

A Study on Improvisation of Academic Performance and Decision-Making Ability through an Interactive Review Model

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Abstract

Background: Critical thinking skills plays a predominant role in the present challenging skills. Critical thinking involves the process of rigorous assessment and understanding of the information to achieve a well-defined conclusion. These critical thinking concepts and theories are generic, even though adopting them for different disciplines involves a cognitive concept mapping process.

Objectives: To progress a precise balanced model for the improvement of the thinking ability with the specific indicators of learning/teaching strategies.

Methods: Critical thinking is valued in various disciplines for its ability to analyze, assess, explain and reconstruct. This critical thinking involves the personal traits that includes a conscious assumption linked with a paradoxical underlying conviction.

Results: By creating a friendly environment, between the students and teachers, which helps in creating the learning attitude that would benefit the students in concept of knowledge.

Conclusions: This involves interaction sessions between the students and teachers that requires the collaboration resource support that increases their performance which relates the reasoning ability in order to retain and develop the skills of the students.

Keywords: Motivation, Academic Performance, Critical Thinking, Decision-Making, Collaborative Knowledge Transfer

1. Introduction

The progression of 21st century needs all the students possess the skills that are required for themselves in the scope of personal developments to enhance their critical thinking skills and problem solving along with communication and collaborative skills which can be easily trained for the students at the early learning process. Students who possess and strive to enhance their critical thinking skills can be required to provide logical and reasoning skills by making the multifaceted choices which can also be linked with the understanding of the various interconnections of the systems. Therefore, these can be preferred for the interaction session between the students and teachers. The lack of ability in examining potential information sources in an objective i.e. cogitation skills in the students can affect their problem analyzing ability, they can be submissive while doing group works. In general, it might be difficult for them to interact or connect the concepts and problems Some students can find their uncomfortableness or difficult in articulating their opinions during the discussion gathering amongst

them. Critical thinking is added to the category of skills which will be required as a powerful tool for the present changes and developments in the education industry (retnaningsih, Kindiasari&Nurdiyanto, 2020). Critical thinking is always considered as beyond the concept of thinking deeply and logically with rationalism, It is also related to think individualistically which can formulate the new advanced opinions and conclusions without the stimulus of peripheral indicators. It can also be related to the developing analysis and understanding the connections between the ideas that are clubbed from the discussion of information (Neba, 2019). The combination of the knowledge with skills that prolong the attitude of the individual through improving the correct decision making without depending on the subjective judgments to be taken as consideration for evidence (D'Alessio. Avolio & Charles, 2019). Critical thinking helps the students to be much more successful in the academic achievement by taking the active participation in all types of roles, by becoming the unidentified learners, in order to execute the acquired knowledge (Toshpulatova&Kinjemuratova, 2020). The students with higher cogitation skill ability level always pursuits for new information along with the high level of self-confidence when they are truly open-minded and good at delivering the information (Kavenuke, Kinyota&Kayombo, 2020). There can be an argument that the students are expected to cross the limits of knowledge for just thinking and they should be critical advanced thinkers.

Critical thinking skills have a strategic value part in the knowledge levels of the students. Because of these critical thinking skills, the students can retain the ability to think quantitatively, rationally or logically. These critical thinking skills can be trained to students in many different ways that includes a process of interaction meeting between students and teachers as there can be a question which can be given to the students by the teachers that needs to be analyzed and suggest a solution. Moreover, there is a secondary preferable method that is suited perfectly for the training of the students through a session of confrontational activities which improves their thinking ability and creative skills for bringing up the new ideas. These types of models can be easily applicable for the classroom learning environment. These models can involve the aspects of various syntaxes such as exploring, understanding, smearing, investigating, assessing and generating a new concept which are some of the indicators for the training of the students for the personal development. These critical thinking skills plays the predominant role for the propensity to make and evaluate the evidence-based decisions. These are derived for the enhancement to create an unreflective thinker to master thinker. This study is maintained on developing the involvement of students in learning for academic achievement along with the elevated cognitive rational thinking skills for the individual progress of the students. The problem mainly focused in the study is the lack of critical and logical thinking skills in the students which downsizes their decision-making ability and motivation level. This needs a accurate strategy for thee interaction between the students and teachers for the better understanding of knowledge transfer.

2. Objectives

The major objectives of this research study are as follows:

- To understand the focus of attention skills of the students in the classroom.
- Through review, to understand the current situation's observation and identify the gaps in the existing learning/teaching strategies in the classroom.
- To define the factors from existing model that facilitate the observed current situation.
- To understand the relationship between the teacher and student for the better understanding of the knowledge transfer and factors of critical thinking.

- To progress a precise balanced model for the improvement of the thinking ability with the specific indicators of learning/teaching strategies.

