

# Pioneering Inclusive Education for Students With Disabilities

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# **Pioneering Inclusive Education for Students With Disabilities**

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# CHAPTER 1

## **SWDs in Higher Education in Sri Lanka: Challenges, Impediments, and The Way Forward**

*Samanmala Dorabawila, Anoma Abhayaratne and Sakunthala Yatigammana Ekanayake*

### **1.1 Introduction**

Access to education is well-accepted as a universal right. Though there is remarkable progress in education attainment globally, the evidence suggests that many children with disabilities are still being left behind. The participation and completion rates of education of children with disabilities are low compared to their peers without disabilities (World Health Organization and The World Bank, World Report on Disability, World Health Organization, Geneva, 2011). The WHO estimates suggest that children with disabilities make up one-third, or around 19 million of the 58 million out-of-school children. The several factors contributing to the large number of children with disabilities being out of school include lack of assistive technology, limited skills of teachers on inclusive teaching, lack of appropriate and accessible infrastructure in schools, and limited scope in curricula, among others.

According to the estimates of the WHO, 1.3 billion people – or 15% of the global population – experience a significant disability today (WHO, 2021). Department of Census Statistics (2012) reports that 8.7% of Sri Lanka's population or nearly 1.2 million people have some form of disability. These figures which are significantly lower than the WHO and World Bank estimates reflect the underreporting of disability in Sri Lanka. This underreporting points to persistent challenges in identifying and measuring disability, which could lead to a large population of children with disabilities being excluded from education and other social services.

The WHO estimates suggest that more than 32 million children with disabilities worldwide are deprived of education. They represent about one-third of the out-of-school population (Report of

the Commission on Education, 2016). In low and middle-income countries, 50% of children with disabilities are out of school (UNESCO). Even those children who start school education are more likely to continue to secondary education. Denying the right to education can have a lifelong impact on learning, achievement and employment opportunities and, hence hinder their potential economic, social, and human development.

It is often stated that disability is ‘both a cause and consequence of poverty’ and poverty and disability ‘reinforce each other, contributing to increased vulnerability and exclusion’ DFID. (2000). Disability, poverty and development. London: DFID. Children with disabilities are often faced with discrimination and are likely to be poor. Education can be the most effective way to break the cycle of discrimination and poverty. Many countries in the world today are making efforts to create an inclusive education environment to ensure that all students are treated fairly and get equal opportunities. Within such an educational environment, it is expected that student diversity and uniqueness are ensured without discrimination.

In an inclusive education environment, all students, regardless of their ability and challenges they may have, are placed in age-appropriate general education classes that are in their own neighborhood schools to receive high-quality instruction, interventions and support that enable them to meet success in the core curriculum (Bui, Quirk, Almazan, & Valenti, 2010; Alquraini & Gut, 2012). Sri Lanka has made several achievements in providing education for all children since the introduction of the Universal Free Education Policy in 1945 and the Compulsory Education Policy in 1998 which strived to afford equal educational opportunities for all children at all levels. In 2020, the country recorded a 100.3% net enrolment rate with almost 100% of students completing primary education. Despite the efforts of the Ministry of Education of Sri Lanka in mainstreaming children with disabilities in regular classrooms and special education units in schools, a larger percentage of them continue to face several barriers to access, participation and achievement in education.

As a direct outcome of the low participation in education and the high competition in entering national universities, only a small number of students enter the Universities every year. However,

it is not only access to higher education for students with disabilities (SWDs) but pursuing their education on equal terms with persons without disabilities in the universities is still a challenge. This chapter is based on the findings of a baseline survey that was carried out to identify the existing facilities for the SWDs in the Universities, their needs, requirements, obstacles, and challenges faced by them in participating in higher education. The findings of the survey identified several challenges faced by SWDs, including limited access to physical infrastructure, inadequate support services, insufficient availability of assistive technologies, lack of awareness and understanding among stakeholders, and financial constraints. These challenges significantly impact the academic progress, social integration, self-esteem, and overall well-being of SWDs. The absence of reasonable accommodations and inclusive policies create barriers that hinder their participation and limit their educational opportunities. Understanding the challenges faced by SWDs and implementing appropriate interventions is required to create an inclusive educational environment that ensures equal opportunities for all learners. This chapter aims to contribute to the ongoing discourse on inclusive education and provide valuable insights for educators, policymakers, and researchers supporting students with disabilities.

