respondents Strongly Agree to this statement as they believe that they can actually easily recall newly acquired knowledge with the help of models. This is similar to the findings of Salisu & Ransom (2014) who mentioned that it is easier for students to recall and understand newly acquired information with the help of models since they serve as the visual representation of the topic.

2. *What are the learners' perceived level of confidence in critical thinking after the intervention?*

Table 2. Learners' perceived level of confidence in critical thinking after the intervention

		Mean	Descriptor
1	I am able to produce a more creative product/output compared to the models shown to us.	5.05	High
2	I can easily identify what kind of quality output is expected from us when we are provided with models.	5.43	Very High
3	I can easily organize my thoughts on how to complete the task by analyzing the model first	5.61	Very High
4	Through models/modeling, I can easily comprehend the content/lesson.	5.40	Very High
5	I am capable of generating original ideas for my output despite being exposed to models/modeling.	5.41	Very High
6	Having an unfamiliar task/output modeled to us first by the teacher improves my understanding of the lesson/expected output.	5.28	Very High
7	Having an example assignment already completed to show the finished product creates a picture in my mind so that I'll know what I will be working toward.	5.61	Very High
8	When the teacher models what needs to be done, I ask fewer questions.	4.90	High
9	It makes me easily recall the lecture/new information taught to us when there are models.	5.33	Very High
Overall		5.37	Very High

Table 2 also interprets the perceived level of confidence of the Grade 10 respondents after the intervention based on the results of the total mean and standard deviation. The total mean is 5.37 while the standard deviation is 0.57. With these results, it means that the respondents' perceived level of confidence in terms of critical thinking is Very High after the intervention has been implemented. Comparing the results of the two tests, there is an increase in their scores. This indicates that through Verbal Instructional Modeling, the respondents' perceived level of confidence changed from 'High', which means that they believe that they can work with very little support, organize, analyze and generate ideas when needed, and have a general idea of which direction to take in making the task, to 'Very High', which means that they believe that they can work with independently, organize, analyze and generate ideas most of the time and have a clear path or direction to take in making the task in just a short period of time.

In the second test, after the intervention has been implemented, most of the answers in almost every statement are Strongly Agree (6), resulting in a higher total mean than the first one. Among the 9 statements, the statement that got the highest mean of 5.61 is Statement no. 3 "I can easily organize my thoughts on how to complete the task at hand by analyzing the model first." Most of the respondents Strongly Agree to this statement as they believe that they can do it with the help of models. As stated by Wilson et al. (2020), through modeling it helps students to be organized since they can easily make connections between concepts that, at first glance, appear to be unrelated.

3. Is there a significant difference in the learners' perceived level of confidence in critical thinking before and after the intervention?

Table 3. Test of Significant Difference of the Learners' Perceived Level of Confidence in Critical Thinking

	Mean	T-value	P-value
Before the intervention	5.11	-1.86	0.04
After the intervention	5.33		

SIGNIFICANT

Table 3 shows the difference between the before and after intervention tests based on the t-test results. In the first test, the total mean is 5.14, in which no intervention was implemented, and 5.41 is the total mean in which the Verbal Instructional Modeling was already implemented. Clearly, the score has increased by 0.27. Meanwhile, the t-value result is -1.85 and the p-value is 0.04. These results provide clear evidence that there is still a significant difference in the students' perceived level of confidence before and after the intervention even if the scores of the respondents before the implementation are already High. Apart from this, it can also be implied that the intervention improved the respondents' perceived level of confidence in terms of their Critical Thinking Skills. This is also because students were more participative in the learning process. As Phan (2022) mentioned, active learning can help learners to upgrade their critical thinking skills. During the observation and conduct of the study, it was noticed that while the intervention was being implemented, students were able to work more independently, that they asked fewer questions and came up with creative solutions to the problems presented in the tasks they encountered. While this is so, there are also other reasons which might have contributed to the varied results of the participants before and after the intervention which includes, but are not limited to, a better understanding of the lessons learned after the intervention which might not have been directly because of the intervention itself, the enthusiastic delivery of the participating teacher, and even because of the activities which scaffolded the main task at hand.

These results are also reflected in the focus group discussion where students mentioned that the activity provided them "inspiration in coming up with topics and inspiration in making the products" which shows that the intervention helped in the HOTS 'Analysis' and 'Synthesis'. Another student mentioned how "it was easier to make the product because I already have an idea what to do and I shouldn't", the same student also mentioned how they don't ask too many questions from their teacher as they were given a model to follow as well as clear instructions on how to go about the activity. Most students agree that the intervention "really helped in making outputs or products related to the subject".

