Proposals for Nurturing Authentic Learning in New Education Normal in the Realm of Global Social Entrepreneurship in New Education Normal
- Post-Pandemic Global Liberal Education for all Stakeholders in the Society to Foster Future Skills and Mindset -

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A new authentic educational paradigm for the Post Pandemic Era, involving students from all tiers of education, is proposed in this paper. Such a paradigm includes an authentically integrated curriculum, incorporating lifestyle, society, cultural values, regional history, and STEAM (abbreviation for science, technology, engineering, arts, and mathematics) on the one hand, and social entrepreneurship enhanced with creative, disruptive, and innovative thinking skills, on the other. While conducting regional and gLocal learning with heterogeneous team members consisting of K-12 students, university students, and even graduate students, i.e., the entire main stakeholders in education, each project team conducts field research to identify grave problems or issues in the society to prevent sustainability of the future society and then tries to work on optimal solutions to be shared with other teams. In this way, an authentic educational model for transcending values and cultural heritage will be guaranteed in education for the benefit of the future society. This paper spotlights some prominent showcases of such learning activities conducted at various levels of educational institutions in Japan, Taiwan, and Singapore.

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1.   Introduction

University/regional collaboration before the COVID-19 pandemic is discussed first. Before the COVID-19 crisis, a collaboration between universities and local communities was centered on matters related to short-term problem-solving and securing the sustainability of local communities. Volunteers were often employed. The source of funds for regional revitalization activities is subsidies provided by local governments, aid organizations, and individual companies outside the region that obtain such subsidies, and thus there is no original innovation that imitates successful cases in other regions. Once the subsidy expires, such organizations will immediately withdraw, leaving nothing behind, and the situation will be even worse than before their activities. And yet, sources of funds are important for regional revitalization activities.

Looking at the sources of funds for regional revitalization from the perspective of cash flow, the incoming cash flow is mainly from the source of income for the region, which is based on the pensions of the elderly living in the region, subsidies from local governments, and aid money. While pensions are mostly used for living expenses. Taxes paid by residents living in the area and subsidies and aid money are the main sources for the sustainability of the region. The cash flows out of the area as operating funds for regional revitalization activities, which are conducted by organizations and companies outside the region. In this way, more cash flows out from any region.

From the perspective of the SDGs (Sustainable Development Goals adopted by the United Nations in 2015), regional revitalization consists of three areas, i.e., "economic," "social," and "environmental". Under such circumstances, the mission of higher education is to engage in future human resource development and have university students seriously think about wellness in the future society where they will live the rest of life while interacting with local stakeholders and sharing their learning experiences with younger generations. It follows that conducting learning only within the classroom is not enough to implement authentic learning across the board. Thus, it is proposed that higher education initiate an authentic curriculum to work with local stakeholders in the regional community to conduct collaborative PBL activities to make the community a better place to live in the future. For the students, as they work collaboratively with the elders in the area, they can project themselves in the future. The students have opportunities to apply what they learn in the classroom practice to the social problems with elders in the local area.

Authentic learning must be based on the transcendence of wisdom from one generation to younger generations. The rural areas will continue to age, there will be a shortage of human resources for the SDGs in the local community, and the declining birthrate will continue to progress. As to working with such problems, university students will conduct authentic learning activities together with 1-12 students in the area. The position of the university in regional cooperation is to serve as the facilitator to promote authentic learning of 1-12 for the benefit of the future. If younger generations choose to live in their hometown after graduation for life, having the authentic mindset of SDGs is essential.

2.   Key Point in the Development of University-Regional Collaboration

In what follows, the points for developing university-regional collaboration are elaborated.

2.1   Collaborating with University Students and Local Stakeholders: Confronting Local Issues as "Personal Issues"

In the development of regional cooperation so far, the main scope of activities has been volunteer activities to answer to the daily problems of aging communities. Such volunteer activities are led by university professors who have networks in specific regions. In such a community, where no university students were present, just seeing them working hard in a rice field was an extraordinary stimulus for the local elders. In such a rural community, the mindset of building long-term relationships of trust and collaboration for a long time was lacking. Student volunteers are usually considered as convenient helpers that are free of charge. The local elders do not want long-term relationships. Student volunteers are just convenient helpers. Especially in old rural areas, the presence and long-term involvement of "strangers" are frowned upon. It is psychologically unacceptable for a stranger to enter and work in one's own field or rice field.

To avoid such psychological obstacles, it is necessary to build a relationship of trust between stakeholders who are local leaders, respected by other residents on the one hand, and university officials on the other. This relationship of trust is sensitively conveyed to university students who are active in the area, which greatly affects their willingness to participate. University students who participate in such learning are young and immature and have no social experience yet. It will be an opportunity to prepare for how to design yourself to live in the future society and how to live in the future society.