This chapter also proposes a way forward by highlighting potential strategies to address these challenges. These strategies include implementing inclusive policies and guidelines, ensuring accessible infrastructure, providing assistive technologies and support services, conducting disability awareness and sensitivity training for faculty and students, establishing peer support networks, and promoting financial assistance programs for SWDs. The paper also identifies the importance of a collaborative effort involving higher education institutions, policymakers, other stakeholders to create an inclusive higher education environment.

## **1.2 Disability and Inclusive Education**

There has been a global increase in the number of students with disabilities entering higher education (Abrue et al., 2015). 2019). This increase is a result of policy initiatives to protect the rights of people with disabilities, the development of assistive technology, the implementation of inclusive education, the use of ICT, as well as the understanding of the importance of entering higher education for their personal growth (Hanafin, Shevlin, Kenny, & Mc Neela, 2007; Hadjikakou & Hartas, 2008).

This increasing trend of the number of SWDS in higher education is not only evident in developed countries but also in other countries as well (Grimes, et al., 2018) In developed countries, the SWDs entering universities include students with intellectual or developmental disabilities. There have been many efforts to create an inclusive education environment within school education. However, as more SWDs complete their school education successfully and enter higher education, there is a need for creating inclusive practices in higher education. However, implementing inclusive education practices within higher education can be challenging and the universities are lagging behind as they have less experience and fewer resources in this area. In most of universities, among other challenges, teachers have little or no training in providing adequate educational opportunities to SWDs (Gwen Schilling-Dickey, 2022)

Currently, many universities have taken action to make universities more inclusive by making them accessible for SWDs (Barnes 2007; Jacklin et al. 2007). Universities have adopted policies for SWDs, established support centers and offices to support their educational needs and have incorporated the use of new technologies and/or have implemented inclusive educational practices. However, in most of cases, the actions taken to make the universities inclusive are insufficient to ensure the right of the students to quality education, without discrimination and based on the principles of inclusive education. In order to ensure successful inclusive educational practices within universities, it is necessary to incorporate the principles of inclusive education and universal design for learning into university policies and practices (Moriña, 2016).

In Sri Lanka, a limited number of SWDs are annually admitted to the state Universities, the numbers are remarkably low and there is only a slight gradual increase in the enrollment rate over the years (University Grants Commission, Sri Lanka, 2013). In these circumstances, the sustainable development of inclusive education in higher education will be more favorable and afford more opportunities for SWDs.

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National Universities in Sri Lanka admit a limited number of students with disabilities from among those who satisfy the minimum requirements for University admission under the category of ‘special intake’.

<sup>1</sup> The baseline survey was carried out as a part of the Erasmus+ CBHE project “Developing Inclusive is Education for Students with Disabilities in Sri Lankan Universities” funded by the European Commission.

The 2003 National Policy on Disability in Sri Lanka defines inclusive education as the capacity of the education system to respond to the diverse needs and abilities of all children, regardless of their disabilities, by adopting a learner-focused educational approach. The 2009 proposal for a New Education Act for General Education broadened the definition, recognizing that inclusion is about the child's right to participate in schools, rejecting segregation or exclusion of learners based on their ability, gender, language, status, family income, disability, colour, religion or ethnic origin. Not only does the concept of inclusive education refer to the absorption of disabled children into mainstream education, but it also imbues the right of education for all, specifically for deprived children and those at risk of exclusion.

However, the emergence of challenges together with this process is unavoidable. These include attitudes of the society, accessibility, awareness of the needs of the disabled, unavailability of assistive technology, lack of resources (physical and human), intervention of stakeholders, and employability.

### **1.2.1 Barriers to Inclusive Education**

The accessibility barriers that the SWDs encounter can be mainly of three forms: structural barriers, attitudinal barriers, and technical barriers (Alsalem et al., 2018). Structural barriers include barriers in admission to programs as well as physical barriers. The solution to these barriers solely depends on the responsible authorities such as the legislators, UGC, policymakers, and administrators in higher education. It is important to have proper coordination among these personnel while having a clear understanding of the SWDs' requirements.

Social acceptance is directly related to the attitude of the different stakeholders in society, which directly affects inclusive education. The attitudes of society toward persons with disabilities are mainly influenced by people's knowledge of the disability and their contact with individuals with disabilities (Wang, et al,2021). Attitudinal barriers include negative attitudes of students without disabilities towards those with disabilities (Chikwature et al., 2016; Jenjekwa et al., 2013; Liasidou, 2014) and disablist practices and attitudes of staff in higher education institutions (Macleod & Cebula, 2009; Madriaga, 2010). Past studies have indicated that teachers require in-service training to be equipped with the positive attitudes, knowledge, skills, competencies and

understanding to meet the individual needs of students with disabilities in higher education institutions (Chiparaushe et al., 2010; Phiri, 2013). Most importantly, social change in the attitudes of students and faculty toward people with disabilities is necessary for social inclusion and equal opportunities for SWDs (Saches et al., 2011).

