# The Value of Neurology in Cultivating the Social Emotional Ability of Primary and Secondary School Students in China in the Post-Epidemic Era

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Abstract: The New Year in 2020 begins in an unexpected manner. To effectively combat the 'COVID-19' epidemic and ensure the health and safety of teachers and students, hundreds of millions of students have poured into online classrooms to engage in online learning, which is not only a tremendous challenge, but also a butterfly change in Chinese school education. How to learn from history and open up new teaching ideas in the post-epidemic era. Under the current circumstances, how can we effectively improve students' social and emotional abilities as well as core literacy? In light of the aforementioned issues, every educator should maintain sufficient calm, not only depart from the essence of education, but also embark on a new journey of teaching exploration with an advanced educational vision. Based on existing research and literature, this paper examines the development of social emotional ability in primary and secondary school students in China during an epidemic, examines the relationship between them through the lens of neuroaesthetics, and proposes some teaching path ideas in order to achieve a new leap between teaching progress and student development.

Keywords: Social Emotional Learning, Youth Development, Neuroaesthetics, Curriculum Revolution

#### 1. Introduction

The sudden outbreak of COVID-19 in China at the end of 2019 disrupted people's daily lives. It not only endangers the lives and health of the vast majority of people, but it also has a significant impact on production and work in all fields. According to the current situation of epidemic prevention and control, 30 provinces, municipalities, autonomous regions, and municipalities directly under the Central Government have declared and responded to major public health emergencies, launching a sniping battle against the COVID-19 epidemic [1]. Simultaneously, all types of schools at all levels throughout the country actively participate in epidemic prevention and control efforts. The Ministry of Education issued a notice postponing the start of the spring semester in 2020 and instructing students to 'suspend classes and stop studying' via an online platform. Following that, local education administrative departments and schools responded one after the other, and home-based learning and online teaching quickly became emergency measures for all types of schools across the country to deal with the delayed start of school.

Looking back in time, it is easy to see that major epidemics have plagued humanity. Plague, flu, cholera, the Ebola virus, and other diseases have all harmed human development. In the twenty-first century, China experienced an outbreak of SARS and pneumonia caused by a novel coronavirus. The difference is that COVID-19 is highly contagious, with a broad range of influence and significant harm. There are few studies on education in an epidemic situation, and the majority of them focus on health education, life education, or education reflection after the epidemic situation. However, what kind of difficulties will students face in physiology and psychology as a result of the epidemic situation and the new situation of teaching and learning at home? What kind of education is really beneficial to students' development in the post-epidemic era, and a series of issues about teaching practice, teacher development, and students' growth are all issues that educators need to think about. Social emotional ability, a hot topic in the educational field in recent years, focuses on students' comprehensive qualities such as emotional management, social ability, and independence, which greatly promotes the all-round development of students' comprehensive qualities [2]. Neuroaesthetics is an aesthetics and psychology interdisciplinary subject that focuses on the general laws of artistic creation and aesthetic activities. Integrating neuroaesthetics into adolescent education research is a brand-new field, and it is also a

response to the Ministry of Education's recent policy of art curriculum reform.

# 2. Challenges Faced by Primary and Secondary School Students' Social and Emotional Ability Development Under Major Epidemic Situation

Every teacher, almost instinctively, wishes for their students to grow up smoothly. This hope is not only the internal motivation for people to continue and develop, but it is also the embodiment of the humanistic spirit in educational thought and practice. However, education based on hope is unlikely to achieve the goals that people set for education. In general, only instilling positive and compassionate feelings in education will inevitably result in the weakness and willfulness brought about by warmth and care, which are unfavorable to growth in the process of shaping children's sound personalities. As a result, there is no shortage of reminders from severe frustration education while practicing the educational philosophy with the theme of understanding, respect, and happiness. The 'COVID-19' epidemic, which has lasted three years, has yet to abate. Relevant scholars have rendered professional judgments on the nature of the epidemic, but for ordinary people, it is a disaster that could put them in danger at any time. In the face of disasters, it is necessary to remain calm, rational, and firm, but the nature of disasters and their negative impact on human psychology cannot be avoided. Teenagers' minds, in particular, are immature, making it difficult to form a correct and appropriate response attitude in the face of such emergencies. If teachers and parents are unable to provide timely guidance on learning and emotion, it will have a lasting impact on the development of teenagers [3].

