## Reconstruction of Liberal Arts Education – Disability Studies at the Center

#### **Kurumi Saito\***

Research Center for Advanced Science and Technology, \*Corresponding Author the University of Tokyo, Japan

Kurumi Saito PhD, Research Center for Advanced Science and Technology, the University of Tokyo, Japan.

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#### 1. Introduction

Inclusive classroom practices are required in colleges/universities. There are accommodations and considerations for students with disabilities or other minority students in many countries. Japan, "reasonable accommodation" became mandatory in 2024. However, DEI curriculum design or college design is still in high demand.

When we create educational settings and curriculums, we should put people with disabilities or minorities into perspective from the beginning. That results in a learning environment that is comfortable for minority students, pedagogically efficient for all students, and also economical from management perspectives. I designed, with the cooperation of educators and researchers with disabilities and who are minorities, an online liberal arts college with an inclusive curriculum: the Barrier-free College of Liberal Arts. (We have applied for the approval of our educational ministry). Environment and teaching methods using Information and Communication Technology are important to realize this college. They are themselves based on interdisciplinary and multidisciplinary fields and possibly advance liberal arts education.

To construct an inclusive curriculum that places minorities and the disabled at the center, I aggregated literature on Liberal Arts Education, Disability Studies, and Minority Studies. I also consolidated reports on educational projects including those I conducted for students with disabilities and students to support minorities as a volunteer activity, or even as prospective careers.

### 2. DEI In College/University Education

In the USA, two-thirds of colleges/universities require their students to earn DEI credits to graduate, which means these colleges/universities offer some courses dealing with cultural diversity or minorities. However, such courses or programs are usually not offered as part of the core curriculum in colleges/ universities. While there are departments of Indigenous Studies, or even Deaf universities ("Deaf" means "deaf signer") such as Gallaudet University, these colleges/universities are specialized in

their particular fields; they are not the colleges for DEI.

Japanese colleges/universities have been required to provide reasonable accommodation since April 2024 under the Law for the Elimination of Discrimination against Persons with Disabilities. Prior to this, DEI centers had been established in some colleges/ universities, but DEI is still a new concept in Japan, and a "DEI center" is practically a "support center" or a "research center". The question is whether consideration and accommodation for minorities including persons with disability are DEI or not. They do not necessarily lead to the elimination of discrimination or microaggression. Accommodation and consideration are the concepts which put majority as the premise. They are necessary because the classroom, tests, curriculum, teaching method, and campus design are created, conducted, and managed by the majority.

A problem with college/university education in Japan, or other countries too, for that matter, is that classes have been taught by professors of the majority and most of them are elites in the mainstream, which is problematic in the academic viewpoints. Higher education is not wholesome nor complete, because there are missing or disrespected parts in many academic fields. College or department curriculums and the environment that complement the present higher education are necessary.

When we design DEI educational settings and curriculums, we should put people with disabilities or minorities into perspective from the beginning. Many colleges/universities, at least in Japan, take steps to create an environment for people with disabilities after they enroll. If we take minorities into account from the beginning it is most efficient as follows. Firstly, such an environment is comfortable for minority students. It is also pedagogically efficient for all students to learn liberal arts including Minority Studies, especially Disability Studies in a barrier-free learning environment. Minority Studies can be the core of the liberal arts curriculum, being interdisciplinary and cross-cutting. It is also economical from the perspective of management as well. For example, if digital materials are all ready in advance, there is no need for the expense to modify and convert them for visually impaired students or students with upper limb disabilities who cannot turn the page. Also, if it has highlights marking the keywords, visually impaired students as well as students with a developmental disability such as dyslexia may profit from it. There are, of course, no disadvantages for students without disability. The following are the characteristics of the Barrier-free College of Liberal Arts we established as a model that needs no accommodation and consideration:

- Barrier-free virtual campus with universal design and accessible classrooms --- ENVIRONMENT
- Minority Studies, especially Disability Studies being the core of the liberal arts curriculum --- CURRICULUM
- COIL style and Flipped Classroom for anyone including students who need more time to communicate and who cannot attend classes at fixed times because of reasons such as disabilities, incurable disease, worktime, and caregiving ---TEACHING METHOD

This model is possible, if the majority of staff members are from minority groups including persons with disabilities and persons of other minorities. The slogan "nothing about us, without us" led to Convention on the Right of Person with Disabilities. The majority sometimes misunderstand the point and simply try to help out minorities, including persons with disabilities. Therefore, a sensitive review by ETS (educational testing service) which aims for the absence of bias, for example, is conducted by "assessment agencies from review members who are from minority groups of the test-taking population" [11]. Our college has persons from minority leaders as the chairperson, director, and councils, which is important to create an inclusive and barrier-free community and to send out the message to Japanese society as well.

