



English teaching based on the mode of growth thinking

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Abstract

Growing thinking is a kind of thinking mode with the core idea of believing in one's intelligence and ability plasticity, which plays a very important role in English teaching. At present, English teachers are easily dominated by fixed thinking in the process of teaching, and lack of appropriate intervention and guidance for student's thinking, which leads to poor teaching methods, insufficient use of teaching resources and insufficient critical thinking. Based on this, English teachers in the new era should change their thinking mode and explore English teaching by using the concept of growth thinking mode, that is, skillfully using metacognitive teaching strategies, optimizing English evaluation feedback mode, skillfully setting multiple personalized teaching tasks and other strategies to guide and intervene students's thinking, promoting the development of students' high-level thinking learning and comprehensive ability, with realizing efficient English classroom teaching.

Keywords: growth thinking, fixed thinking, thinking intervention, english language teaching

Introduction

The development of the brain does not lie in the reserve of knowledge, but in the ability to think ^[1], said Mr. Shi, the chief executive officer, once talked about the development trend of future education at the Education Innovation Summit. He said that future education will pay more attention to the development of students' thinking ability, rather than just the input of formal knowledge. We should abandon some existing fixed learning methods and thinking. Professor Dweck of Stanford University in the United States also devoted himself to the study of students' thinking development, and put forward the concept of growing thinking mode. She believes that growth thinking is a necessary thinking ability and learning style for children in this era, which can really change their future development and lifelong growth. With the reform of the new curriculum standards, the concept of growth thinking mode has opened up a new perspective for the innovation of English Teaching in the new era. However, in the process of teaching, English teachers still have some disadvantages, such as poor teaching methods, insufficient use of teaching resources, and insufficient critical thinking. Based on this, how to use the growth thinking mode to skillfully use teaching resources to improve teaching methods, and cultivate students' critical thinking has become an urgent problem for English teachers to solve.

An Overview of the Connotation of Growth Thinking

Growing thinking was first proposed by Carol Dweck, a professor of psychology at Stanford University. It is a thinking mode that believes in the plasticity and unlimited potential of individual intelligence and ability. At the same time, she also won the "one dan Award" of the world's highest education single award for her research results ^[2]. In 2006, she published the book *Mindest: The New psychology of success*, which

summarizes her research achievements in the past few decades, and for the first time explicitly puts forward two opposite thinking modes: growth mindset and fixed mindset. Among them, the fixed mode of thinking holds the view of intellectual entity, which holds that personal intelligence and talent are fixed characteristics and cannot change significantly. The growth mode of thinking holds the view of intelligence growth, and believes that individual intelligence and ability can be developed through postnatal efforts, accepting challenging work and improving learning strategies ^[2]. For decades, Professor Dweck and his team have been studying the different effects of these two modes of thinking on children's learning and future development based on brain science and psychology. Through a series of psychological experiments and follow-up survey data, they found that children with fixed thinking will choose to escape and slack off in the face of setbacks and challenges, resist any tendency of failure, thus depriving themselves of opportunities for self-improvement, growth and learning, and tend to pursue expressive goals. Children with growth thinking will choose to face it positively, believe that personal practice, effort and perseverance will bring unlimited opportunities for self-improvement and growth, and tend to pursue learning goals. Professor Dweck also found that in fact, there are two kinds of thinking in everyone. They are a mixture of two kinds of thinking patterns, but when we deal with different aspects of different things, we may adopt different ways of thinking to deal with them, resulting in different learning effects. What's more, she says in the book that all people have growth thinking at the beginning of their lives, just like in infancy ^[2]. It's just that the fixed mode of thinking later limited our initial mode of thinking. Can growth thinking be regained?

