

Pathways to Successful Transformation of Basic Education amid Educational Crises: A Case Study of the Experiments in Educational Reform by 271 Education Group

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Abstract: *The 2021 release of Reimagining Our Futures Together: A New Social Contract for Education by the United Nations Educational, Scientific, and Cultural Organization was a reaction to a number of serious problems discovered in worldwide educational reforms. It sought to establish a new social compact for education to fulfill its unmet promise in the face of many educational crises and to combat future uncertainty. Using the methods of 271 Education Group as a case study, this article examines China's efforts to transform basic education in response to widespread educational issues and how they have represented the major principles espoused by the UNESCO report. The article elaborates on the coping strategies of 271 Education Group, such as incorporating eco-civilization education into basic schooling, constructing life-based curricula that are built on knowledge commons, introducing pedagogy rooted in cooperation and solidarity, and promoting teacher professional development through collaborative educational research.*

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HUMANITY has been presented with a decision about its survival: either to continue on the current path of unsustainable development or to make a major shift in order to maintain their existence on the planet. Their shared future will be determined by their decision. People must consider how to shape the future of mankind and the planet in a complicated, precarious, and sensitive environment by recasting knowledge structure, teaching, and learning (Lin et al., 2022). The COVID-19 pandemic has exacerbated global crises, made education more precarious than ever, and increased people's anxiety about the future (Yue et al., 2022).

Given this context, the report "*Reimagining Our Futures Together: A New Social Contract for Education*" (hereafter referred to as the Report) was published on November 10, 2021, by the International Commission on the Futures of Education with UNESCO. The Report suggests creating a new social contract for education in the ensuing decades that is based on human rights and seeks to rebuild our relationships with one another, the environment, and technology. It also aims to correct injustices and aid in the development of peaceful, just, and sustainable futures (UNESCO, 2021).

The Commission asserts that a number of interconnected crises are plaguing humanity, including unsustainable economic development paradigms, extreme wealth polarization, frequent violent conflicts between and within countries, rising populism, democratic backsliding, and gender inequality. Unsustainable economic development models have exacerbated factors such as climate change, environmental degradation, resource depletion, biodiversity loss, and a reduction in the amount of land that can support human habitation (UNESCO, 2021). Digital technology may both unite and divide people in the age of the internet. They can facilitate the sharing of knowledge and information, but they also pose a serious threat to knowledge diversity, cultural inclusivity, private space, and privacy security. They reshape human production, life, and education while also eliminating some industries and jobs, leading to increased unemployment. The "digital gap" might make it more challenging for those who are less fortunate to acquire excellent education and good jobs.

Approximately 2,500 million children worldwide do not have access to formal primary education; 1 in 5 young people are NEETs (not in education, employment, or training); and 7,000 million people are still illiterate. In the COVID-19 pandemic, school closures affected 1.6 billion students worldwide; many girls may never again have the chance to attend school; the percentage of qualified primary school teachers fell from 85% to 65%; and the lack of funding for education is made worse by the epidemic's negative effects, making it more difficult to achieve the objective of "sustainable development of education." The epidemic, according to UNESCO Director General Azoulay, has demonstrated both our vulnerability and our interdependence. The United Nations secretary general, Antonio Guterres, emphasized that the right to education as a fundamental human right has not yet been universalized, that the 2030 sustainable development of education goal is in jeopardy, that education is still far from being realized as a global common good, and that the educational crises are affecting all of us (Zhang & Bian, 2022).

Commitment is necessary for the realization of the common good, and teamwork is required for the accomplishment of global goals. What ought to serve as the foundation? The Report makes transformational suggestions for various nations, particularly for nations and populations that are most seriously threatened by the current crisis. What direction and action China should follow for basic education is a topic well worth debating in light of the educational crisis, a planet in danger, and uncertain futures.

The 271 Education Group of Shandong, which began as a typical rural middle school 20 years ago, has grown into a conglomerate with 16 separate schools, approximately 6,000 teachers, and 90,000 students. It includes teaching management, in-service teacher training, study trips, and the development and operation of farms for the practical instruction of students. It also includes educational research and development. It has gained widespread recognition in the area for providing high-quality education; its member school, “Changle No.2 Middle School of Shandong,” has set the bar high for China’s basic education. In the process of education and teaching reform, the Group has produced numerous effective teaching initiatives and research findings, such as the holistic module learning model, a significant experiment in teaching paradigm innovation (Zhao, 2022), and home-school partnership courses based on Xingzhi Tao’s life education theory (Zhao & Wei, 2021). In light of the escalating educational crises, this essay focuses on the Group’s investigation of routes to successful reform of basic education.

