

The Critical Thinking Ability Cultivating in College English Course in the Artificial Intelligent Age

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ABSTRACT. *This paper discussed the trend of the English education under the perspective of AI. The learners could acquire the specific language knowledge with many different AI tools. The humanity accomplishment and critical thinking ability should be one of the main goals of the college English class. The critical thinking ability cultivating could be realized through the innovative study method during the lexical study, reading and writing process and other language learning process.*

Keywords: *critical thinking ability, college English, artificial intelligent*

1. Introduction

With the developing of the artificial intelligent (AI), It will take great impact on education. What can it change our foreign language education. What will take place in college English education of vocational colleges? What should we do to hug the coming AI age?

2. The trend of the English education under the perspective of AI

2.1 *The deeper integration of the English education and AI*

AI can enlarge the margins of mankin's knowledge. First, based on the big data analysis of AI, the online system can trace the learners' study track and assess the problems and collect their questions, then come to the solution suggestions. It also can provide huge study resources and guidance promptly. Thus it will improve the

study efficiency. Second, it can use the VR and other tools to create the virtual science which can give the learners language practice sciences and imitate the real environment. The online courses also can break the borders of space and time which can make it possible for the students to communicate with the foreigners and teachers abroad. Students also can learn specific knowledge through the online videos and audios. It can make it much easier to learn specific language points and practice language for communication. So it make the English study more personally.

2.2 The thinking ability and humanity accomplishment cultivating becoming more important.

AI will give the learners lots of study instruments and online platform to practice language and get access to learn English as an tool. What should the offline classroom do to help learners to have deeper understanding of the language in order to learn the language better as well as to develop their intelligence and ability. The offline communication and discussion will give the learners more opportunities exchange opinions with the teachers and team work partners, they can have brainstorm discussion to dig out the inner logic of the language usage and the thinking patterns of the article author as well as the metaphor figures of the literature works. They can have drama workshop, craft teamwork, debate competition. Comparing with the language points lecturers, the English class should emphasize more on the intelligence thinking ability and humanity accomplishment which can not be taken place by AI technology tools.

2.3 The classroom teaching design will become more divergent

In the new AI era, the classroom flopping and extending will become more and more common, the big data result will promote the personal education development by the different kinds of platforms. The flipped classroom will have more diversity forms and activities. The students can get study resources from lots of channels such as the MOOC platforms. The online education make the margin between colleges and society vague. The classroom activities will have much more new forms. Except our thinking margin, nothing will forbid the classroom.

3. The critical thinking ability cultivating in the college English class

3.1 The critical thinking ability cultivating through lexical study

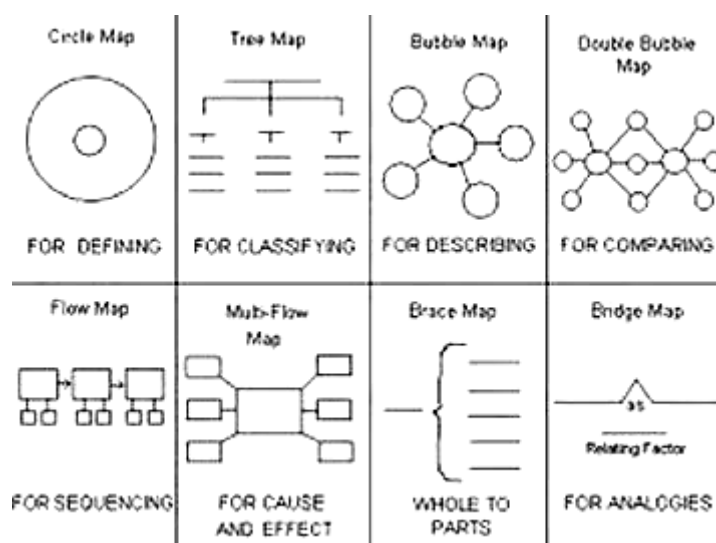
The innovation can promote the critical thinking ability cultivating. In the English study process, it should be the process of innovation promoting the critical thinking, then promoting the study. It means it should have the ideas firstly (innovation), then assess the ideas (critical thinking) and then improve the learners' understanding as well as transforming into their own knowledge (study). That is the process of innovation promoting the study. In the lexical teaching class, teacher can issue the study task such as the vocabulary through the online platform. The study groups of the students will receive their tasks with the platform before the class. Every group do their team work to look up the dictionaries and documents to find the meanings and usage ways, discuss the memory ways and design the exercises forms, look for the extension materials and use context, survey the interesting games and projects. In the class, every team share their fruits and discuss with the other classmates. Then each team give each other assessment and suggestions to improve their designs so that they can find the better solution together. At last, each team modify their documents and the whole class do the exercises and actualities that each team design for the different part of the lexical study. The students will gradually grasp the vocabularies and their usage in their mind.

3.2 The critical thinking cultivating in English reading class

In the reading class, we can divide the reading class into three periods which include before reading, during reading, after reading. In the before reading period, we can give the students tasks and questions they need to collect the background information of the text, and to check the new words definitions in dictionary with team work. In the class, each team have to present their collecting information and the sentences with new words. This process can let the students to shape their ability to locate, look for and integrate information.