In 2007, Professor Dweck's team began to carry out the research project of thinking mode intervention, trying to

explore whether growth thinking can be obtained through external control means. For example, in an experimental project, they randomly divided a group of seventh grade students into experimental group and control group, which is found that many students in the experimental group have some characteristics of growing thinkers, the classroom learning motivation continues to increase, and the final score is also higher than that of the control group ^[3] This shows the effectiveness of thinking intervention. Subsequently, more and more thought intervention experiments based on brain science research show that the human brain is like a muscle, as long as given the appropriate intensity of stimulation and exercise, it can increase the connection channels between neurons. After these channels become more, the information between neurons will be transmitted faster and more, thus promoting the continuous growth of brain intelligence. In recent years, researchers from the United States, Chile and other countries have also been involved in the study of thinking intervention. Through the "field" empirical research, they have revealed that growth thinking intervention can improve students' academic achievement development and affect their personality growth ^[4]. This means that growth thinking is not innate thinking, but a way of thinking that can be acquired through acquired training. When students believe or are taught that they can cultivate their own intelligence and ability, their behavior performance and academic performance will be relatively better, rather than showing a fixed intelligence coefficient. In the process of English teaching, psychological intervention by changing students' mentality can effectively promote the transformation of their growth thinking, stimulate their internal learning motivation system, and change students' self-cognitive evaluation and their inherent way of thinking and learning.

The Multidimensional Value of Growth Thinking in English Teaching

Students' Failure for Cultivating Their Learning Ability

Brain science research experiments show that: once children with growth thinking make mistakes in the process of completing tasks, they will allocate more attention to the tasks that they make mistakes, and improve them in time, so as to improve the accuracy in subsequent tasks ^[5] Compared with the fixed thinking children, the growth thinking children are more able to bear the failure, and can actively correctly attribute in the failure, find the root cause of the error, and go to success. In the process of English learning, due to the lack of local language environment and the negative transfer of mother tongue, students often make a lot of common mistakes and learning difficulties. Especially in the senior stage, in the face of phonetics, vocabulary, reading, listening, grammar and other knowledge barriers, learners tend to lack self-confidence and lose interest in learning. For example, after teaching English grammar, such as progressive tense and future tense, it is easy for students to confuse the grammatical knowledge points of be going to do and be doing, and produce some inevitable errors, which cannot be used flexibly and skillfully in the specific text context. The students of fixed thinking choose to avoid these difficulties, while the students of growth thinking will pay attention to these errors, explore their causes

independently, and then compare and analyze them from the aspects of meaning notation, form formation, sign word signal, etc. The idea of growth thinking is to guide teachers and students to pay attention to mistakes and make good use of this valuable teaching resource. English teaching cannot blindly try to curb students' mistakes, but guide students to learn to make mistakes, actively correct them, attach importance to the output value of failure, and cultivate their independent thinking and independent inquiry ability.

Change Students' Cognition for a Proper Evaluation

Fixed thinkers often associate success with their own intelligence, unable to objectively and accurately evaluate their performance and ability. Once they encounter failure, they will be attributed to their lack of intelligence, which is similar to "I am not smart enough"; People with growth thinking can accurately evaluate themselves and are good at developing their strengths and avoiding their weaknesses. They think that intelligence and ability can be improved through learning and hard work. They have strong resilience in the face of failure, which is similar to "where else needs to be improved". For example, in an English test, students with 75 points of fixed thinking will think that their intelligence ability is in the range of this score range. Limited by this kind of thinking, they will not be able to further improve in the next opportunity. On the contrary, growth thinking students with the same score will correctly evaluate their learning progress and performance in the previous stage, and find their own shortcomings in English learning, such as "I have mastered this grammar point", "forget to capitalize the first letter of a sentence" and so on. These assessments point out a clearer direction for their English learning in the next stage. At the same time, their desire for progress also makes them have certain learning expectations. Correct self-awareness can make them happy to meet the challenge, and promote their brain nerves to produce new connections. In the process of English learning, accurate self-evaluation attribution can help students better control the rhythm of learning, plan their own learning progress, stimulate students' internal motivation and initiative, and improve learning efficiency, while students change their cognitive thinking from "English is too difficult, I'm not suitable for learning English" to "my oral English is not good, change the way to practice more".