Eco-Civilization Education Based on Ecological Consciousness

“We must rethink and reimagine curricula to instill a fundamentally new way of looking at the place of humans as part of the planet,” the Report adds. The urgency of environmental sustainability—living within the limits of the planet without endangering future generations or the natural ecosystems of which we are all a part—should be stressed to students in all subject areas (UNESCO, 2021. p.66). This is surely significant and forward-looking thinking about how education will develop in the future from the standpoint of humanity’s and the Earth’s sustainable development (Yue, 2022).

Education about eco-civilization will always be important to education, both now and in the future. The majority of Chinese schools only offer ecological education as a minor module in their basic education curricula right now; it is not as developed and comprehensive as that in Western nations. Therefore, it is crucial to create new paradigms for teaching eco-civilization. The following ideas should be kept in mind when doing so: (i) to create a deep-ecology-based educational idea to reject human exceptionalism. (ii) to establish eco-civilization education paradigms by drawing on outstanding traditional Chinese and Western heritage as well as modern culture. (iii) to develop subject-integrated, school-based curricula for ecological education that are “rewilded by developing deep connectivity with the natural world and embracing the biosphere as an educational space,” are progressive and consider the characteristics of students at different levels (UNESCO, 2021. p.66).

The 271 Education Group has placed a strong emphasis on eco-civilization education. The Group’s educators hold the views that harmonious coexistence between humans and nature is necessary for sustainable development and that human survival is a gift from nature. As a result of the world’s rapid industrialization, the environment has been severely damaged and human society is currently experiencing serious ecosystem issues. Environmental protection depends on increasing public ecological consciousness, which calls for thorough and organized eco-civilization education. According to the varied stages of students’ thinking abilities, which continue to advance from lower to higher orders as they mature, 271 Education Group carefully chooses instructional materials and methodologies for ecological education.

The learners’ thinking is rather simple in the primary level, as they are transitioning from imaginable to abstract thinking. Teachers focus on guiding students to

“perceive the ecological environment” at this stage, and a situational learning technique based on students’ perceptual experience is used. Teachers present the teaching content using concrete teaching tools and vivid language to help students feel and understand the surrounding environment, encourage students to tell stories about environments based on prior experiences, and design various games and activities to inspire students’ reflection on environments based on their perceptual knowledge. Teachers, for example, can tell kids stories about forest conservation and teach them to sing the children’s song “Take Care of the Sapling” to help students consider why they should care for young trees. Students will gain an understanding of the importance of plants and begin to build an awareness of environmental protection through activities like these.

At the junior secondary level, students’ abstract-logic thinking has greatly developed and plays a crucial role in their thinking processes, although it still relies on perceptual experiences for the most part. At this stage, teachers concentrate on “arousing students’ care for the ecology” and attempt to heighten their ecological consciousness by analyzing contemporary ecological issues. In order to arouse students’ awareness of the plight of the ecosystem, teachers first introduce scenarios of environmental devastation by displaying images, texts, and films. Then, problem-based group cooperative learning is implemented to involve students in the discussion of specific ecological challenges, allowing them to increase their ecological knowledge via discussion, analysis, and reflection. When discussing the freshwater environment, for instance, teachers pose the topic, “What will happen to people once they consume polluted freshwater organisms?” and let students to discuss it freely. In terms of the relationships between humans and animals, students are supposed to debate whether or not snake catching should be authorized, given that snakes can attack humans and livestock, resulting in human and economic consequences.

At the senior secondary level, abstract-logic thinking dominates the cognitive activities of students, and their theoretical abstract-logic thinking ability begins to increase. In addition, as a result of their increased life experiences and scientific knowledge, high school students are capable of a greater comprehension of the fundamental relationships between things. At this stage, students are motivated to “study ecological problems” and their application of ecological knowledge is emphasized. Teachers assist students in establishing a somewhat orderly framework of ecological knowledge through the use of linkage and mind mapping so that they can acquire an all-encompassing awareness of the ecosystem and its principles. Students are also encouraged to apply their ecological knowledge to the examination of complicated environmental issues in the actual world. For example, the teacher introduces students to environmental concerns involving value conflicts, such as “how can a region dependent on the logging industry shift from ‘logging economy’ to ‘green growth with ecological safety as the primary priority? What ethical risk does it pose for some nations to discharge sewage into the ocean in order to safeguard the ecosystem of their home country? Then, students are asked to apply their ecological knowledge to the exploration of resolution strategies and the evaluation of the viability of various solutions in order to develop a critical understanding of environmental issues and sound ecological perspectives and values.

