Visual Thinking Strategies and Creativity in English Education

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Abstract

Objectives: The study attempts to define what creativity and visual thinking mean in English education and to suggest how teachers can enhance children’s creativity through visual thinking strategy in English instructions. Methods: The method employed in this study is an analytic literature review in order to examine previous studies of creativity and visual thinking strategy, focusing on English language teaching and learning. The leading themes emerged from the literature review are: 1. A strong connection between creativity and language development, 2. A wide range of applications of visual thinking strategy, 3. Optimal environments for creativity and visual thinking strategy development. Findings: Findings indicate that only a few studies researched on concrete and explicit teaching models of visual thinking strategy in the area of English education, especially for English as a second or foreign language learner. Moreover, it seems that the concept of visual thinking and the advantage of visual thinking strategy are relatively unfamiliar idea in the area of English education. Therefore, more research should be conducted to develop various techniques and models applied with visual thinking strategy for English language learners’ creativity and English ability. The key finding of this study is meaningful in that it raises the issues of visual thinking strategy which can be effectively incorporated to language instruction, and it highlights the role of language teachers as a facilitator and provider of optimal learning environments for both creativity and visual thinking strategy. Finally, it is hoped that the finding helps the development of a theoretical framework for visual thinking strategy use in English education. Improvements/Applications: Based on the finding, suggestions are made for effective ways of teaching visual thinking strategy and integrating it into creativity development of English language learners in optimal classroom environments.

Keywords: Creativity, Creative Thinking, English Language Learners, Visual Thinking, Visual Thinking Strategy

1. Introduction

Visual materials are used in all areas of subjects because they are effective tools in teaching and learning procedures. For instance, English textbooks for children include images in every single page. However, it is questionable if teachers are fully used them in effective ways by providing their students with various learning opportunities in order to utilize their thinking skills such as creative thinking. In terms of creativity, it has been emphasized as an essential competence needed in 21st century and required ability to be cultivated through education1,2.

It is believed that language learners learn language by constructing their own knowledge under the learning condition where appropriate sources and effective instructions are given. To improve the learning condition which is one of the critical requisites of language learning, the use of visual material or imagery should be maximized. In particular, visual thinking as a primary mode of thought should be fostered. Since visual thinking requires cognitive process, it can promote language learners’ creative thinking in many ways. Therefore, this study aims to delineate the definition of creativity and visual thinking and how visual thinking and creativity are interrelated. The study also aims to explore: in what ways teachers can use visual thinking strategy effectively in English lessons and what are the optimal environment for creativity and visual thinking strategy development for English language learners.

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1.1 Creativity and Language Learning

The concept of creativity varies: some defined it as imagination, some defined it as problem-solving and others defined it as divergent thinking. Therefore, creativity cannot be defined as a word, but can be explained as “the generation of ideas that are both novel and valuable”. In fact, cultivating learners’ creativity is a crucial role of teachers in current age based on the following beliefs: first, creativity can be found in all individuals; creativity can be taught. Therefore, creativity lessons should be incorporated into across all subject areas including English.

To develop creativity of learners, many researchers have tried to find attributes that lead to creativity. For example, proposed three components for creativity: domain-relevant skills, creativity-relevant process and task motivation. In on the other hand, claimed that creativity consists of six distinct but interrelated resources, which are specific aspects of intelligence, knowledge, cognitive styles, personality, motivation and environmental context. They also proposed that creativity involves more than a simple sum of an individual’s level on each of the components for creativity.

Educators also have investigated teaching strategies, techniques, or programs to support learners’ creative potentials. In noted that being creative is acquired through childhood experiences. Therefore, many teachers of young children have tried to serve as role models of creative thinkers and provide creativity-enhanced learning environment for children. However, creativity has been a continuous task that needs to be solved because creativity is linked to complex attributes such as personality, family, and culture and so on.

More important, school setting influences the development of creativity in numerous ways. In other words, school environment plays a crucial role in creativity development. For example, the opportunity of individual engagement, teachers’ responsive attitude, emotional condition such as anxiety level can affect creativity development of children. Therefore, teachers should pay more attention to provide positive and supportive learning environments with well-defined techniques or programs for enhancing creativity development of learners.

In the area of English education, creativity teaching is one of curriculum goals in many countries. Therefore, both language learning and creativity development are not separative, rather they require cognitive demanding process based on the consensus that language learners build new languages creatively. Accordingly, teaching language and creativity can be incorporated in effective ways. Adapting visual thinking strategy training can be one of possible and innovative examples to attain the education goal.