These results support the findings of Gopal, Singh, and Aggarwal (2021) who mention that students are more self-confident when it comes to accomplishing tasks, especially when there are clear explanations and instructions from the teacher. In this study, it was seen how modeling-exceptionally verbal instructional modeling, gave the students a clear picture of how to manage the task at hand, and knowing the processes involved, along with the product expected, gave

them the confidence to finish the task, as Coleman (2020) mentioned in an earlier study. The significant relationship between critical thinking and the self-esteem of students is also echoed in Khavanin et al.'s (2021) study. Similarly, Castle Learning (2019) mentioned on their blog titled "The Academic Benefits of Modeling" confirms that modeling or the use of models can empower the students to begin their tasks giving them the confidence to proceed and even allowing teachers to monitor their students who need extra support. Do et al. (2023) re-assert the importance of teachers in becoming mentors and models to guide their learners in acquiring skills needed in the language learning classroom.

Furthermore, modeling or the use of models not only gives the students confidence in terms of how well they accomplish tasks but also helps them improve their confidence in their critical thinking skills. As the students take part in the activity being completed, they will be able to better understand how to do it, thus giving them the confidence in their own faculties to accomplish it.

Conclusion

Looking into the perceived confidence level in Critical Thinking skills of the Grade 10 respondents within five days, this study showed how the proposed intervention, Verbal Instructional Modeling, influenced learners' perceived level of confidence with the use of both verbal and visual examples. Using the model, it assisted learners in conceptualizing, applying, analyzing, synthesizing, and evaluating information. This finding echo that of Salisu & Ransom's (2014) study, which found that modeling is necessary to improve one's self-confidence in accomplishing certain performances or tasks as it gives a higher possibility of successfully accomplishing said undertaking. This also confirms Bandura's theory on observational learning, which mentions that when certain explanations and descriptions were presented, learning was enhanced.

This paper amply demonstrated that Verbal Instructional Modeling can be applied at any time to assist in learning a new skill, carrying out a task more successfully in terms of the success criteria, developing thinking abilities and cognitive processes, etc. With the given results, the researchers recommend that teachers use, if not continue using, Verbal Instructional Modeling in their classes as this can improve the students' perceived level of confidence in critical-thinking skills. Future research can also be done more specifically on the different components of critical thinking and measuring actual levels of critical thinking instead of students' perception of their own. As this study was done in just five days, a longer duration for the observation and implementation of the intervention is also suggested.

References

- Akbari, O., & Sahibzada, J. (2020). Students' self-confidence and its impacts on their learning process. *American International Journal of Social Science Research*, 5(1), 1-15. <https://doi.org/10.46281/aijssr.v5i1.462>
- Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability*, 12(20), 8438. <https://doi.org/10.20944/preprints202008.0246.v1>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Castle Learning Inc. (2019, March 25). *The Academic Benefits of Modeling*. <https://www.castlelearning.com/news/news-the-academic-benefits-of-modeling/>
- Coleman, M. (2020). *Modeling Teaching Strategy Examples for English Language Learners*. TeachHub.com. <https://www.teachhub.com/teaching-strategies/2020/08/modeling-teaching-strategy-examples-for-english-language-learners/>
- Creekmore, E. (2019, January 28). *The Power of Modeling - The Instructional Coach Academy*. The Instructional Coach Academy. <https://theinstructionalcoachacademy.com/index.php/2019/01/28/the-power-of-modeling/>
- Dasmo, D. (2020, June 10). *Critical Thinking: Multiple Models for Teaching and Learning (abridged)*. Teaching With Writing: The WIC Newsletter. <https://blogs.oregonstate.edu/wicnews/2017/11/29/critical-thinking-multiple-models-teaching-learning/>
- Demirdag, S. (2019). Critical Thinking as a Predictor of Self-Esteem of University Students. *Alberta Journal of Educational Research*, 64(4).
- Do, N. H. M., & Le, Q. T. (2023). Lexical Collocation Errors in Essay Writing: A Study into Vietnamese EFL Students and Their Perceptions. *International Journal of Language Instruction*, 2(2), 1–20. <https://doi.org/10.54855/ijli.23221>
- Fahim, M., & Eslamdoost, S. (2014). Critical Thinking: Frameworks and Models for Teaching. *English Language Teaching*, 7(7). <https://doi.org/10.5539/elt.v7n7p141>
- Frerejean, J., Van Strien, J. L., Kirschner, P. A., & Brand-Gruwel, S. (2018). Effects of a modelling example for teaching information problem-solving skills. *Journal of Computer Assisted Learning*, 34(6), 688–700. <https://doi.org/10.1111/jcal.12276>
- Gavilan-Martin, D., Merma-Molina, G., Baena-Morales, S., & Urrea-Solano, M. E. (2022). Critical Thinking and Effective Personality in the Framework of Education for Sustainable Development. *Education Sciences*, 12(1), 28. <https://doi.org/10.3390/educsci12010028>
- Gopal, R., Singh, V., & Aggarwal, A. K. (2021). Impact of online classes on the satisfaction and

