

## Changing the Context of Education through the Concept of an Assembly University

**Jekuk Chang**

President

Dongseo University, Korea

Email: jchang@dongseo.ac.kr

Technological development is proceeding at a greater pace across broader scales and with deeper human impacts than at any previous time. It is a primary driver for both economic globalization and disruptive innovation. Undoubtedly, technological development has brought important social benefits. However, it has also presented significant challenges. This paper introduces three such challenges within the context of the academia. Next, it examines how lessons regarding the disruptive potential of sharing economies in the broader marketplace might be applied in transforming the context of higher education. To this end, the paper defines the concept of an Assembly University. Finally, it outlines certain steps taken by Dongseo University (DSU) toward implementing the Assembly University concept as a benchmark of best practices.

The first challenge for universities derives from the advent of the fourth industrial revolution. In his book on this topic, Founder and Executive Chairman of the World Economic Forum Klaus Schwab explains that “the scale and breadth of the unfolding technological revolution will usher in economic, social, and cultural changes of such phenomenal proportions that they are almost impossible to envisage.” He further suggests that this revolution is changing not only “what” and “how” we do things, but even “who” we are. Faced with these as yet unforeseeable paradigmatic shifts, the challenge for universities is to provide students with the skills needed to succeed in a rapidly changing and radically different work environment.

The second challenge stems from the ready availability of knowledge. Together technology and globalization have produced a ubiquity of information. This has had at least two negative impacts on universities. First, it has increased competition. Top universities like Harvard and MIT, along with leading companies like Microsoft and Google, now offer a wide range of free or low-cost online courses. As these online systems develop, their disruptive potential will continue to grow. Second, it has required a methodological shift. Specifically, universities can no longer simply provide students with facts. Instead, they must develop ways to enhance students’ creative talents and help them to realize fruitful ideas.

The third challenge appears as a paradox: universities must improve quality while at the same time cutting operating expenses. Over the past two decades in most countries, tuition rates have been rising faster than inflation and wage rates. This has caused education costs to become a prominent social issue. In many cases, universities are under pressure to freeze or reduce their tuition fees. Yet to remain competitive they must simultaneously improve quality despite compounding factors such as demographic shifts, decreases in government funding, and increases in fixed costs related to the recruitment of top faculty, investments in advanced

facilities, and provision of opportunities for student mobility. Universities that cannot revise their basic cost structures may not survive long into the future.

Turning challenges into solutions, it is possible to draw insights from the growth of sharing economies. For example, observe the recent disruptions within the accommodation and transportation industries. Airbnb does not own any hotels, Uber does not own any cars, and Star Alliance does not own any airplanes. However, these companies have all become dominant industry leaders. What they have in common is their ability to connect customers with externally provided services. In other words, they all profit from sharing economies.

Universities would do well to take note, and indeed some already are. Consider Minerva. This is a young university established in 2012. All of its students stay onsite in dormitories, and all of its lectures are offered online. The educational contents it provides are created at world-renowned universities like Harvard and Yale. Then they are incorporated into Minerva's curriculums. This new model allows Minerva to keep its costs low. For instance, tuition for the 2018-2019 academic year was USD 12,950. That is less than one third of the cost of attending most of American Ivy League colleges. According to Business Insider, Minerva admitted only 1.9% of its 16,000 applicants for the 2016-2017 academic year, making it more competitive than Harvard.

It is in this context that the concept of an Assembly University can be defined. At its core, the concept involves the formation of a sharing economy for higher education. One standard definition of sharing economies includes all arrangements where participants share goods rather than relying on individual ownership. In the case of higher education, however, a sharing economy may be defined as involving the mutual utilization of partners' readily available resources. Such resources can be of various types. In some cases they might be curriculums. In other cases, they might be facilities. The Assembly University system is adaptable to the strengths and circumstances of each of its members. By selling, renting or sharing their best academic resources, universities can benefit through one another's competitive advantages.

This final section outlines some of Dongseo University's efforts to implement an Assembly University system. The first example involves its "Hero School." This program was recently established by Dongseo's Digital Contents Division together with professionals at the Walt Disney Company in California, USA. The Disney professionals provide real-time classes to students at DSU's main campus in Busan from their studios in California. These classes give students access to the latest production methods and technologies. Moreover, providing instruction this way is more cost-effective for DSU than recruiting new professors.

Another program Dongseo University has been running since 2013 is called DAIP, which is short for "Dongseo Asia Initiatives Program." Each summer, DSU sends around 7 teams of about 10 students together with a supervising professor to conduct research projects abroad. The teams usually stay in dormitories at partner institutions. Teams also work closely with students and faculty of the host university. Sharing facilities and human resources in this way helps DSU create outstanding and affordable international opportunities for students.

Dongseo University also provides international study opportunities through joint education and double degree programs. These typically involve a division of the study period between the home university and DSU, such as in the 2+2 or 3+1 formats whereby students spend the first portion of their undergraduate degree program studying at the home institution then complete their studies abroad at DSU during the final portion. Currently, Dongseo runs joint-education programs in a wide range of academic fields at the undergraduate and graduate levels with partner universities in China, Indonesia, Lithuania, Malaysia, and Vietnam. Additionally, DSU provides international study opportunities through its branch campuses in China and the USA, to each of which it sends 100 students annually for intensive training in language and culture.

The last example is the Global Access Asia (GAA). This is the online education platform of the Asian University Presidents Forum. It was launched in 2015 by Dongseo University, and it presently has approximately 50 participating universities from all across Asia and beyond. Basically, the platform resembles other massive open online courses (MOOC) systems like EdX or Coursera. Students visit the website to search and sign up for available courses offered by member universities. Unlike most MOOC platforms, however, GAA allows credit sharing between participating universities. Also unlike most others, GAA is largely focused on issues relevant to Asia.

To conclude, the future success of particular universities will depend upon their ability to meet coming challenges. These include preparing students for the changes brought by the fourth industrial revolution; shifting from a focus on providing knowledge to providing creative competencies, and reducing cost structures while simultaneously improving quality. The concept of an Assembly University offers a useful framework for shifting the context of education. Other industries are utilizing sharing economies, and institutions of higher education should recognize their potential benefits. Under the Assembly University system, it is unnecessary for universities to do everything alone. By sharing resources, they can avoid trade-offs between cost and quality, and benefit through one another's competitive advantages. The efforts of Dongseo University illustrate how the Assembly University system can be practically implemented to foster internationalization and improve educational capacities.