1.2 Visual Thinking and Visual Thinking Strategy

Visual communication has grown over the past two decades with the growth of technology, and people no more communicate using verbal language only; rather we use a variety of visual materials through media. However, to date, most of teachers and learners have only learned to talk in verbal language in language classrooms. As a result, we can do verbal thinking, not visual thinking. In general, it has been known that verbal thinking is related to intellectual, rational, and analytic. In contrast, visual thinking has been considered intuitive, non-rational, and unsystematic. According to, individual has both verbal thinking and visual thinking modes, and the distinct cognitive modes are interrelated and comparable.

In cognitive imagery theory, assumes that there are two cognitive systems, one is verbal and the other is nonverbal (imagery). He explains how we think with a Dual-Coding Theory (DCT) as shown in Figure 1. According to DCT, we store information and/or experience in both imagine and verbal codes simultaneously. He assumes that visual and verbal processes have equal roles. The DCT emphasizes the early development of the non-verbal system because it is foundation of cognitive skills associated with language. Further considers images are the primary elements of thinking and therefore, visual thinking is our primary mode of thought. Thus, it is clear that images function as symbols for general ideas by associated with language.

According to, ‘thinking’ remains as ‘perception’ without inner speech. In other words, perception is the precondition for thinking. He mentioned, “In our speech, there is always the hidden thought, the subtext”. Supported this idea by explaining, “…most of the words we use in our inner speech, before speaking or writing a sentence, exist as auditory or visual images in our consciousness”. The concept of ‘visual thinking’ can be defined as “an active problem-solving process”. Specifically, as mentioned, visual thinking is an analytical process of perceiving, interpreting and producing visual messages, an interaction between seeing, imaging, and drawing.
In addition, it can help solving visual communication problems. 'Visual thinking strategy', meanwhile, is originally developed to build students' thinking skills used to enhance understanding of art work. Visual thinking strategy, however, can be transferred to other subjects of learning by helping learners to think creatively and critically. For instance, explored the relationship between the concepts of creativity and visual thinking in art education. The result revealed that visual thinking facilitated flexible thinking and helped students to solve problems in effective ways. The researcher emphasized the importance of practicing visual thinking to enhance creativity in art education.

Figure 1. Dual coding theory.

2. New Perspectives of Teaching English Language Learners

2.1 English Language Learners and Visual Thinking Strategy

Since visual thinking strategies impact on thinking and language skills, its' application can help English learners effectively study English as well as many subject areas. For instance, developed a learning model for reading pictures in picture books based on visual thinking theory for preschool children. In the teaching model, the role of teacher is providing encouraging questions that raise various literary responses from children about the visual images shown in the picture book. The researcher proposed that the activities of reading pictures using picture books incorporated with visual thinking theory would improve visual thinking ability and assist children’s literacy development.

In terms of English language learning, a few researchers have applied the concept of visual thinking strategy based on some other theoretical framework related to visual thinking. For example, applied the concept of semiotic mediation using various semiotic forms such as letters, signs, symbols, and codes, have been infused with meanings in order to assist elementary ESL students' literacy learning. From the study, it was found that the integration of visual picture with speaking activities helped the ESL students negotiate with one another.

With regard to writing, suggests that language teachers can stimulate their students to complete their writing tasks by providing visual experiences, deliberately created by them through classroom activities and interactions. In addition, provide some research findings that prove the effectiveness of visual thinking strategies in the field. In recent years, examined EFL students' writing process focusing on how image influences their writing processes and products. She found that the students' mental image raised a few ideas for their writings, but the internal imagery was not directly reflected on their written texts. The result implies that a long-term instruction might be required to obtain a significant impact of visual thinking training. In other words, argues, extending the amount of time for writing process with aid of teachers might affect the finished writing output, and in turn, help developing individual student' imagery ability.

2.2 Teaching Creativity and Visual Thinking Strategies for English Language Learners

According to, teachers who effectively use visual thinking strategy help students to:

- Look carefully at works of art (images)
- Talk about what they observe
- Back up their idea with evidence
- Listen to and consider the views of others
- Discuss and hold as possible a variety of interpretations

He also mentioned, in training visual thinking strategies, teachers are basically supposed to stand aside to let the conversation develop among students by observing if individual students notice different things or piece of information. Students also should play the role as the
ones who look, think, and talk about what they see while teachers play their role as a facilitator of the process. Moreover, a visual thinking strategy discussion, a teacher should accept individual student’s opinions by modeling responsive attitudes so that all students could learn open and responsive mind towards each other’s ideas. This openness and neutral manner are all related to both creativity and visual thinking lessons.