- performance of students during the pandemic period of COVID 19. *Education and Information Technologies*, 26(6), 6923–6947. <https://doi.org/10.1007/s10639-021-10523-1>
- Khavanin, A., Sayyah, M., Ghasemi, S., & Delirrooyfard, A. (2021). Correlations Between Critical Thinking, Self-esteem, Educational Status, and Demographic Information of Medical Students: A Study from Southwestern Iran. *Educational Research in Medical Sciences*, 10(1). <https://doi.org/10.5812/erms.116558>
- Lipscomb, A. Swanson, J. & West, A. (2010) Emerging Perspectives on Learning, Teaching and Technology, Global Text, Michael Orey. Chapter 21. Retrieved from https://textbookequity.org/Textbooks/Orey_Emergin_Perspectives_Learning.pdf
- Richardson, M. (2018). Building Self-confidence and Critical Thinking Skills. www.aitd.com.au. <https://artofmentoring.net/wp-content/uploads/2017/03/Building-Self-Confidnce-and-Critical-Thinking-Skills-AITD-mag-April-2016.pdf>
- Riches, A. (2019, April 9). *Effective teacher modelling*. Retrieved from <https://www.sec-ed.co.uk/best-practice/effective-teacher-modelling/>
- Salisu, A., & Ransom, E. N. (2014). The Role of Modeling towards Impacting Quality Education. *International Letters of Social and Humanistic Sciences*. <https://doi.org/10.18052/www.scipress.com/ilshs.32.54>
- Shore, K. (2019). *The Student with Low Self-Esteem* | *Education World*. https://www.educationworld.com/a_curr/shore/shore059.shtml
- Singh, H. (2022, February 4). *Teaching Modeling*. Harappa. <https://harappa.education/harappa-diaries/modeling-in-teaching/>
- Teklu, S. W., & Terefe, B. B. (2022). Mathematical modeling analysis on the dynamics of university students animosity towards mathematics with optimal control theory. *Scientific Reports*, 12(1). <https://doi.org/10.1038/s41598-022-15376-3>
- Verma, E. (2017). Self - confidence among university students : An empirical study. *International Journal of Applied Research*, 3(7), 447–449. <https://www.allresearchjournal.com/archives/2017/vol3issue7/PartG/3-6-8-908.pdf>
- Phan, M. N. V. (2022). EFL Teachers' Perceptions of the Implementation of Active Learning in Reading Classroom. *International Journal of Language Instruction*, 1(1), 65–85. <https://doi.org/10.54855/ijli.22117>
- Wilson, K. J., Long, T. M., Momsen, J. L., & Speth, E. B. (2020). Modeling in the Classroom: Making Relationships and Systems Visible. *CBE- Life Sciences Education*, 19(1), fe1. <https://doi.org/10.1187/cbe.19-11-0255>
- Yasmeen, G. G. (2008). Action Research: An Approach for the Teachers in Higher Education. *Turkish Online Journal of Educational Technology*, 7(4), 46–53. <http://files.eric.ed.gov/fulltext/EJ1102937.pdf>

Biodata

Adeva Jane Esparrago-Kalidas has been an English teacher for 10 years at Xavier University–Ateneo de Cagayan Junior High School in the Philippines where she also serves as the English Department Chairperson. She holds a Master of Arts in Education from Xavier University and a Masters in Culture and Arts Studies from Mindanao State University – Iligan Institute of Technology. Her research interests include critical thinking, teaching and learning strategies, language learning, and culture and arts studies. She can be reached through aesparrago@xu.edu.ph.

Dr. Edralin Manla is currently the Dean of the School of Education at Xavier University – Ateneo de Cagayan, Philippines. She finished her Doctor of Philosophy in Education (Field of Specialization – School Management) from Capitol University, Philippines, in 2012. A number of her research include Implementing the K to 12 Principles in Teaching English (2021), Assessment Literacy of Madrasah Educators (2019), Developing Teachers' Identity in the Context of K to 12 Reform (2018) and Research Self-Efficacy, Interest in Research and Research Knowledge of Graduate Students (2017). She can be reached at emanla@xu.edu.ph.

Xenia Jo B. Agot is a student currently graduating from Xavier University – Ateneo de Cagayan, Philippines, where there are taking her bachelor's degree in Secondary Education – majoring in English. She can be reached at xeniajoagot18@gmail.com.

Leila Cashmire A. Blanco is a student currently graduating from Xavier University – Ateneo de Cagayan, Philippines where there are taking her bachelor's degree in Secondary Education – Major in English. She can be reached through blancoleilacashmire@gmail.com.

Nicole A. Carrasco is a student currently graduating from Xavier University – Ateneo de Cagayan, Philippines where there are taking her bachelor's degree in Secondary Education – Major in English. She can be reached through carrasconicoleapilado@gmail.com.

Mark Rey O. Frasco is a student currently graduating from Xavier University – Ateneo de Cagayan, Philippines, where there are taking his bachelor's degree in Secondary Education – majoring in English. He can be reached through markreyfrasco9@gmail.com.