The elders who live in the area are mirrors of themselves living in the future society. University students can listen to stories from such elders and learn what kind of things they have been thinking about and living in the area. In other words, by having university students think about community issues from the same perspective as the elders living in the community, they can simulate themselves as working adults living in society several decades ahead. It is possible. In other words, you can get the opportunity to do your own scenario planning for living in the future society. In this way, university students working together with local stakeholders and tackling local issues as "personal matters" is educationally very important for young people who will become working adults and graduate from university. seems to have meaning.

2.2   Short-term, Mid-term, and Long-term Planning

The point of view that was lacking in university-regional collaboration before the corona crisis was that regional collaboration was a mere activity and focused only on short-term matters. In other words, it lacked the mindset of a systematic project for problem-solving in modern society. The following illustration of HBR made me realize this. It is the argument that short-term disruptive innovation (detailed in the next section) will shake society and produce temporary economic effects, but nothing will improve society.
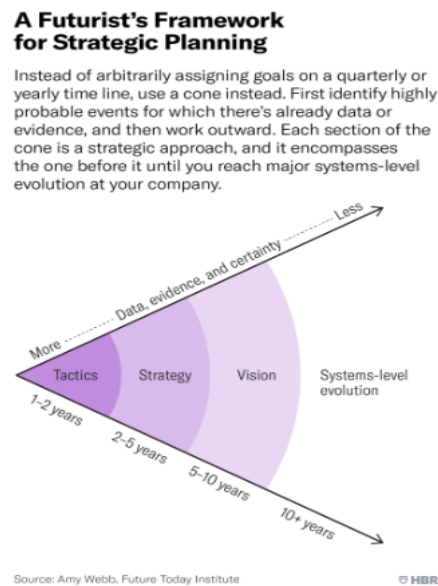
Figure 1. HBR Strategic Planning

(From: https://hbr.org/2019/07/how-to-do-strategic-planning-like-a-futurist)

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2.3   Entrepreneur: Disruptive Innovation

Disruptive innovation is an unexpected creative change from a new perspective by making sense of two completely unrelated concepts in existing products, services, processes, technologies, etc. that are already in circulation. It is an innovation (new axis) that destroys existing livelihoods, concepts, and values, creates new market value, or fundamentally changes conventional conventions and existing concepts by bringing about. Intuitive simplicity with high affordance, affordable price range, convenience that enriches life, and intuitive familiarity, especially for complex manufacturing work processes that are stuck, expensive products and technology fields, and various fields. etc. For example, in an era when there were only glass-type mobile phones, we eliminated the operation buttons for dialing numbers and instead used a simple and intuitive interface with only a touch panel screen. It can be said that a smartphone that has the functions of a PC that can be used is truly a disruptive innovation.

After the COVID-19 pandemic, service-learning developed through collaboration between universities and regions will lead to further decline of regions unless this disruptive innovation mindset is incorporated into the field of regional revitalization. As shown in Figure 1, it is essential to think about the attitude toward solving regional problems in the medium to long term and to work on it as a matter of personal responsibility. To do so, it is necessary to create a

disruptive innovation mechanism that connects cities and regions where many people live in a win-win manner.

Entrepreneurial thinking deeply tied to disruptive innovation so far has limited the consumer/investor class to 16% of the top Innovators and Early Adopters shown in Figure 2.
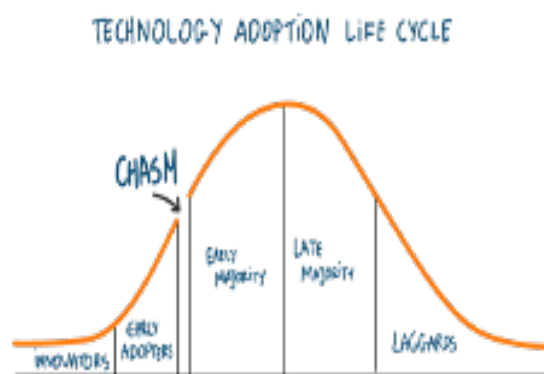

Figure 2. Entrepreneur beyond Chasm
(From: https://procognita.com/post/agile-has-crossed-the-chasm-what-does-it-mean-for-agile-coaches-413)

However, in order to come up with a disruptive innovation mechanism that connects cities and regions where many people live in a win-win manner, disruptive innovation involving people from all fields is necessary. This seems to be the ideal form of collaboration between the university and the local community through service learning. By collaborating with local stakeholders, university students can learn what local stakeholders want to sustain and develop from the perspective of SDGs, what local leaders think about the future of the local area, and what the local community is like. It is important to understand how we want our descendants to live in the region and to think about disruptive innovation in regional revitalization as a matter of personal concern.