Stimulate Brain Comfort Zone to Promote Their Personalized Learning

Providing sufficient challenges for each child is an important concept of growth thinking. The brain has plasticity, so long as it is given appropriate stimulation, it will promote its change. Every challenge can be said to be a process of inputting new information again and again. These new information will stimulate the synapses between neurons in our brain to constantly change and produce new synapses. In the repeated repetition of old knowledge, the synaptic connections are consolidated. Growth thinking not only emphasizes the importance of challenges, but also emphasizes providing challenges for "every child". As a matter of fact, we know that there are great differences among students due to their different life experiences, educational backgrounds and

aesthetic tastes, which is inevitable in English teaching. This gives English Teaching Enlightenment: to provide individual challenges for each student, to achieve individualized teaching. For example, in the process of carrying out some activities and tasks in the English classroom, it is necessary to grade different types of students and formulate personalized tasks and challenges. English teachers can set different levels of challenge a, B, C and D in the same type of task, and students with different English basics can choose the matching level to break through, stimulating the brain to realize synaptic connection. Students break through and realize their self-worth in the personalized challenge task after task. They regard every challenge as an opportunity for growth, find the outlet for progress in failure, cultivate interest in English learning and master the initiative in learning.

The Application of English Teaching Strategies under the Mode of Growth Thinking

English teachers themselves should change from fixed thinking to growth thinking, and use growth thinking to guide and intervene students' thinking, so as to enhance students' continuous learning motivation. From the perspective of intervention, English teachers should arm themselves with the theory of growth thinking mode, apply growth thinking to teaching design and process, innovate daily English teaching strategies.

Failure Produces the Great Value

Group Relationship Is the Foundation of a Harmonious Atmosphere

Jacqueline Zeller, a researcher at Harvard University, once said, "When children are more secure in school, they are more willing to learn." [6] From the sociological point of view, individual behavior and attitude are more or less controlled and restricted by the relationship between specific surrounding groups. Group life is the prerequisite for the healthy and stable development of human psychology. To a certain extent, safe group environment can promote the efficiency of individual activities. Learners are in the micro social group of school, and their words and deeds are closely related to the people around them. They are always consciously or subconsciously influenced by the interpersonal relationships around them, including the relationship between teachers and students, the relationship between students and students, and the relationship between the subject and self dialogue. They are afraid that their improper behavior will lead to the disintegration or disintegration of the relationships around them, So they dare not jump out of the comfort zone. In the process of English language learning, many students are afraid to speak English, afraid of making mistakes, being criticized by teachers and ridiculed by classmates. This is the manifestation of their psychological lack of sense of belonging and security. The teachers of growth thinking are good at actively building the classroom environment of growth thinking teaching, and creating a failure friendly, safe and mutual learning relationship group for students. The formation of safety relation group can overcome students' psychological fear of failure and regard mistakes and failure as a natural experience. Annie bullock and Heather Hendry

mentioned in the training of growing thinking that teachers should tell students at the beginning that they will make mistakes in learning, and these mistakes will help them learn, and create a "wrong language" with students [6]. This kind of wrong language, such as "great mistakes", can help students and teachers reach a psychological consensus, which use some language and gestures such as "wrong language" to enhance their security and trust. Take the following English teaching fragment as an example:

T : What's this? (The teacher pointed to a tomato)

S: It's a tomato.

T: What're these? (The teacher pointed to a basket of tomatoes)

S1 : It's tomato.

S2 : They are tomatos.

S3: They're tomatoes.