Is that unfair for students of the majority? The answer is no. They have been living in a majority-oriented society which is always more advantageous for them. They would be surprised at and enlightened by DEI courses/subjects. They can also be acquainted with the skills on supporting minorities and they can acquire those skills in campus helping the schoolmates with disabilities or those of ethnic and cultural minorities.

Most importantly this college not only deals with or aims at DEI, but also the college itself, as a community, is the model of DEI as a community. The college is the manifestation of DEI. In the following chapters, I will discuss our environment, curriculum and teaching method, and the relationship between each of them and liberal arts.

#### 3. Environment

Our metaverse college was designed by a bedridden engineer with a respirator. He operates the computer with his mouth. Therefore, his model is operatable for any student including students with most severe disabilities or serious progressive incurable disease. He also developed a new kind of real-time text caption application for hearing-impaired students. He made a plan to streamline office work by cutting out paperwork. "Paper" work excludes persons

like him, persons with visual disability, and persons with upper limb disability as well. Our board chairman is blind, and he cannot read letters on paper. The bed-ridden engineer and the blind chairman are both strengths of the UD (Universal Design) of our college.

The college has complete information accessibility for the students with any disabilities including hearing or visual disabilities. It has also a digital library for visually impaired persons and persons who cannot turn the page. Students with intellectual disabilities are not excluded from using Information and Communication Technology such as Easy Read and Dasy. They will receive a special certificate if they cannot complete the curriculum of B.A.

Thus, Information and Communication Technology and Assistive Technology are the key concepts of the inclusive college and they are most efficient to lower cost. Also, they are multidisciplinary fields, as Bodil Ravneberg and Sylvia Soderstrom point out, relating to the study of STS (science technology, and society), disabilities, gender, age, an actor-network perspective, and marketing [1]. We have established "Information Accessibility Theory as Liberal Arts" subsidized by the Ministry of Education, Culture, Sports, Science and Technology (Grants-in-Aid for Scientific Research, 23K17625). "Information Accessibility Theory as Liberal Arts" is a compulsory course in our college.

#### 4. Curriculum Policy

The curriculum falls into the following categories:

- Traditional subjects which include topics related to minorities.
- Minority Studies such as culture, arts, and social movement of each disability and discriminated community [2-4]. Most of these include the sessions/units dealing with basic principles of traditional subjects or fields.
- Subjects dealing with accessibility including supporting technology and supporting skills.
- Subjects dealing with communication including minority languages such as Japanese Sign Language and Korean language.
- Critical thinking.
- Information Accessibility Theory as Liberal Arts.

These are taught by faculty members consisting of minority professors such as professors with disabilities and those from discriminated communities AND professors of the majority who graduated from or have taught at liberal arts colleges. Classes of minority languages are taught by native speakers/native signers.

#### 5. Liberal Arts and DEI

We designed our metaverse college as a liberal arts college. The head of the Global Liberal Arts Alliance, Richard A. Detweiler states that liberal arts education aims at an open-minded, analytical mode of inquiry and competencies necessary for effective citizenship [6]. The website of Yale University points out that they emphasize not what you study, but the result; gaining the ability to think critically and independently and to write, reason, and communicate clearly, which are the "foundation for all professions"

(Yale Univ. 08/20/2024). Princeton University states, "liberal arts education is a vital foundation for both individual flourishing and the well-being of our society" and adds that "a commitment to the liberal arts is at the core of Princeton University's mission. "Princeton aims that students will "learn to read critically, write cogently and think broadly" (Princeton Univ. 08/20/2024).