In sum, 271 Education Group considers the cognitive level of students at each stage in the selection of instruction methods and chooses relevant education content based on the complexity of knowledge to ensure the successful implementation of ecivilization education at the basic education level.

Life-Based Curricula based on the Knowledge Commons

Where does knowledge come from? What must be taught and acquired? What should be forgotten? At this crucial point, when the common future must be remade, the International Commission on the Futures of Education replies to these extremely significant questions. The Report claims that “curricula should approach knowledge as a great human accomplishment that belongs to everyone” and that “education can enhance people’s abilities to build on the knowledge commons, with each generation contributing their own reinventions of the world” (UNESCO, 2021. p.65). Knowledge is never complete; educators should encourage and facilitate student participation in the co-creation of knowledge commons. In order to design open and shared curriculum, it is necessary to renounce the disciplinary and topic borders as permanent or essential constraints and to incorporate the perspectives of complexity, plurality, and transversality. Only by doing so can we move beyond the old notion of filling the school curriculum with existing subject knowledge and integrate ecological sustainability, scientific inquiry, information technology, human rights protection, gender equality, cultural diversity, and inclusion and coexistence into the curriculum, which is designed for the future of humanity.

The goal of education is not just to provide students with knowledge, but also to develop their ability to criticize and apply current knowledge, as well as their potential to generate new knowledge. According to the Report, school curricula should strive to increase students’ literacy and promote multilingual opportunities; to develop students’ numeracy, which combined with mathematic knowledge should be utilized to resolving individual, societal, and human challenges; to nurture students’ empathy, morality, and imagination and foster their capacities to grasp human and non-human experiences and analyze the evidence of historical events; to pique students’ enthusiasm in scientific inquiry, which is far more important than memorizing scientific symbols, formulas, and theorems, and to increase their discrimination and ability to undertake honest and complex inquiries; to improve students’ digital literacy in order to secure their personal development in a world of rapid scientific and technological advance; to bolster students’ social and emotional abilities as well as their overall humanity-related competencies through art education (UNESCO, 2021). Education through such curriculum aims to mobilize individuals’ agency, assisting them in achieving complete growth, and, most importantly, preparing them to be qualified citizens in morality, democratic participation, knowledge production, and happy life creation.

These recommendations from the Report show that the main objective of education is to develop all-around people, which call for curriculum that are entwined with all facets of life and derived from life. The curriculum should include all elements in the outside world that are important to students’ personal development, including both cognitive and non-cognitive activities, according to the 271 Education Group’s perspective.

According to the Group’s philosophy of life-based curricula, a curriculum that is generated from life and totally connected to life enables students to develop the skills necessary to expand life, create life, and ultimately live a happy life. Life supplies every youngster with crucial learning material. For students, society, the home, and school all act as classrooms. Life-related disciplinary knowledge makes sense to them and is therefore easily assimilated and digested.

The following principles guide the Group’s life-based curricula:

- i. The program is based on real-life experiences. It adds “live teaching resources” to curricula and adapts them to the needs of the time. Only by integrating the curriculum into the vibrant life can it fully demonstrate its vitality and value. Furthermore, life is the most potent motivator for student academic achievement. Curriculum based on students’ life experiences might better increase students’ interest in learning, raise their awareness of accepting knowledge, and hence produce better results. Additionally, learning in real-life settings necessitates emotional engagement on the part of the learner. As a result, knowledge gained via life practice is more true and profound.
- ii. Although curricula are derived from life, they are meant to go beyond it. Avoid teaching just for the sake of teaching. The main objective of life-based education is to help students develop the skills they will need to survive in the future and to grow their capacity to change society. A dynamic process in which the educated are enduring physical and mental change and growth is the implementation of life-based curricula. In order to provide students with timely support and guidance, educators should approach each student with appreciation and from a developmental perspective, consider their particularities at various stages, pay attention to how each student’s emotion, personality, and values change over time, and work to identify their implicit, individual qualities.
- iii. Life-based curricula should emphasize the subjectivity of student learning. Modern education needs to introduce the concept of “inter-subjectivity.” The functioning of students’ initiative in learning is not supported by teacher-centered instruction; students’ subjectivity should be fully utilized. In the curriculum that is based on real-world experiences, the educators and the educated are seen as agents of equal importance who interact and support one another (Hu, 2007). Students are able to study in a democratic, egalitarian, and open teacher-student relationship when teachers approach them as actors with initiative rather than passive learners who need to be instructed.