According to WHO, about 15% of the world's population lives with some form of disability. Children with disabilities are more likely to have never attended school compared with children without disabilities. Also, they are more likely to be out of school than children without disabilities. The low enrolment in the education of these children with disabilities can negatively impact their lives as adults as they have had limited opportunities for higher education and professional skills development which can lead to financial dependence, social exclusion and cycles of chronic poverty.

In this context, enrolment rates of SWDs in higher education institutions can be much lower than the students without disabilities. In Sri Lanka, the 2012 Population Census recorded that only 0.8% of the total persons with disabilities are engaged in post-secondary education programs in Sri Lanka.

Technical barriers occur when technology cannot be adopted into another format that can be accessed by assistive devices (Whiteneck et al. 2004). Today, technology has become an important component of all our lives, without which none of us would have survived the Covid-19 pandemic. During the pandemic, SWDs in developing countries encounter many technological barriers due to financial constraints.

Much research identifies the inadequacies in facilities and trained personnel, ineffective and inefficient use of technology, lack of funding, and lack of support to teachers practicing inclusion as barriers to implementing inclusion (Furuta, 2009). Parveen (2018) points out many problems such as a lack of well-educated teachers, ill-planned curriculum, inadequate resources, lack of good infrastructural facilities, lack of awareness, negative attitudes poor policies as hurdles for extending the concept of inclusive education.

### 1.2.2 Disability and Diversity

With the increase in the number of students with disabilities entering higher education, higher education institutions have made progress in providing some forms of access for them though there is still a need for more disability awareness, reasonable accommodation, training of teachers and providing non-discriminatory teaching and learning environment (Kauffman et al., 2023).

Disability inclusion is not only making sure to admit the number of SWDs as per the quota or to make them welcome at the Universities. Disability is a diversity of a particular type depending on the nature and severity of the disability and requires different types of accommodation (Harden, 2021). Unlike many types of diversity such as gender, ethnicity, sexual orientation, religion and so on, disability cannot reasonably be reduced as it can be situation-dependent. Diversity in the forms of disabilities of the SWDs makes it difficult for universities to make necessary accommodations for all of them to meet their higher education demands without discrimination as their requirements depend on the nature and severity of the disability (Katsiyannis, 2009). These accommodations include adjustments to an academic program, materials, procedure, and environment that intend to mitigate the impact of functional limitations and facilitate the social participation of students with disabilities (Brown, 2021).

Types of disabilities found in SWDs in universities include mobility impairments, sensory impairments, chronic disorders and students with dyslexia or reading disability. The nature and severity of these disabilities can vary greatly and hence the requirements for reasonable accommodation which means making learning more effective for them by adjusting how they learn can vary widely. Reasonable accommodations that are being adopted by the universities can be categorised as follows;

**a. Testing reasonable accommodations** that include priority seating, separate rooms, low distraction environment, computers for essay exams, extended time, breaks during examinations, test format changes such as a reader to read directions and questions, oral test, larger type, dictate answers to scribe or tape recorder (Hart et al. [17])



- b. Instructional reasonable accommodations:** video-recorded presentations, screen enlargers, advanced receipt of the syllabus, notes, slides or course handouts, etc. (Brown, 2021)
- c. Classroom environment reasonable accommodations** such as a laptop or tablet for note taking, notetaker/audio record/digital “smart pen” in class, more breaks, smaller groups, permission to bring sensory objects, permission to bring drinks or food, etc. (Brown, 2021)

However, in cases of learning disabilities or intellectual disabilities, the above reasonable accommodation may not meet the requirements that need to address the higher education demands of those SWDs.

Another means of addressing the needs of SWDs is the modifications. By modifications, we mean the adjustments made to what they learn to make it more effective. Modifications include revision of curriculum for the needs/capabilities of SWDs, reducing assessments/homework or providing alternative assignment/assessment/homework with changes in the content or medium, grade the assessments at a different standard/level than peers.

Although the technologies, accommodations, adaptations, and modifications make the inclusion of SWDs in higher education possible, it may not be possible with all disabilities. Therefore, it would be essentially important to have a proper assessment of the nature and severity of the disabilities of the SWDS prior to making the adjustments for them to be effective in their learning (Kauffman, 2021).