3. Methods

“Applying a Business Simulation game in a flipped classroom to enhance engagement, learning achievement, and higher order thinking skills, Yueh-Min-Huang et al. (2022)”. This paper studies regarding the learning attitudes and skill development of the students and explains the strategy of blended learning that makes the improvement in the student academic engagement by making them complete their readings of class and work at home purely based on the live problem solving which is done with the collaboration with teachers as an online discussion traditionally through considered activities. This typically increases the focus of attention among the students. This includes the support guidance and feedback from the teachers to the students which controls the conversation flow. This study explains the method as a purely base for a learning positioned prototypical set. This study focused on developing the involvement of students in learning for academic achievement along with the elevated cognitive rational thinking skills for the individual progress of the students. There also been the in-person face to face conversation wit peers.

“Empowering the collective reflection-based argumentation mapping strategy to enhance students’ argumentative speaking, Darmawansah et al (2022)”. This paper mainly engrossed on the process of designing the crucial strategies for developing the various learning attitudes for the students through the pictorial representation of combined joint opinions and beliefs in order to disengage the students in creating confrontational negotiations. This aims at developing the promotion of group of unreflective learners and thinkers from beginner to master level by the process of combined assigned tasks accomplishment and monitoring of every individual in the group. This completely reflects on the educational concept of collective reflection of combined decision planning to enhance the skills on the discussion based on the student’s simulated communal training that are visually developed for reasoning ability and proof of evidence against a claim or statement where the collision of two statements disagree.

“Facilitating critical thinking in decision making based professional training: An online interactive peer review approach in a flipped learning context, Hui-chen-Lin et al (2021)”. This study mainly focused on the creating the different teaching and learning strategies and their applications with interactive learning environments. The stratagems are designed for the students to deal with their problems and improve their elevated cognitive thinking skill ability in the perilous circumstances in order to promote the insightful thinking beginner skills through mutual observation. This is done as an interaction between the students and teachers, as teacher’s thinking tactics aims at expressing their point of view that allows the students to understand their assessments and observations are precise. Moreover, teachers also need to help the students in developing their problem-solving abilities that guides them in a path for collecting the information regarding their judgement and decision-making. The strategies that are developed in this study are suggesting the flipped classroom which is enabling the teachers to teach the students in a well-structured active manner that could develop positive impact on their learning performance.

“Problem-based learning in live online classes: Learning achievement, problem-solving skill, communication skill, and interaction, Alper Aslan (2021)”. This study dealt with the process of

improving the classroom teaching by creating the groundbreaking knowledge related environmental conditions for the students along with the interaction through different learning/teaching strategies. This study explains the effect of understanding level of the students using through live problem-based learning method. The different indicators that are followed in this research for the data collection that includes the various tests relating to learning accomplishment, problem solving assessment method scale, course interface along with their fortitude and communication dexterity level. Now a days, the knowledge is always independent for all its characteristics which means available under any circumstances. The access of knowledge improves the need for an objective and solution-oriented flexibility concepts which indirectly supports the strategies such as nature of the problem, problem-solving along with appropriate information selection, and monitoring process.

“A blended design of game-based learning for motivation, knowledge sharing and critical thinking enhancement, Wei-Lun-Chang (2021)”. This study investigates how the motivates plays a major role in the learning attitudes of the students, how the students coordinate with each other for the knowledge transfer and improve their critical thinking ability during the process of information management through the game constructed instructional method. This procedure involves the mechanism of complete involved participation of the students in the learning prospect, division of the students into groups for brainstorming procedure for the knowledge transfer for achieving the demarcated learning result in a friendly educational environment. The study suggests the practical learning approach is more effective than theoretical scripted based learning. This can also create the strong positive motivational impact on the student learning attitudes.

4. Results

From the observation of the study, there needs a much better strategy for the process of learning of the students which is linked with the interaction session with the teachers. This involves a hybrid model which can be processed with creating a friendly educational environment for the students and teacher interaction for the better development of motivational skills and personal skills of the students for the self-centered learning through the interactions like senior or academician support with collaborative group culture. This can be developed for a better approach for improving the academic achievement and performance of the students that indirectly improves the one of the indicators of the student's skills required is reasoning ability. This procedure can be implemented in the concept of flipped classroom with various types of approaches in learning based upon the practical concepts. This can be designed for the promoting the unreflective beginner level of thinking to mastery level of thinking. This also increases the thinking ability for the cooperative knowledge transfer through the instructional point of view from the teachers.