The new situation of studying at home has resulted in a slew of new developments. To begin with, class-based collective learning in schools has given way to individual learning at home, which weakens teachers' leading roles and raises the bar for students' autonomy in learning. Studies have shown that only 13% of parents think that their children have high learning autonomy; More than half of the students answered positively in the two surveys of 'doing things unrelated to study during online teaching' and 'whether to preview occasionally or never.' More than one-third of the students said that they 'seldom or never take the initiative to study at home' and 'are not suitable for studying at home.' The above results make it clear that students' learning autonomy needs to be improved. In fact, autonomous learning is not only a new concept in distance and open education; many international organizations and countries (regions) regard students' learning autonomy as one of their core characteristics. However, the learning autonomy of Chinese primary and secondary school students is not encouraging. From the perspective of social emotional ability, the consequences of the above are that students can't make "responsible decisions" for themselves and can't realize 'self-management.' Second, students' information literacy will have a significant impact on their learning effect. Learning tools have expanded from textbooks and teacher lectures to the entire Internet system, and students' access to knowledge has been greatly expanded. At the same time, can students accurately distinguish useful information from harmful information in the face of the complex network world? Consciously resist the lure of online games. When faced with difficulties, it is a significant challenge for primary and secondary school students in our country who are accustomed to classroom teaching, such as whether they can skillfully use the Internet to seek assistance. It is a new direction for teachers' teaching in the post-epidemic era, as well as a required advanced emotional ability to enter the future 'high-tech' society [4]. At the same time, during the epidemic period, life education should be regarded as a unique and valuable teaching resource. Our country's education focuses on book knowledge, so students lack knowledge of physical health, mental health, and all other 'lifetimes,' including the lives of animals and plants in nature, as well as emotional tolerance in the face of major life problems and moral education content related to life meaning, life meaning, and interpersonal communication [5].

It is clear that Chinese primary and secondary school students have not fully adapted to the new home-based learning model. The rapid development of society is fraught with uncertainty. Life education will be integrated into the teaching category of teachers in the post-epidemic era. Life morality and life morality will accompany people's production and life, regulate and maintain interpersonal relationships, and allow people to establish common social rules and norms, promote cooperation, and reduce conflicts. Self-awareness, social awareness, and interpersonal skills are related social and emotional abilities of Chinese primary and secondary school students that must be improved urgently.

## 3. Aesthetics into the Teaching of Social Emotional Ability

Neuroaesthetics is concerned with human thought, the creation and appreciation of artistic works, as

well as scientific research into the neural basis of aesthetic cognition of natural phenomena, social emotional relationships, and life images. Neuroaesthetics provides a scientific path and valuable information for people to gain a deeper understanding of the brain mechanism and psychological mechanism of aesthetic activities, as well as a new research path and teaching enlightenment for school aesthetic education.

Art is primarily concerned with people's perceptual abilities and spiritual accomplishments, with the goal of improving people's feelings, perception, imagination, and emotional wisdom. The way art perceives the world reveals the essence of human beings, and it, along with theoretical thinking and practical abilities, constitutes human beings' essential strength. As a result, having artistic ability and accomplishment is an important part of a person's overall development. During the epidemic's online teaching stage, teachers should always prioritize students' mental health education while ensuring textbook knowledge teaching. At the moment, China has not developed a specific drug for Covid-19, which cannot fundamentally control the virus's variation and spread, increasing the uncertainty of the surrounding environment. The COVID-19 epidemic, it must be said, has become the educational backdrop and educational resource. It causes people to enter an abnormal state involuntarily, and it is possible for them to encounter various dangerous situations around them without preparation. Education must always be 'in progress,' but its backdrop is a chaotic information environment and unsettled emotions. As an educational resource, educational wisdom first transformed the epidemic into a difficult problem to test the life will and ability of all members of society, including students, and even became a textbook for social members to learn about the society, understand the government, get close to science, and promote life civilization. However, teachers should not instill scientific knowledge about virus prevention and control in students, but rather guide students to explore independently in a way that they can easily accept, and truly turn their learning achievements into powerful factors that can promote their overall development. The goal of art education in primary and secondary schools is to foster students' interest in art, improve their understanding of beauty, and promote their overall development. As a result of its inherent interest, it is reasonable to incorporate art into daily teaching as a "teaching tool" during such a special period [6].