Pedagogical Approaches Rooted in Cooperation and Solidarity

One key objective of education in a fast-changing world is to improve learners’ skills in collaborating with others in problem-solving and innovation, as well as their potential to create a better life that is closely connected with rather than isolated from the world. The Commission believes that “in a new social contract for education, pedagogy should be rooted in cooperation and solidarity, building students’ and teachers’ capacities to work together in trust to transform the world,” and that “teachers and students need to form a community of knowledge-seekers and builders nourished by and contributing to humanity’s knowledge commons” (UNESCO, 2021. p.50). Such pedagogies recognize that every individual, including teachers and students, has the right to study and share information with others. Thus, the goal of education is not to teach students how to memorize information, but rather to help them develop into actors capable of discovering and creating new knowledge in collaboration with others.

Solidarity- and cooperation-based pedagogical approaches emphasize that teaching should not only emphasize the transmission of single-subject knowledge, but also the development of interdisciplinary, formative, and meta-cognitive knowledge, which are essential for comprehending and addressing the complex, multifaceted chal-

lenges facing humanity. Collaborative problem-based learning is vital for acquiring such knowledge. In addition, it can motivate students to expand learning venues to nature and communities, beyond the confines of classrooms and schools; to learn to cooperate effectively with others; to abandon discrimination and segregation; to embrace diversity and pluralism; and to gain an understanding of the relationship between scientific knowledge and the real world.

By implementing “collaborative group learning” in classroom instruction, schools affiliated with 271 Education Group put into practice a pedagogy based on solidarity and cooperation. In order to improve student academic quality and train student cooperative ability and skills, the group defines “collaborative group learning” as an approach where classroom activities are carried out in groups, interaction between group members is maximized to promote student learning, and group performance becomes the criterion for the evaluation of academic achievement (Zhao, 2022). To be more precise, it has five key components: (i) The study group is the fundamental building block of classroom structure. It is characterized by “heterogeneity,” which means that members of each group are chosen to aid and complement one another based on their differences in gender, academic standing, and subject of highest achievement, learning style, and family background. (ii) Interaction between peers and between teachers and students encourages collaborative learning. The most engagement possible between group members can enhance students’ abilities and fully showcase each person’s special traits; teachers can improve the quality of their lesson plans and delivery methods through increased communication with students. (iii) The group learning is purpose-driven. To avoid pointless extension and to ensure that the lesson plan is carried out, all classroom activities are set up to address specific issues. (iv) Group performance, not individual scores, is used to evaluate academic accomplishment. Academic success of each student is related to the combined achievements of all group members, including formative and summative assessment scores. With the help of this evaluation system, study group cohesiveness and cooperation are enhanced, and attention is turned away from individual student competition and toward intergroup comparisons. (v) Multidimensional learning objectives for cooperative group learning are established. Teaching activities are designed to foster students’ cooperation skills and help them grow as individuals, not just to impart knowledge.

Different types of cooperative group learning are now being used. In some way, 271 Education Group emphasizes that this strategy must always include these five components:

- *Mutual Dependence* - The student must recognize that he or she is not only working for himself or herself, but also for the group as a whole; team members are bonded by shared interests.
- *Face-to-Face Interaction*: to provide students with the opportunity to put their cooperation into practice and learn from one another.
- *Assumption of Responsibility* - There must be a clear division of responsibilities among group members, and each student must execute the assigned assignment in a timely and effective manner.
- *Social Skills* - The teacher should add social skill training into the curriculum to promote successful student participation.
- *Self-evaluation*: The study group is expected to check the development of collective actions and evaluate their results on a regular basis in order to enhance the efficacy of cooperation.

Teacher Professional Development via Collaborative Educational Research

“Teaching is a complex, intricate, and challenging vocation that labors in the tensions between the public and the personal,” according to the Report. In order to carry out this difficult work, teachers require collaborative learning communities that are rich in freedom and support. Supporting teachers’ autonomy, professional growth, and collaboration is a crucial demonstration of public support for the future of education (UNESCO, 2021, p. 80).

