

# Exploring the Path of Teaching Critical Thinking in the Context Of Cultivating Innovative Talents in Higher Education Institutions

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## Abstract

**Innovative people have certain traits of intelligence and personality, and critical thinking has a vital role in developing these traits and enabling these transformations. Critical thinking is a combination of rational, reflective, and constructive thinking that promotes rationality in people and society and is vital in human cognitive development. The integration of critical thinking into cultivating innovative talents has theoretical and practical significance. Still, more importantly, it can effectively enrich the cultivation model of innovative talents and stimulate students' enthusiasm and initiative to participate in the cultivation of thinking and competence in universities. To provide innovative talents.**

## Keywords

**Innovative talents; Critical thinking; Talent development.**

## 1. Introduction

Higher education institutions are the cradle of training talents based on the times and development. They can follow the historical trend and carry out innovation in talent training mode. However, many problems put them in a bottleneck. The lack of critical thinking education is the most important reason. Critical thinking is the premise and foundation of innovative thinking, and innovative thinking is the root of innovative talents. Therefore, higher education institutions should pay attention to cultivating students' critical thinking ability to provide strong support for the cultivation of innovative talents.

## 2. About Innovative Talent

What are innovative talents? Most academics emphasize the overall development of personality and the cultivation of creative consciousness and innovative ability. From the interpretation of the objectives of education training by universities in the world's major developed countries, the focus is on cultivating talents' innovative consciousness, innovative spirit, innovative thinking, and creative ability. Cultivating gentlemanly leaders and scholars is the goal of university education in the UK. The definition of a gentleman leader and scholar is, as the 19th-century British educator Newman put it, "a person who has learned to think, reason, compare, discriminate and analyze, who has a refined sense of humor, a good sense of judgment and a broad outlook." The Chancellor of Oxford University, C. Lucas, called for universities to produce people who are "highly skilled, with a comprehensive base of knowledge, with a strong sense of personal responsibility, innovation, and flexibility. Individuals who can constantly acquire new skills to suit their needs." The Humboldt philosophy has had a profound impact on the development of talent in German institutions of higher education. In the early 20th century, the famous German educator Jaspers argued that universities should foster a 'whole person' mentality based on the 'whole person. In the mid-20th century, Hutchins, a mid-20th century

American educator, argued that education should be aimed at developing the whole person, not as a single instrument of development, but in the true sense of the word. The goal of the university, like the goal of education, was to develop the human intellect, nurture the human intellect, attain the highest wisdom and the highest good, and attain the 'perfect man.' UNESCO's report on the development of education in the 21st century also calls for the development of innovative human beings. However, the aims of teaching and learning are still interpreted in the light of the two objectives of the whole person or the perfect person.

Generally speaking, we can accurately grasp the connotation of innovative talents from the following four aspects.

Firstly, innovative talents are people with innovative consciousness, spirit, creative ability, and creativity. Innovative talents are closely related to what is generally called theoretical, applied, and technical talents. All the talents, as mentioned earlier, must be innovative, which is the primary quality of becoming "innovative talents."

Secondly, to cultivate creative talents, the overall development of human qualities must be a prerequisite. The concept of innovation, the spirit of innovation, innovative thinking, and the ability to innovate come from nothing but are closely related to other qualities. Innovative talents are those whose overall development is at their core.

Next, the free development of the individual is a prerequisite for the growth and development of innovative talents. Higher education institutions must be equipped with individual independence and not be reduced to a tool for producing creative and innovative talents. Although it cannot be said that the development of individuality leads to creativity and innovative thinking, innovative talents will not be produced without the development of individuality. Under these conditions, creative people are individuals whose personalities develop freely and independently.

Finally, both innovation and creative talent are stage concepts, and there are certain historical biases in understanding innovation and creative talent in various eras.

### 3. About Critical Thinking

Critical thinking is a universally accepted goal worldwide. It is rational, reflective thinking that focuses on caution about opinions, assumptions, arguments, etc. It has its origins in Socrates' "spiritual midwifery." By talking to people and asking them questions, Socrates enabled them to continue to acquire "knowledge" in dialogue and, as a result, to move closer to the truth. The "spiritual midwifery" has evolved into a method different from the traditional "indoctrination," that is, "dialogue education."

A modern perspective on critical thinking can be traced back to Dewey's reflective thinking. According to Dewey, "thinking is the conscious effort to discover a particular connection between what we do and what we cause, to make a connection between the two." The best way to think is called 'reflective thinking, which is "repeated, careful, and continuous deep thought about an issue." Reflective thinking emphasizes deep thinking about the causes of beliefs and behavior, the use of reason and logic in specific contexts, and is scientific. After Dewey, the American educationalist Ennis argued that critical thinking is the right of individuals to make the right decisions about what they want to do and believe. After the 1980s, researchers represented by the British Fashion argued that: 'Critical thinking is the purposeful, automated process of judgment, including interpretation, analysis, evaluation, reasoning and the interpretation of evidence concepts, methods, and or consideration of the full range of contexts in which judgments are made.

These concepts show that critical thinking focuses on individual thought and analysis, personal reasoning, decision-making, and evaluation. Critical thinking requires questioning, being creative, seeing things from a broader perspective, and thinking deeply and thoroughly. Today,

we must focus on training students in tertiary institutions in critical thinking to enhance their judgment and ability to deal with problems to meet current development needs.