In the reading class, we can ask the students to do the group reading under the teacher's guide. Each group has to find the topic words of the text, the clues of the text, the logical relationship of the different parts of the text such as sequence, listing,

contrast comparison, etc. If it is fiction texts, we need to find the plot of the text. If it is non-fiction texts, we have to find the content table and the structure of the text. The students can get the information through some visual tools. We can let the students to draw the thinking map of the text, to write summary and retell the text according the thinking map.



8 types of mind maps in reading class

As the reading of non-fiction text, we can let the students to find the topic words correspondently with the main characters, plot, places, time etc.. We also need to ask the students to find the causes and effects in the text, and let them to know the causes and effects can exchange their places, the effect of one cause could be the cause of another effect. They can be a chain or a circle. The students could also be told how to differ the opinions and facts in the text, to analyze the characters' traits from the character performance in the text. When the students have got the plot and topic words, the logics of the text, they will be easy to memorize the key vocabularies, sentences and use them to retell the text and express their own opinions which will achieve the double goals which are to learn language points and to get the text ideas.

As to non-fiction text, the students can also be asked to find the topic words, the

sequence of the text content, the different sciences, etc. Teachers can let the students to write the k-w-l chart. K means what you have known about the topic, W means what you want to know about the topic, L means what you have learned through the reading. This chart can help the students to clarify their knowledge system and the study trait. After reading, they can think what they want to know, what they have known and what they still need to find in future.

After reading, we can give some extended reading text which has some connection with the origin text. Maybe, it is the supplementary materials of the text and it has the same similarities with the main text but has differences with it, too. We can lead the students to make comparison and contrast between the different texts. The students can draw the above mind map to make the thinking process concrete and vivid. According to the text logics, we can divide the content into above 8 different relations and draw the above different maps. Through the mind map drawing process, the students can clarify the inner logics of the text and read the text with different point of views.

3.3 The critical thinking cultivating in English writing

In order to have the output writing, the input based on critical reading is necessary. As we have discussed above, the critical reading can help the students to collect the witting resources, bank the useful language structures, grasp the witting skills, cultivate the critical ability and then transfer the structural, informational, language knowledge and skills to the output witting. The witting based on reading can make the students output their thoughts and language naturally.

After reading, the teacher can enlighten and inspire the students to summarize, discuss, present and debate their opinions about the text analysis. This process actually make the students have deeper understanding about the text and topic, acquire more vocabularies and expressions, develop their opinions and supporting details.

After the students have deeper understanding and getting the ideas, they can begin to have their writing plan. During the process, the teacher can create a witting process documents for every students. From the planning step to the final text including the first draft, second draft and so on. Every step, the students will

comment on their own works, comment on each other's works, get comments from teachers. They collect the suggestions and polish their works again and again. Finally, they come to the last composition. During the process, students can assess their own works repeatedly, express their own ideas freely about the composition ideas, inner logical relations, article planning, metaphor figures and so on. The documents will record the whole writing process and can help the students to trace their thinking procedures. The teachers will collect the assessment from the students themselves and classmates, according to their performances during the process, do the assessment about the students' performance finally. It will pay more attention to the process not only the final study results. This is a kind of critical assessment.

4. Conclusion

In the AI era, the technologist has changed the traditional education formats and has made the foreign language teaching and learning different with the various AI tools. The learners can get the knowledge through many high-tech ways without the traditional classes. The humanly accomplishment and critical thinking ability should be the main advantages of the college English classes in China. We can cultivate the learners' critical thinking abilities through the language learning process such as lexical study, reading and writing study.

As a hot research technology, moving target tracking technology has been widely used in various fields. With the help of low cost, low power consumption, self-organization and high error tolerance of wireless sensor networks, moving target tracking based on wireless sensor networks also has broad application prospects. Based on existing wireless sensor network moving target tracking algorithm and moving target tracking technology, we designed a set of intelligent workshop product tracking system with low cost, low power consumption and high tracking accuracy.

References

- [1] Lemike J L(1998). Multiplying meaning: Visual and verbal semiotics in scientific text// Martin J R, Veal R. Reading Science: Critical and Functional Perspective on Discourses of Science. London: Routledge.

- [2] Bloom B S(1956).Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain. New York: David Mckay Co.
- [3]Tompson C(2002).Teaching critical thinking in EAP courses in Australia. TESOL Journal, vol.11, no. 4, pp. 15 -20.
- [4]Yu Xin(2015). The teaching model construction of the critical thinking ability cultivating in the College English.Shandong social science, no.52, pp.347-348.□□
- [5] World Economic Forum. The Future of Jobs. (2016-01-18) [2018- 10- 24].<https://www.weforum.org/reports/the-future-of-jobs>.
- [6] Gartner(2018).Future- Proof Your Talent Strategy: How artificial intelligence is evolving the workforce.[2018 - 10 - 25].
- [7] Xu Guoqing(2016). The change of the talent cultivating model of the vocational education in AI age .Education Research, no. 3 .
- [8]Adriansen,H.K.(2010).How Criticality Affects Students'Creativity.InTeaching Creativity -creativity in Teaching, Fanngdon, Oxon:Libri Publishing,pp:65-84.
- [9]Bessant, J.and Tidd, J(2007).Innovation and Entrepreneurship, New York:John Wiley & Sons.
- [10] Sun Youzhong(2015). Foreign language education and the critical thing ability cultivating. Foreign Language in China, no.12, pp.004
- [13]Ying, J(2010). The Conceptual Mapping Model in Consecutive Interpreting Teaching.T21N - Translation in Transition, no.7, pp. 1-16.