Take the form of a Land Grant University, in which the government provides land and the state builds a university on that land. In other words, the university is responsible for the future of the local community and contributes to the development of human resources and the construction of the future society for the SDGs of the local community. It can be said that service-learning at our university has a mission just like that of a Land Grant University.

At our university, we are developing education based on 3C-based future human resource development in our curriculum, but service learning provides a place where 3C skills acquired in other subjects can be put into practice.

The foundational future skills to be acquired in the 3C curriculum are cultivated through agile team-based PBL-type learning experiences through active learning. Service learning is the place where these future skills are put into practice. For a detailed explanation of active learning, please refer to the Education Comprehensive Research Series No. 15, March 2022, "Proposals for a Higher Education Paradigm for the Development of Future Human Resources Under the New Normal," III.   See the Authentic Learning section (pp.151-156).

2.4   Entrepreneur: Disruptive Innovation

New Education Normal choreographed around ICT is a must in Education New Normal. While traditional education is centered around the top left corner where memorization and understanding are the major learning activities, the New Education Normal will go beyond such boundaries.

Figure 3. Bloom's Taxonomy Matrix

The realm of active learning is the major playing ground for the New Education Normal. And yet, such an endeavor is not an easy task. In order to nurture the fields of active learning, we must define the future skills needed for the New Education Normal. For example, the Institute for the Future defines future skills as given in Figure 4 to nurture innovative and creative skills to survive and contribute to the future society. In other words, learning activities must range from the top left corner of the matrix to the entire area of the matrix! After all, authentic learning resides in the entire area of the matrix. Even in traditional education, we have been using thinking tools such as graphic organizers to enhance learning and critical thinking skills. In the post-pandemic era, we must employ innovative and creative thinking tools to nurture all future skills in the entire area of the matrix.
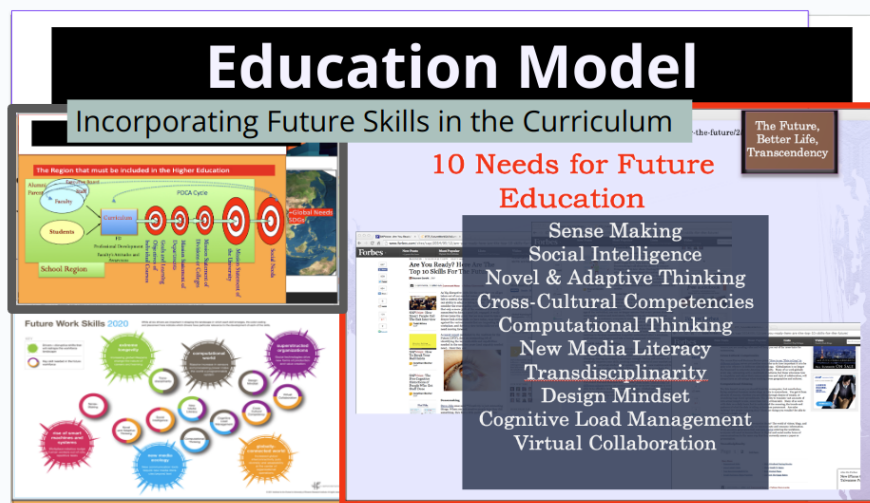
Figure 4. Future Skills Defined by IFTF
(From: https://legacy.iftf.org/futureworkskills/)

3. Showcase

It is demonstrated as a showcase that university students and elementary school children work together with the local sweet shop owners to create the local sweets exploration map, which later transformed into a sweets-hunting game designed and programmed by the students. The elementary school children walked around the neighborhood area and researched sweets shops, finding out their location, history, opening hours, products, most-sold popular sweets, and service types, among others. And then they created a trifold to include all the information, as shown below.

Figure 5. Research Results shown in infographic

Upon completion of the trifold, the school children worked on designing a sweets-hunting game. The concept of the game is to obtain designated items by maneuvering a robot car. The entire process of this series of learning offers the school children to understand the local neighborhood area.

Figure 6. Game Board for Robot to Complete Tasks

Figure 7. Scene of Completing a Task with Robot

In this way, the authenticity of learning can be reflected in the learning contents and resources from the regional segments of living, which include: lifestyle, regional culture (tangible and intangible cultural heritage), regional industry, economy, and local history, to name a few.

3. Conclusion

Learning in the post-pandemic era implies the combination of traditional school learning with innovative, creative, and social entrepreneurial learning with gamification. With a future-oriented mindset, young minds can learn from the findings in the surrounding world and then share them with others in rich media including gamification, incorporating PBL in STEAM, programming, data science, and innovative entrepreneurship. Schools in regions with aging populations and declining birthrates need to shift gears to sustain the regional culture and tradition. The future of the regional community depends on the education there. Education is not solely dependent on the endeavor of the school teachers, but on that of the entire stakeholders who run lives there to the future, offering a lifelong learning mindset for life.

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