This teaching segment clearly shows the mistakes that students often make in the process of using the singular and plural forms of output due to their learning inertia. Teachers are to protect the mechanism of students' psychological changes when they make mistakes and reduce their sense of failure. A few minutes before class, English teachers can share with students some stories about great people who have made mistakes or failed to reflect on their success, and then tell students that everyone makes mistakes in class. When students produce valuable errors, but can simply correct themselves, teachers of growth thinking can say "great errors" together with students, equipped with corresponding gesture symbols of praise, and then ask other students to correct the answer step by step. Finally, they can explore the causes of errors and participate in metacognition to solve problems. Failure is an interesting and valuable process.

The In-Depth Study of Language Errors Is Effective Learning Resources

Language learning is a transitional process. Each learning stage has its independence, and naturally transitions to the next stage over time, gradually approaching the target language, and errors run through this process. Corder, a British scholar, believes that making mistakes is a kind of learning method used by learners for the purpose of acquisition and a method used by learners to test their assumptions about the nature of the language they have learned [7]. Of course, he refers to the mistakes that are valuable, not the mistakes caused by psychological reasons such as emotional pressure. In the process of English teaching, due to the negative transfer of mother tongue, students will make some mistakes in English pronunciation, grammar, style, culture and so on. These mistakes not only reveal the law of students' language learning development, but also indirectly reflect the way of learners' thinking and cognition. Growth thinking teachers will use these error resources reasonably, so that students can explore in-depth in valuable errors, analyze the reasons, find out the problems, and use metacognitive strategies to correct the errors. For example, with the increase of syntactic and grammatical difficulty of senior students, they cannot get rid of the Chinese "burden" barrier, and are prone to confusion in the use of

communicative language, such as I last weekend went to my uncle's and I very much enjoy this party "The misplacement of "last weekend, very much" in the sentence position is due to the systematic errors made by students who do not know the rules of the English language system. English teachers can ask "why do such errors occur? Next time, we need to ask open-ended questions such as "how to avoid such mistakes", so that students can explore in groups and experience the differences between Chinese and English. Another example is the synonyms take, cost, spend and the synonym group take, part in, join in, participate in. Their Chinese translations are the same, but their specific meanings and usages are completely different. It is easy for students to confuse in the process of using them. Teachers can show some mistakes in practice in class, and let students find out the reasons for the problems themselves, Cultivate their thinking ability of independent inquiry.

Evaluation Optimize the Feedback Mode with New Thinking Expression

Evaluate One's Efforts rather Than Intelligence

The effort mentioned here can also be equated with "grit" of perseverance. People with fixed thinking often lack indomitable perseverance and always high interest. People with growth thinking are good at improving themselves^[9]. Experimental research shows that when students are evaluated for effort (perseverance) rather than intelligence, they will pay more attention to the value of learning itself, perform better in practical tasks, and thus enjoy more fun in learning. This view can also be explored from the attribution theory: the success or failure of an individual will affect his later motivation. If an individual attributes his success or failure entirely to his innate intelligence, then this way of attribution will have a negative impact on his later behavior and motivation. Intelligence labels will mislead students' self cognition and hinder students from correctly self attribution. The following will be based on teachers as the main body of evaluation to explore how teachers focus on evaluating students' success and progress through efforts as an internal factor, and guide students to actively conduct self-evaluation and peer evaluation.

The evaluation system of English education is often in a single and fixed state. The forms commonly used by teachers mainly include "cleaner, good, great, smart, very well, excellent" and other evaluation words. These vague evaluation words easily make students attribute their achievements to their intelligence. Once they suffer from failure, they can't bear to be questioned by their parents, teachers and classmates, so they will try their best to do some tasks that meet their expectations but are within their ability. First of all, teachers of growth thinking should change their own expressions and make the above-mentioned evaluative expressions concrete, such as "you always make great effects on learning / hardware makes your success / excellent performance is from your striving". After the germination of growth thinking, English teachers can gradually guide students to make self-evaluation and peer-to-peer evaluation with the focus of "effort" in carrying out relevant English activities. Teachers' external evaluation is to promote the change of students' self cognition. Once students realize the creativity of perseverance