To sum up, for liberal arts education what you study does not matter so much, but the result matters. The result should be a broad intellectual foundation which is important for diversity and competencies for effective communication, therefore the contents should not be limited to particular fields, but open to diverse fields including interdisciplinary fields, which is important for inclusive society. Thus, the keywords of liberal arts education are: critical, analytical, clarity, and open-mindedness.

Recently liberal arts colleges or programs are increasing rapidly in Asia [5]. Detweiler remarks that it is truly a global phenomenon and it can no longer be claimed as distinctly American [6]. In addition, liberal arts education is even more important for students with disability and persons from discriminated communities, because they have difficulty, at least in Japan, in getting jobs. They cannot choose the field they like freely. Therefore, the open-mindedness and broad knowledge are advantageous for them. They also should know how to learn by themselves in order not to miss any chance.

#### 6. Disability Studies for Liberal Arts

Advantageously, the liberal arts curriculum puts Disability Studies at its center. Disability Studies are interdisciplinary by nature [3]. They include biological, social, educational, psychological, ethical, cultural, political, and medical research. For example, Deaf study consists of interdisciplinary research between neuroscience and linguistics. The definition of language, in early 20th-century linguistics, is the collective entity of rules connecting sounds and meanings. This definition was overturned by sign language research. It was discovered that sign language which has no sound is produced at the same area of the brain where a phonetic language is produced. This took an important role for deaf people to regain the rights of sign language.

Anthropology was also advanced by sign language research. "Everyone here spoke sign language" is a masterpiece of anthropology. Nora Elen Groce's research method is a very good model of anthropological research. At the same time, it proved that the concept of disability is relative, not absolute.

There were also discoveries in applied linguistics. For example, the contact between phonetic language and sign language produces pidgin such as Pidgin Sign Japanese (*Cyukan Syuwa*) and Pidgin Sign English. That has turned out to be a universal phenomenon.

Another example is eugenic thought. Persons with disabilities had no right to have children in Japan from 1948-1996. Sterilization, contraceptive surgery, and abortion were "allowed," which was practically and socially prohibition of having children. Disabilities are, of course, not necessarily inherited, therefore trials have been

held since the 2010s and the government is losing one by one. Oppositely, some Deaf persons want Deaf (or deaf) people's sperm by artificial insemination in America. Thus, Disability Studies are problems of law, bioethics, and genetics.

Secondly, Disability Studies, which emerged in the mid-1980s in the USA, the UK, and Canada are critical by nature. The leadership positions of academic societies have been held by disabled people. This field questions conventional perspectives such as the idea of the normal-abnormal binary. Therefore, Disability Studies and special education have a contentious relationship [10].

Disability Studies propose the shift from the medical model to the social model. The principle was accepted universally in 1999, and now intersectionality is emphasized. It focuses on the relationship between disabilities and race, gender, sexuality, classes, and other related systems of oppression [7].

# 7. For the Sake of Liberal Arts Education and Academic Research

Disability Studies can reform liberal arts education because liberal arts have lacked the viewpoint of disadvantageous or discriminated persons. Liberal arts education has overlooked or been unaware of the matter of minorities. Especially cultures of disabilities have not been taken seriously. Disabilities have been regarded as mishaps, adversity, or ominousness. However, Disability Studies have positive factors and many latent truths. They have many possibilities of discoveries.

At the same time, researchers with disabilities make special contributions. For example, D. Kwan points out in "Why Blind People are Better at Math," that blind persons cannot rely on visual cues or written materials to remember things, they develop stronger working memory than the sighted, which is critical to doing well at math. B. Morin made a special contribution. He discovered the method of everting the sphere, which sighted researchers could not discover. One thing that is difficult about geometric objects is that one tends to SEE only the outside of the objects, not the inside. Morin develops the ability to pass from outside to inside [8].

#### 8. Teaching Method

The Teaching Method of the Barrier-free College of Liberal Arts is COIL with Flipped Classroom. COIL, Collaborative Online International Learning "connects faculty, students, and classes at higher education institutions around the world for discussions, exploration, and collaborative project work" (Website of Sunny Coil Center 2024/10/25). It is suitable for inclusive classes attended by diverse members. Students can participate in the class regardless of the time difference. It advances "the use of technology tools for collaboration, communication and learning" and "prepares students to work in a multi-cultural and connected world" (Website of Sunny Coil Center 2024/10/25). It is useful for students who cannot attend classes at a fixed time with other students.