Aesthetics research reveals how our brains react when we appreciate 'beautiful' things. According to Anjan Zajit, when both eyes see beautiful works, light reflects from the object and hits the retina, which is converted into an electrical pulse and then spreads to the back of the cerebral cortex via a parallel path, reaching the prefrontal cortex, before the object features are extracted and processed by the parietal lobe and temporal cortex. Different parts of the occipital lobe control this information, which interacts with emotions in the limbic region of the brain. When people are moved by what they see, the pleasure or encouragement center in the marginal area activates; when people consider the meaning of what they see, the temporal lobe activates. When people recall aesthetic memories and experiences, the inner temporal lobe is connected, and the amygdala, which is in charge of emotions, adds emotions to people's aesthetic memories [7]. It is important to note that the objects of 'beauty' and 'aesthetics' are not limited to works of art. Anything that can give people beneficial emotional impulses is "beauty," and it can be included in the neuroaesthetics research object. During the epidemic, many doctors, public servants, and even ordinary citizens recorded their actions, which became the inspiration for film and television works. After completing daily teaching, teachers can play this type of film for students to impress them more vividly, improve their self-management and self-awareness, and let them know they are fortunate. These dedicated people, described in the film as struggling in all walks of life, have gained a relatively stable learning, and living environment. And, when difficulties arise, you must not give up until the very last second. These beautiful characters are unlikely to be acquired through simple preaching, but they are more likely to be acquired through understanding the profound meaning of works of art. Second, aesthetic experience is fundamentally an emotional experience, with the most notable feature being a positive emotional experience with a reward nature. From start to finish, the entire aesthetic process is accompanied by emotional changes. The successful completion of each stage of the aesthetic process will result in positive emotion and self-reward experience, as well as a change in the overall emotional state. We should emphasize the quality of 'doing nothing' in aesthetic education. The infiltration of 'beauty' into people's minds is quiet and silent, and it is a gradual process, so we must not rush for success. Aesthetic experience, according to developmental psychology, is a complementary process of perception-action cycle and emotionmovement cycle. In other words, only through the interaction of body, emotion, and aesthetic objects can aesthetics be achieved. These interactive processes allow the audience's emotions to move alongside them and then be moved by them. A person's temperament and taste will gradually change, his mind will broaden, his style will improve, his interest will be elegant, and his sympathy will grow. The direct value brought by the way art perceives the world is soul harmony and freedom, which aids

in the elimination of people's excessive selfish desires, thereby achieving the goal of self-cultivation. Teachers may wish to organize certain drama activities through games and rehearsals while teaching. Allow students to experience the severity of the epidemic and the hardships of medical work, and think about how they can help in any way they can or how they should handle such major emergencies. Drama is a collaborative art form that necessitates the coordination of all departments and their respective responsibilities in order to achieve an excellent performance. Drama activities for teenagers should follow the principle of 'the process is greater than the result,' with the key point being to guide students to participate in the process of activities and put themselves in the shoes of the emotional interaction. Empathy and empathy in drama, according to neuroaesthetics, should be considered in three parts: I and roles, between roles, and I and members of the group. As a result, when students are given the opportunity to participate in drama activities, their emotional movement will be heightened. We can not only consider the difficulties in the current drama situation from the perspective of other roles, but we can also achieve group cooperation through a combination of joint consultation and independent thinking. Simultaneously, as a prominent feature of the neuronal system, embodied simulation allows our bodies to resonate with the bodies of others. Mirror neurons' functional characteristics in relation to movements, feelings, emotions, and physical states have been studied by neuroscientists. The findings indicate that mirror neurons in the anterior motor cortex are activated not only when performing and observing actions, but also when imagining actions. This means that humans perceive with their motor systems as well as their visual systems. That is, we can experience our own and other people's behaviors through embodied simulation. It allows us to recreate others' experiences, feel others' feelings, and understand others' intentions in our hearts, giving human social and emotional communication the internal cognitive basis of brain psychology.

In comparison to traditional teaching and instilling, this type of interactive teaching path allows students to have personal feelings and truly internalize what they have learned in their hearts, which they can then apply to life practice. The goal of life education or social emotional education is to help primary and secondary school students achieve overall development. All of its components, such as the previously mentioned "learning autonomy" and 'information ability,' are not independent, but rather interdependent. Educators should do everything possible to find an effective teaching method that allows students to develop their minds and bodies on multiple levels while studying in writing.