for future development, they will form corresponding goal oriented plans and constantly break through the possibility of their own development. For example, it is required to carry out English activities around the "friendship" unit, which is a compulsory English unit in senior high school. Teachers can assign tasks after class, ask students to perform snow white and the seven wars English short plays in groups in the next class, and ask students to discuss freely, study and guess characters, and integrate extra lines and plots. After the activity is carried out, the students are asked to make self-evaluation around their own shortcomings, practice degree and improvement methods, such as "I should spend more time on my procedure / I will endeavor on my graphical knowledge".

Evaluate the Learning Process Rather Than the Results

Education evaluation often falls into a misunderstanding, that is to say, the essence of appreciation education is to blindly express the appreciation of children, while ignoring its core point: the process of appreciating children behavior. The English curriculum standard also points out that formative assessment should be the main evaluation in daily teaching, focusing on the evaluation of students' performance and progress in the learning process^[8]. However, in practice, English teaching has been implementing the result oriented examination oriented evaluation, paying attention to the output of results, focusing on scores and rankings, and ignoring the feedback process of children growth behind the results. Based on the overall perspective, process evaluation guides students to pay attention to the growth process from behind the results, and cultivate their growth thinking from the attribution in the process. Therefore, growth thinking teachers should pay attention to students' learning process and give them appropriate evaluation methods. The most important evaluation methods are classroom oral evaluation, written evaluation, recorded test evaluation and so on. Taking the classroom of dialogue structure in primary and secondary schools as an example, teachers should do a good job in classroom observation. They should not only pay attention to students' ability to use English language knowledge in the process of dialogue, including the mastery and application of pronunciation, intonation and meaning group; We should also observe the students' understanding and application of the characters, emotions, scientific knowledge and foreign culture in the process of context, make appropriate oral evaluation for the whole process of students' learning performance, and give timely evaluation feedback. English teachers can also make written evaluation through homework exercises, such as I like the part of your exercise / your writing has improved / you remember the capital letters. These evaluation words can help students get feedback in time and adjust the progress of learning stage.

Focus on the "challenge of intelligence" and skillfully set up multiple personalized teaching tasks

Deliver expected signals and make personalized task plans

Rosenthal Effect proves that teachers give students certain expectations, which will change students' intelligence. What is the extent of this expectation? Just think, do you believe that if a child who always fails in the exam can get 100 points,

he can suddenly achieve the corresponding effect? Obviously, it needs a slow process. Too high expectation often makes students shy away from the challenge, and too low expectation will hinder students' progress. Only meeting the expectation of students nearest development zone can make students willing to meet the challenge. The joy of enjoying the challenge process is also one of the core concepts of growth thinking. This means that teachers should give different levels of expectations according to the differences of students' abilities, and transmit the expected signals by making task plans for students.

English teachers should design personalized task plans for different children. English teachers can divide some challenges into different small challenges and make a phased task schedule for each child according to the starting point of the students. You can set up the same type of learning tasks with different difficulties in the table. For example, you need to read a foreign language reading book of children's literature and express your feelings. You can grade the reading materials and select some slightly difficult foreign language picture books for students with weak English foundation: Alice in Wonderland English picture books, Little Prince English picture books, Senior students are asked to try to read some foreign language books: Treasure Island, legend of King Arthur, white boulder. At the same time, it can also make different types of task plans for students, such as setting the tasks that everyone must give priority to (watching the original Disney English movies), and also setting some optional tasks (making English games, making English speeches). The individualized learning task plan conveys teachers' expectations for different students, reflects the fairness and tolerance of education to a certain extent, and actively develops students' growth thinking, so as to really like challenges and actively meet challenges.