When visual thinking strategy is applied, teachers also provide some specific but open-ended questions for the student to talk. In created the core questions such as:

- What’s going on in this picture?
- What do you see that makes you say that?
- What more can we find?

Then teachers are required to repeat those questions so that the questions to lead cognitive habits of students. According to the data collected by, children learned the strategy for making meaning of visual images with the repeated questioning activity. Therefore, it is clear that visual thinking strategies are linked with creative thinking which can be developed by teachers’ various and provoking questioning. It is also critical to promote language production of English language learners. More important, throughout the process, teachers’ acceptable and responsive attitudes can generate comfortable and collaborative learning environments.

In addition, when adopting visual thinking strategies to English education, teachers can use any materials that include pictures or symbols such as photos, maps, graphs, posters, cartoons, picture books and any art works. For example, a movie poster can be incorporated into language lesson with several inquiry questions and challenging tasks. With the images given, students are asked to generate their own idea, discuss opinions, take guesses, imagine the situations, and create stories by drawing visual products, and so on. Table 1 shows an example questions for creativity and visual thinking development lesson that can be used in the English classroom.

| Visuals | Words |
|---------|-------|
| What colors can you find in the poster? | Take a guess and create the (new) title of the poster. |
| How is the mood of the poster? | Explain the message of the poster. |
| List as many as things you see in the poster. | Which words, phrases, or sentences do you see the most important? |
| What do you think the picture means? | What do you think the feelings of each character in the poster? Why do you think so? |

### 2.3 Optimal Environment for Creativity and Visual Thinking Strategy Development

In the previous research, many researchers in creativity believe that environments are important in establishing conditions for creativity development. According to, an expert of creativity research, asserted that teachers can provide classroom environments to promote creative behavior of students by: helping them develop imaginations, permitting time for thinking, encouraging and rewarding ideas, giving them ideas concrete embodiment, accepting them to take a different look, prize true individuality, being cautious, editing their work, and encouraging them to play with words. Others pointed out several conditions that enhance creativity and language learning: cognitive engagement with motivation; low anxiety level to encourage idea generation; enough time and positive feedback to formulate ideas; student-centered classroom to challenge the learner’s thinking.

Similarly, in visual thinking strategy classrooms, a teacher plays a role of facilitator: he or she facilitates a student-centered discovery process, focusing on carefully chosen images. In other words, individual student is a main agent to drive discussions. In states the role
of teacher in Visual Thinking Strategy (VTS) lessons: a
VTS teacher helps students to look carefully at works of
art, talk about what they observe, back up their ideas with
evidence, listen to and consider the views of others, and
discuss and hold as possible a variety of interpretations.
The teacher also encourages students’ engagement. In14,
meanwhile, proposed two characteristics of the optimal
teaching environment for visual thinking in his architec-
ture design classroom. First characteristic is an open space
that encourages interaction and a sense of community. He
believed that a large open area provides students feel free
and ongoing conversation opportunities. The environ-
ment also makes the students relaxed and comfortable
so that they can enhance their own work or learning.
The feature of learning environment seems very student-
centered and productive. The second characteristic is low
technology. It means that technology is not a central part
of visual thinking development; rather it is a tool.

From both perspectives, it is found that there are com-
mon conditions for optimal environments for creativity
and visual thinking strategy development. To sum up, in
both creativity and visual thinking classroom, students
are provided tasks in supportive environments where they
can be motivated and comfortable. In addition, they must
have enough time and feedback, and learner autonomy.
Furthermore, students in the creativity and VTS class-
room need to be exposed to meaningful interactions with
aid of teachers’ questioning that can guides and stimulates
their idea. Consequently, teachers’ attitude and belief are
requisite in developing the creative spirit in students and
creating a supportive classroom environment to practice
VTS.

3. Conclusion

Many researchers agree that visual thinking plays a crucial
role in perception and communication. Therefore, inte-
grating visual thinking and creativity training could help
language learners develop their potentials beyond their
current level of thinking skills by stimulating their way
of thinking. Moreover, adopting visual thinking strategy
to enhance English language learning can help students
being more flexible and deliberate thinkers.

Since a rapid development of technology has changed
the way and context of teaching and learning, the field of
language learners’ creative potentials with aid of visual
thinking strategies. In other words, English language
learners should be exposed to the learning environment
where visual thinking and creative exercises are provided.
In this way language learners can be holistic and fluent
communicators who can use their knowledge in new situ-
ations.

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