At our college, each class has Google Classroom as the platform.

Attaching SNS, students can form groups of five or six members, discuss the materials, for example, on sign video or on sound source depending on their disabilities, and make a presentation to the entire class by barrier-free video with audio and text. Flipped Classroom reverses the traditional model of lecture and homework; students learn the content of lectures, textbooks, and materials online including video lectures before the class, and in class they discuss, make statements, and make presentations. Therefore, lecturers must upload class materials or video lectures in advance. Flipped Classroom is advantageous for liberal arts which need active learning and discussion/debate, because its goal is the ability to continue learning on their own throughout their lives and the competency for effective communication.

The following are the reasons why COIL with Flipped Classroom using Google Classroom and SNS is suitable for the Barrier-Free College of Liberal Arts:

- The ratio of text materials, video materials, and sound sources can be adjusted appropriately depending on the characteristics of the subject, the student's progress, and the attributes of the student including disabilities.
- Even if a student is unable to attend class due to illness or work, they can access Google Classroom whenever they want and see the assignments and their deadlines. Teachers can also see the time each student submitted their assignments, and can stop accepting submissions at the deadline.
- Contents the lecturers teach or lecture can be viewed (or listened to) by students at any time and as many times as they like.
- Students can post questions to their lecturers at any time, and lecturers can answer at any time.
- For group discussion and group work, students with the same disability can form groups using SNS. For example, deaf students can work together using sign language, or a group of visually impaired students can work together using only audio.
- Students can use sign language videos to ask questions to deaf lecturers and discuss in sign language. (Gaining Deaf pride and establishing their identity.)
- For visually impaired students, text data can be uploaded (students read it using a screen reader or Braille Sense). This also enables students with upper limb disabilities to turn pages using a tablet.
- Visually impaired lecturers and students can also communicate using only voice. (Easy to communicate and establish their blind identity.)
- Audio can be transcribed for hearing-impaired students using Google Speech-to-Text.
- Google AI converts diagrams and photos into text for visually impaired students.
- Since students have already read (or watched) the lecture, simultaneous interactive classes allow them to spend time interacting with each other.
- Students who are unable to attend simultaneous interactive classes can see them later by the videos which are uploaded by the lecturer. The students who have watched them can post comments and deepen the discussion further with other students on Google Classroom.

#### 9. Conclusion

We designed an online liberal arts college with an inclusive curriculum, the Barrier-free College of Liberal Ars, with students with disabilities or of minorities in our perspective from the very beginning. That results in a learning environment that is comfortable for minority students, pedagogically efficient for all students, and economical from management perspectives as well. This can be achieved because it is created by educators and researchers with disabilities and those of minorities. Liberal arts college is the most suitable for DEI because

- Liberal arts curriculum can include new subjects and cuttingedge research fields such as disability studies.
- Interdisciplinary subjects/fields such as Disability Studies, Minority Studies, and Human Rights, fit the aim of liberal arts
- Disability Studies is a critical subject. Critical and analytical abilities are essential for liberal arts.
- Liberal arts have not been wholesome and have had missing parts because classes in university/college have been taught by professors of the majority and most of them are elites in the mainstream. Liberal arts have a lack of minority perspective and respect for minority persons. Therefore, this college can improve the liberal arts education and advance many academic fields.
- Inclusive college should include students of diverse attributes, therefore curriculum should be open-minded and should have a broader perspective not limited to a certain subject/field.
- Research and technology to establish the environment and teaching method of inclusive college are interdisciplinary and cutting-edge fields that advance liberal arts.

Thus the Barrier-Free College of Liberal Arts reconstructs the very concept of liberal arts. In addition, the environment and teaching method for this college were constructed by or designed by staff members including minorities. Therefore, they are suitable for minorities including persons with diverse disabilities. These developments are based on interdisciplinary and multidisciplinary research fields and complement the missing part of liberal arts.

In the future, the effect of the college should be measured from the viewpoint of students' self-affirmation, their critical ability, their communication skills, and their influence on Japanese society.

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