Build high-level thinking and carry out personalized task-based teaching activities

The purpose of learning task design is to serve the development of students' thinking ability. Any task activity should have its meaning and value. At present, task-based teaching activities in English classroom focus more on form than content, more on students' memory and practice of knowledge, and less on inspiring students' higher-order thinking development. Theoretically, this kind of mechanical challenge task can achieve the effect of foreign language knowledge training in a short time and help students improve their performance, but it is not conducive to the long-term development of students. The "challenge" in the concept of growth thinking can inspire each students' high-level thinking, use individual subjective initiative to deal with challenges, solve problems in a new way, and turn knowledge into "wisdom".

According to David Nunan, learning tasks are mainly composed of three parts: goals of specific learning tasks, input materials for task contents, and activities designed based on learning materials^[11]. First of all, English teachers should analyze the classroom input materials, and formulate the corresponding learning task objectives of different levels of difficulty. These tasks should promote the construction of

students' higher-order thinking, rather than simple answers to the surface of the material. Only problems, tasks, or projects that can be solved by higher-order thinking, such as performance tasks, open problems, and inquiry activities, can promote students' deep learning^[12] For example, when teaching an English reading text, the teacher should first design goals, input activities¹, activities², activities³ and other activities with different difficulties. The instructions of these activities should be based on the similar expressions of "constructive, open, and exploratory", so as to make the challenging tasks communicative, authentic, and valuable, rather than simple dialogue presentation. Let the students practice according to the unit sentence patterns on ppt. In this way, students extract and integrate external information in different learning tasks, activate existing cognitive schema, process and combine new knowledge, construct new schema, and promote the plasticity development of students' brain. At the same time, in the process of activities, students can choose different levels of challenging activities in the form of individuals according to their own actual situation, and can also assign different levels of challenging tasks in the form of groups, so as to create an atmosphere of common positive challenges, and realize the happiness of self breakthrough in each breakthrough challenge.

References

1. Jane. Interview with CEO of the world famous Education Innovation Summit: such a learning method can adapt to the challenges of the future society. Bund education, 2019. [EB/OL]<https://m.p.weixin.qq.com/s/krqZSG45wMNs8jgbqM5kRA>.
2. Carol Dweck Mindset: The New Psychology of success [M]. New York: Ballantine books, 2006, 7-16.
3. Li Lingyan, Geng Lina. Growth mode of thinking intervention project and Its Enlightenment on the implementation of China's independent development education [J]. Educational science research, 2018;(09):80-85.
4. Yeager David S, Hanselman Paul, Walton Gregory M, *et al*. A national experiment reveals where a growth mindset improves achievement. [J]. Nature, 2019.
5. Schroder H S, Fisher M E, Lin Y, *et al*. Neural evidence for enhanced attention to mistakes among school-aged children with a growth mindset [J]. Developmental cognitive neuroscience, 2017, 42-45.
6. Anne bullock and Heather Hendry. Translated by Zhang Jie. Growing thinking training [M]. Shanghai Academy of Social Sciences Press, 2018, 67-149
7. Lai Jihong. Students' English mistakes are also curriculum resources [D]. East China Normal University, 2006, 1-63.
8. Formulated by the Ministry of education of the people's Republic of China. English Curriculum Standards [M]. Beijing Normal University Publishing Group, 2011, 1-10.
9. Shan Limin. Cultivating growth thinking [J]. Shanghai Education, 2017, (14).
10. Dweck. "Even Geniuses work hard" [J]. Educational

- leadership,2010:(01):16-20.
11. Zheng Qiuqiu. Task based reading activities in senior high school English -- classroom teaching mode and case analysis [J]. Curriculum. Textbook. Teaching method,2003:(12):33-38.
 12. Zheng Donghui. Classroom evaluation to promote deep learning: Connotation and path [J]. Curriculum. Textbook. Teaching method,2019:39(02):59-65.
 13. Hattie J. Visible learning: a synthesis of over 800 meta-analyses relating to achievements [M]. New York, NY: Routledge, 2009, 174.