# 4. Conclusion

From the standpoint of neuroaesthetics, this paper examines the new teaching path of students' social emotion in the post-epidemic era. Previous research has shown that social emotional ability has a positive impact on student achievement [8]. However, our schools have not yet incorporated it into daily instruction, resulting in the inadequate development of social emotional ability in primary and secondary school students. The social situation is changing at the moment, and educators should not only focus on students' knowledge acquisition, but also on their mental health level, to ensure that they can better integrate into society and be competent for their future social roles [9]. Neuroaesthetics is a brand-new interdisciplinary field that combines neurology and aesthetics. Although researchers are paying more attention to the neurological basis of people's aesthetic activities, the importance of neuroaesthetics in art education is rarely discussed. From the standpoint of research value, the neuroaesthetics theoretical model has the potential to revitalize art education, particularly school aesthetic education. In light of the new era's integration of disciplines, how neuroaesthetics will aid art education, and whether the theoretical model of neuroaesthetics can be used as a new channel to cultivate students' core literacy, are all issues worth considering and exploring. This paper focuses on the importance of neuroaesthetic theory in drama, film, and television teaching methods. As we all know, "aesthetic" activities cover a wide range of activities, and cross-research between neuroaesthetics and other artistic aesthetic activities is still in its early stages. Simultaneously, future research can appropriately increase the attention and discussion of negative emotions in aesthetic activities, promoting the gradual improvement of school aesthetic education, students' core literacy, and neuroaesthetic research.

#### References

[1] Chen, Y. and Zhang, F. M., (2022) Policy Initiatives for International Organizations Participation in Global Education Governance under the Influence of the COVID -19: an Analysis of Texts of UNESCO, OECD and EU. JOURNAL OF NINGBO UNIVERSITY (EDUCATIONAL SCIENCE

- EDITION), 44(4), 61-70. https://wap.cnki.net/touch/web/Journal/Article/LBJY202204010.html [2] Xu, J. J. and Yang, Y. X., (2021) Performance, Influence, and Cultivating Strategies of Student Social and Emotional Skills from an International Perspective Analysis Based on OECD Survey. Open Education Research, 27(5), 44-52. https://wap.cnki.net/touch/web/Journal/Article/ JFJJ202105006. html
- [3] Zhou, F. Q, and Hu, H., (2021) The Methods of Psychological Education in the Prevention and Control of COVID-19. Journal of Jinzhou Medical University, 19(5), 71-75. https://wap.cnki.net/touch/web/Journal/Article/JZYK202105018.html
- [4] He, Q. H. and Li, D. D., (2020) Brain maturation and improvement in intertemporal choice in Chinese children and adolescents. Advances in Psychological Science, 28(3), 381-389. https://wap.cnki.net/touch/web/Journal/Article/XLXD202003001.html
- [5] Yang, X. P., Lu, H. and Lei, J. H., (2020) The Connotation, Value and Realization Path of Children's Life Education under Major Epidemic Diseases. EDUCATION and TEACHING RESEARCH, 34(3), 32-40. https://wap.cnki.net/touch/web/Journal/Article/CDJY202003007.html
- [6] Edgar, S. N. and Morrison, B., (2021) A Vision for Social Emotional Learning and Arts Education Policy. Arts Education Policy Review 122 (3): 145–150. doi: 10.1080/10632913.2020.1774830.
- [7] Zhang, X. and Zhou, X., (2022) The Processing Mechanism of Aesthetic Pleasure in the Perspective of Neuroaesthetics. Advances in Psychological Science, 29 (10), 1847–1854. doi: 10.3724/sp.j. 1042. 2021.01847.
- [8] Liu, Z. X., Zhao, M. and Yang, L., (2021) Mechanisms and Educational Implications of Primary School Students 'Social Emotional competence Affecting Their Academic Achievement. Education Science, 38(4), 29-35. https://wap.cnki.net/touch/web/Journal/Article/JYKO202204005.html
- [9] You, Y., (2022) Scrutinizing Social Emotional from Chinese Perspectives. Journal of Northwest Normal University (Social Sciences), 59 (2), 38–47. https://wap.cnki.net/touch/web/Journal/Article/XBSD202202004.html