## **4. The Role of Critical Thinking Education in the Cultivation of Innovative Talents**

### **4.1. Critical Thinking Helps to Cultivate Students' Innovative Spirit and Cognitive Ability.**

Cognitive ability refers to the human brain's ability to process, store and extract information, that is, people's ability to grasp the composition of things, the relationship between performance and other things, the dynamics of development, the direction of development, and the fundamental laws. It is the most important psychological condition for people to complete their activities. In postmodernist education, no kind of knowledge cannot be doubted, and that can be the cornerstone of future intellectual growth. The increase in knowledge is not a development process; it is a continuous renewal and rejection of what is already known. When accepting new knowledge and ideas, critical thinking requires careful reflection on the correctness or incorrectness of the knowledge received and the identification of problems through reflection, resulting in a psychological self-consciousness to solve them. Innovation is based on knowledge, and knowledge is acquired through learning. When learning, if you think critically, you will be able to understand the context and cause and effect of knowledge so that you do not just accept it, but take the best of it and remove the worst so that you can use it to your advantage, and do not blindly follow authority and accept others' views easily. A person who is stagnant in his thinking, conservative in his character, and lazy in his observation and thinking will have something wrong in his mind. He is accustomed to sliding in and out of the orbit of his thinking.

On the contrary, a person with a critical attitude and habit of thinking is usually open-minded, diligent in observation and reflection, good at finding mistakes and nitpicking, and able to find problems constantly, faults and flaws in old theories and practices, thus creating the need, urge and desire to solve them. One can genuinely grasp knowledge and integrate the knowledge acquired by learning critically. Information and theories are integrated and transformed into competence.

### **4.2. Critical Thinking Helps Students to Improve Their Creative Skills and Mental Temperament**

Critical thinking helps develop students' practical skills to review, analyze, and evaluate existing knowledge, which helps develop students' critical thinking, leading to creative ideas and insights. Only ideas lead to behavior, and rational reflection allows creative thinking to emerging, leading to the behavior. Because students are more open and flexible in their thinking, more skilled in their reasoning skills, more accurate in obtaining information, more thorough in their understanding, more knowledgeable, and much more efficient in dealing with problems, this enhancement is very beneficial in enhancing their creative skills. In practice, the success or failure of innovation depends on the relevance of creative thinking and concepts to reality. At the same time, the development of critical thinking is reinforced by practical exercises that both develop students' critical thinking and enhance their creative skills. More importantly, people with critical thinking attitudes and habits do not see 'familiarity' as 'true knowledge' and 'commonplace' as 'taken for granted. They think hard and innovate, their minds are always open to new possibilities, and new ideas and thoughts flow like a gurgling stream.

## **5. Possible Paths for Higher Education Institutions to Cultivate Students' Critical Thinking Skills**

### **5.1. Specialised Courses in General**

Critical thinking courses are not simply general knowledge courses that teach the concepts, structure, and skills of critical thinking but comprehensive courses that allow students to systematically learn the basic principles of critical thinking and master the spirit of critical thinking and critical thinking skills at a deep level. These courses are best taught in small classes and develop a rigorous rational ethos: to think clearly and methodically from clearly understood concepts and problems, to operate according to procedures, to follow the rules, to take one step at a time, and to be able to identify and refute sophistry and fallacies. This type of teaching allows for a more direct and adequate perception of critical thinking but requires dedicated teachers to work on it and additional educational resources. It has the potential to increase the learning load of students, making it uncomplicated to implement.

### **5.2. Take Heuristic and Discussion Teaching**

The traditional teaching method adopts the indoctrination teaching method in which the teacher "speaks" and the students "listen." The classroom should not be limited to imparting knowledge but rather stimulating interest and developing competence. All university teachers must not be satisfied with merely imparting knowledge but must explore the underlying ideas and implicit preconceptions that trigger that knowledge. They need to use 'heuristics' and 'discussion' teaching methods to engage students actively, encourage them to be skeptical and critical, allow and guide them to ask questions, and introduce communication and dialogue into the classroom. This requires teachers to remove their sense of authority, put aside their absolute dignity, and work with students to break the rules and explore problems. From simply imparting knowledge to guiding students to learn to think, teachers and students communicate on an equal footing. More small classes should be arranged to facilitate teacher-student interaction and interaction between students. Examinations should also be innovative, using more minor memory-based examinations and more intelligent ones. Through such training, students will be able to form independent opinions rather than follow the clouds and develop critical thinking, which will be conducive to improving their creative abilities.

### **5.3. Transforming Critical Thinking Into Innovation Through Social Practice**

It is based on critical thinking that we learn, find and solve problems to change the world and for the world to progress. A way of thinking is only significant if applied in social practice. Critical thinking and innovation are only rooted in social practice, where theories can be sublimated. We believe that it is crucial to integrate critical thinking skills into the practice of critical thinking in the education of students' critical thinking skills:

We are developing handouts to guide students in developing critical thinking skills.

They are effectively modeling and applying these methods to the teaching of the subject.

Collecting and using examples of critical thinking relevant to the subject and providing valuable opportunities (including various exams and tests) for students to practice critical thinking skills.

Students apply critical thinking in practice to improve their ability to critique reality, which improves their ability to understand the world and develop the ability to identify problems and innovative ideas. The improvement of thinking skills comes from solving practical problems and ultimately guiding practice. Students combine theory and reality through social practice, transforming critical thinking into creative ability.

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