Teachers’ unique skills and talents need to be fostered through cooperation and assistance. In order to provide students with the connections, environments, and resources they need, modern education requires more intensive collaboration between teachers as well as between teachers and specialists. Examples of this collaboration include group educational research, partnerships between teachers and parents to better understand students and provide them with social and emotional support, and collaboration between teachers and communities.

Teachers are both reflective practitioners and creators of knowledge. There are never two similar teaching scenarios. Because of this, no machine, no matter how advanced, can take the place of teachers’ “relational” and “interactive” labor. The scope of information, particularly the body of educational knowledge, is expanding as a result of the complex job that teachers are conducting on a daily basis. As a result, teachers should be given a lot of liberty and assistance in doing joint research and creating new knowledge.

Collaborative educational research has been regarded by 271 Education Group as a vital means of fostering the professional development of teachers. Collaboration is connected to all facets of social interaction, including approaches, abilities, and techniques. Students can acquire knowledge and finish coursework independently, but learning through collaboration typically enhances the subject matter and increases the efficacy of classroom instruction. Similarly, teachers can prepare courses and conduct scientific research on their own, but teacher collaboration often increases lesson preparation quality and expands scientific research. Teachers at 271 Education Group benefit in numerous ways from collaborative educational research, including:

i. Bolstered Verbal Dexterity

Collaboration in research requires a substantial amount of verbal communication. Effective expressiveness enhances communication with others and prevents miscommunication. Proper expression, accurate evaluation, and even justifiable refusal on the part of educators are advantageous to the growth of collaborative educational research.

ii. Improved Communication Skills

In collective educational research, opposing viewpoints may continually emerge, necessitating a high level of communication skills to keep the activity running successfully. Patience, tactical expression, and attentive listening to others are required for effective communication. Teachers in the Group learn to be aggressive while also becoming more inclusive, compassionate, and flexible as a result of collaborative teaching research.

iii. Improved Reflective Competence

Reflection is the interaction of knowledge and practice as well as the dialogue between the ideal self and real reality. Teachers’ reflective competence can be increased

through the following acts of collaborative teaching research: (i) Self-questioning—to determine whether they comprehend the research material and whether it is applicable in daily instruction. (ii) Self-diagnosis: to recognize their difficulties in group inquiry and seek solutions. (iii) Observations and debate: to mutually foster professional development by engaging in in-depth discussions and learning from and complementing one another. (iv) Maintaining reflection diaries: to self-examine their participation in and contributions to the activity following each session of collaborative research; to reconsider the value and flaws of the ongoing research in order to project follow-up remedial measures.

In addition, schools affiliated with the 271 Education Group engage in “class-based educational research,” which is conducted by teachers teaching diverse disciplines to the same class, in order to supplement multidisciplinary joint research. Presently, the majority of collective teaching research is conducted by teachers of the same subject area, but collaborative research by teachers with diverse academic backgrounds is uncommon. Disciplines, particularly in school instruction, do not exist in complete isolation from one another but overlap to varied degrees. It is difficult for teachers to utilize this relationship between disciplinary knowledge if they lack cross-disciplinary conversation. As a result, it may limit the variety of classroom topics and teachers’ responses to “unconventional” queries involving several academic disciplines, so hindering students’ grasp of the connections between knowledge. In contrast, class-based collaborative educational research focuses on examining the interconnections between subjects and identifies topics ideal for project-based, interdisciplinary, and cooperative student learning. It also plays a significant role in widening the horizons of educators and increasing their knowledge bases beyond the confines of their specialization.

Conclusion

In light of current global crises and educational challenges, UNESCO’s *Reimagining Our Futures Together: A New Social Contract for Education* offers a number of implications for China’s basic education. In response to these difficulties, 271 Education Group created its unique educational philosophy and associated instructional techniques. To create a new social contract for education, all parties and social forces must be involved. Education must address the negative effects of the pandemic on all students as well as the challenges posed by uncertain futures in the context of global radical change and the once-in-a-century pandemic. Education must also safeguard individual human rights and well-being while promoting societal development and preserve civilization heritage while transforming and innovating. To achieve the aim of sustainable development in education and fulfill the pledges for the future, it requires every individual’s effort and devotion. Although education cannot solve all of humanity’s problems, human agency and action in education will undoubtedly help create a more peaceful, just, and sustainable future for all.

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