The Analysis of Exchange and Sharing Activities Based on Visual Thinking Tools

He Lizhen South China Normal University, China HLZ_JN@163.com

> Yin Biyu Xining Primary School, China yinbiyu020@163.com

Abstract: In order to improve the situation of narrow classroom communication and few chances for expression, *"Cross-group sharing & asking"* communication approach based on visual thinking tools was introduced. Research found out that pupils' expression skill and critical thinking ability were improved, but they still needed more time to use the communication approach and teacher's effective guidance was quite essential.

Keywords: Visual Thinking Tools, Exchange and Sharing Activities, Expression skill, Critical Thinking Ability

1. Background

21st century core skills on "learning and innovation skills" refer to the need to develop pupils' communication and cooperation skills, critical thinking and problem solving skills. Nowadays, in the recent primary classroom, there are two common used ways for pupils to exchange their ideas, firstly, teachers ask one or two pupils in each group to express their opinions; Secondly, a few pupils are asked by the teachers to share their learning experience at the end of the class. There is no doubt that these communication approaches have some disadvantages. On one hand, teachers neglect the communication between group and group; on the other hand, chances for sharing offered to the pupils are limited. As a result, pupils can't fully improve their expression skill in the classroom.

2. Key Questions

- How to make communication more effective in the classroom?
- What's the communication approach?
- What's the application effect?

3. Methodology

3.1 Research Objective

In order to improve the situation of narrow classroom communication and few chances for expression, we try to use "*Cross-group sharing & asking*" communication approach during the exchange activity in the classroom, so that pupils' expression skill, critical thinking ability can be improved.

3.2Research Samples

32 pupils of grade 5 from Xining Primary School, Conghua, Guangzhou, China.

3.3 Methodology

Two methodologies were mainly used: case study research and interview research. Case study research was used to choose a certain number of pupils and teach them to use visual thinking tools to learn the topic of "Exploring the Similarities and Differences of the Food Culture between China and Japan". Researchers tracked research sample and gave appropriate guidance during the exchange activities based on visual thinking tools. After the practice, we summarized the application effect and reflected the shortages. Moreover, we interviewed some teachers and pupils to get more information about "*Cross-group sharing & asking*".

4. Analysis of Exchange and Sharing Activities Based on Visual Thinking Tools

"Cross-group sharing & asking" is implemented as follows:

Firstly, according to the topic, teacher divided into four groups: food group (A group), cooking group (B group), cutlery group (C group) and eating etiquette group (D group). Each group had 8 pupils.

Secondly, the first time for "*Cross-group sharing & asking*" was carried out. Each group recommended two pupils to introduce their topic. The rest of the members of each group were distributed randomly to other groups to listen to or ask questions about other topics. As is shown in picture one and two:





Pic.1 The first time of "Cross-group sharing & asking"

Pic.2 The first time of "Cross-group sharing & asking"

Thirdly, the second time for "*Cross-group sharing & asking*" was followed. It was almost the same as the first time. What made the difference was that the two pupils who explained at the first time could not explain any more. This time, the two pupils who were going to explain were those who asked questions at the other group at the first time. As is shown in picture three and four:





Pic.3 The second time of "Cross-group sharing & asking" Pic.4 The second time of "Cross-group sharing & asking"

Generally speaking, two rules need to be complied with. On one hand, let each student be a lecturer and a questioner. On the other hand, this activity should be circulated more than twice. "*Cross-group sharing & asking*" based on visual thinking tools is an effective way to cultivate and improve pupils' expression skill and critical thinking ability.

As a lecturer, when each student explained the content, it's the process for them to memorize and filter knowledge. As they were fifth-grade pupils, their expression skill, comprehension had not yet matured, hence it was necessary to use tools to help them quickly find the intrinsic link among information. After they finished visual thinking tools, they clarified the concept, built and internalized the knowledge. When they explained the content, they can memorize and organize the knowledge in a very short period of time with the help of visual thinking tools, and then they expressed clearly and orderly, shared their understanding of knowledge with companions, in this way, they gradually improved their expression skill. For example, pupils from "cooking group" explained the topic with visual thinking tools fluently. In addition, despite the pupils from "food group" did not express fluently initially, they memorized the generation process of knowledge and finally explained the subject clearly by reviewing visual thinking tools

As a listener or questioner, pupils can learned more knowledge from other groups. Pupils usually raised questions. For instance, when the pupils from "cutlery group" were listening to the pupils from "cooking group", they asked: Why do Japanese like to eat food that is not cooked? Don't they worry about the food hygiene? This question went beyond the research field of "cooking group". Actually, this situation often occurred in the classroom: pupils' knowledge and understanding cognition were no longer shallow, pupils asked more and more "why" than before, and classroom atmosphere became more active. "*Cross-group sharing & asking*" triggered their motivation to think more, ask more, and improved critical thinking gradually. In addition to asking critical questions or comments, pupils also promoted self-critical thinking ability by reflecting on their group's preparation and performance. As the example above, "cooking group" could not answer the question by themselves, and finally dealt with the problem with help of teacher. "Cooking group" pupils got inspiration, reflected on their own preparation and began promoted self-criticism: Why can't we resolve it? What is the answer to this question? And so on.

Therefore, "*Cross-group sharing & asking*" based on visual thinking tools promotes knowledge sharing and accumulation, it helps pupils cultivate and improve their expression skill and critical thinking gradually during the process of "*expression - listening - asking– answer - reflection*" cycle.

5. Conclusions

- Visual thinking tools play an important role when pupils express their opinions, they help pupils memorize and organize knowledge effectively.
- "Cross-group sharing & asking" expands the scope of exchange and sharing, and promotes pupils' knowledge sharing and knowledge building. It improves pupils' expression skill and critical thinking.
- Pupils require more time to use this communication approach. Some individuals could not clearly explain the topics in given time or some were in the "tourist" status. So teachers' guidance and changing pupils' attitudes are necessary.

6. Discussions

How do teachers take into account the situation of each group when they exchange ideas, and solve the problems timely that pupils meet or ask?

Literature Reference

[1] 21st century core skills[EB/OL].http://wenku.baidu.com/view/5090be17a2161479171128b6.html

[2] Ruifeng Ye, (2008). Analysis of Effective Classroom Communication based on New Curriculum Standard. Modern Education Science, (1), 30-32.