Through the interaction sessions, there can be development in the resilience level and communication dexterity rate of the students. The group of students needs to be assigned the tasks that needs to be accomplished which can be monitored by the teachers and submit the feedback from their point of view for improving the problem solving and decision-making abilities. By scrutinizing the consequences, the students' needs to be an active listener which indirectly stimulates their curiosity by refining their thinking and reasoning skills. This enhances their creativity levels and allows to experience the multi-faceted applications. Students need to comprehend with the outcomes that will be as an outcome for the decisions they make either can be positively or negatively which will show the path for the right guidance. This needs the method of examining the existing proof of evidence and use

the previous or past experiences to encounter the present facing situation. Not only having the interaction with teachers can improve their analytical ability of examining the information from the source and cognitive ability skills but also need the follow up for the questions raised even though it is an idea or opinion or fact from someone.

- Smart Interactional Classroom Preference – This needs to be implemented for the interaction session between the students and teachers for the better understanding of the concepts in order to improve the academic performance achievement outcome. This also supports for the complete involvement of the student focus of attention to the course which controls the conversation flow. This helps teachers to give the exact guidance and best feedback that develops the student engagement and teacher interaction
- Learning Attitude – The affective learning for the students towards the academic abilities regarding the expectations in prospective way that helps students increase the motivational levels. This increases the curiosity for the students to learn new concepts that would involve the development of their skills. There can be a positive impact in understanding, evaluating and executing the information that was transferred.
- Teaching Strategy – There is a need in the process for the better transfer of the knowledge from the teachers to the students for the well-developed problem-solving assessment approach and various methods which can motivate the students in the correct path which can improve the satisfaction levels. This can make the students reach the mastery level in the thinking ability from the beginner state. The teacher needs to focus and monitor every student regarding the skill development from different types of approach which is mentioned below.
 - Teacher – Student Approach: This approach is done between the student and teacher individually for the interaction and knowledge transfer.
 - Teacher – Student – Teacher Approach: This approach is as same as the previous method but there is a slight improvisation that returns back to the teacher yet again for the feedback and confirmation of their decisions.
 - Group of Students – Student Approach: This approach is done between the individual student and group of students for the knowledge transfer which allows them to open up to discuss regarding their opinions and beliefs which can improve their confidence level.
 - Group of Students – Teacher Approach: This approach is done between the common division of students and teacher for the better understanding and improvement of the discussion to expand their knowledge which benefit to reduce time to teach number of students over a specific interval.
- Collaboration Culture – This requires separation of students into the groups for the objective of the brainstorming process that is developed to enhance the creativity and innovative skills. This increases the self-confidence, student retention, self-management and higher-level thinking with verbal communication. Due to this, they can capitalize on their educational experience through improving their social and interactive skills. This collaborative learning reinforces students to reach the utmost motivation by giving the freedom to open up for the discussion of their opinions and beliefs.
- Academician Support – The teacher needs to have a unique strategy to teach and support the students in all perspective ways in order to be creative by staying up to date. There needs an involvement of certain goals for academic achievement. Teacher responsibility to submit the

required updated materials for the course completion as well as for the knowledge transfer. Define the challenges and set the targets to reach in a prospective manner.

- Performance – Student’s academic performance can be taken as the achievement of the student across the various subjects that was handled by self-individual for the knowledge transfer using the classroom participation and interaction and homogenous tests outcome result. This involves the particular indicators or factors such as self-confidence, interests, teacher-student association, personal motivation etc. Set the target and goals to be achieved over a specific period of time that will be evaluated by the instructor for the knowledge added by the student.
 - Logical and Reasoning Ability: The ability of the student that can be used to understand logically through the various concepts and situational handling obstacles that are visually represented to the students in the technique of images, diagrams etc. This can be helpful in the increment of effectiveness of strategies and methods that are used for generating the solutions from their own point of views and making the decisions depending upon it.

Continuous Improvement – This needs to be improvised from the feedbacks from the present assessed information from the teachers for the updation of the model which can improve the academic performance and student engagement for the better personal development that can still improve their confidence level and decision-making ability. This interaction session between the students and the teachers needs to be continued for the further updates of this model.

5. Discussion

Critical and logical thinking is more important in the present situations as it plays a major role in the decision making and also for evaluating the verdicts or arguments to know the validity to form the own opinions or beliefs on a concept which develops our confidence levels. This not only improves the skills but also the personal ethics of an individual more intellectually. This also brings the change in the quality and efficiency of the students both in the communication method and also reading strategical approach. In general, this model supports in refining the learning standards of each students and makes them much easier to understand and execute the new concepts and strategies.

- Firstly, decision-making i.e. It helps in the making of good decision making from the path through the consequences of our actions from the concept of solving the obstacles from past experiences.
- This model supports in the knowledge reflection, i.e. The students can evaluate and execute the learning concepts and strategies on their own point of view with the high confidence level.

Because of the elevated cognitive intellectual ability enhancement, Knowledge is not only just learning but also increases the curiosity which nurtures the independence that helps to experience the consequences which will have different various characteristics and structures. i.e. multidimensional protean consequential experimental situation handling ability.

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