### **1.2.3. Teaching SWDs in Higher Education**

Providing educational opportunities for students with disabilities at the university level requires teachers with knowledge and skills in teaching SWDs with various disabilities, understanding of their needs and requirements, provision of disability services, and a good understanding of how the student’s disability will impact their ability to successfully complete a degree. Recent studies point out that university teachers are the key to the success of inclusive higher education and play a very significant role in developing inclusive higher education (Zhang et al., 2010).

It is unlikely that university teachers are exposed to the rights of the SWDs and laws guiding them and relevant policies on inclusive education. In most cases, they do not have the necessary skills or training for teaching the SWDs and possibly have less awareness of the requirements and needs of SWDs. (Moriña, 2017).

It is not realistic to expect regular university teachers to be competent in sign language or Braille. However, universities can provide them with assistance from professionals with specialized skills who can support university teachers by educating them using assistive technologies and a variety of strategies to teach those SWDs. These could include transferring printed materials to digital format for blind students instead of translating to braille, or providing deaf students with PowerPoint material rather than using sign language.

Attitudes of University teachers toward SWDs and towards their inclusion in universities are also important factors that will affect the successful implementation of inclusive higher education (Yuxin Zhang, Sandra Rosen, Li Cheng & Jingshan Li, 2018). Teachers' attitudes toward providing accommodations for SWDs can vary as some may appreciate it while others may perceive it may be unfair for non-disabled students (Vasek, 2005). Also, some of the teachers may not find extra time for the SWDs and some others would like to provide extra services to SWDs if they have adequate time (Sweener, Kundert, May, & Quinn, 2002; Vogel et al., 1999). Burgstahler et al., 2000 found that teachers who have been exposed to the SWDs and have teaching experience with SWDs were more welcoming of and sympathetic toward, inclusive higher education.

### **1.3 Research Methodology**

The study is based on data collected in a baseline survey carried out to identify the standard of higher education for SWDs in Sri Lankan Universities. This included identifying the existing facilities for the SWDs, their needs, awareness among peers, university academic and non-academic staff, peers and parents of the SWDS of the needs of SWDs. It was expected from the findings of the survey to have a clear understanding of the needs and requirements of the SWDs to provide them opportunities for higher education on equal terms with persons without disabilities, identify the obstacles in providing access to higher education and to identify the improvements required in physical, technical and human capacities that are required.

The sample of this study included five groups of stakeholders from all four Sri Lankan partner universities of the IncEdu project ((University of Peradeniya, University of Ruhuna, Eastern University and Sri Lanka Technological Campus). The five groups of stakeholders that were included are SWDs (32), peers of the SWDs (200), parents of SWDs (32), members of the academic staff (200), and administrative staff (100). The total population of SWDs of the four universities was included in the study as the number of SWDs in the Universities is small. For the same reason, the total population of the parents of the SWDs was included in the survey.

Data were collected from the sample using structured questionnaires. A set of five different questionnaires were used to collect data from five groups of stakeholders. The questionnaires include several closed-ended questions to obtain stakeholders' attitudes and beliefs. Two types of closed-ended questions were included in the questionnaires namely: dichotomous questions, multiple questions, and rating scales. Likert scales were adopted when formulating most of the questions. The statements were framed to obtain both positive and negative feedback. In addition to the closed-ended questions, open-ended questions were added at the end of the questionnaires which allowed respondents to answer in any manner they deem fit. In all five questionnaires, part 1 was designed to collect demographic data. However, the other sections were developed focusing on the requirement.

All the questionnaires were piloted prior to the main data collection in order to identify the questions that should be eliminated or modified due to ambiguities, lack of clarity, contrary to initial expectations, or which turned out to measure something irrelevant. The questionnaires were administered in two forms; administering printed questionnaires to the respondents and circulating electronic copies using Google Forms. In analyzing data descriptive statistics are used to organize and summaries data to easily determine what information they contain and describe what the data shows.

It is expected the findings of the survey to provide a clear understanding of the needs and requirements of the SWDs to provide them opportunities for higher education on equal terms with persons without disabilities, identify the obstacles in providing access to higher education and identify the improvements required in physical, technical, and human capacities that are required. The outcome of this survey will guide the activities that aim to develop a system of support for equalizing opportunities for SWDs in Sri Lankan Universities.

## 1.4 Results and findings

### 1.4.1 Type of disability of the SWDs and acceptance at the university

The sample included 40 SWDs from 4 Universities included in the study. Among them, only 23 students responded to the questionnaire. Among them, the majority (44%) were from the University of Peradeniya while none were from the SLTC. In the questionnaire, respondents were asked to choose the types of disabilities that can be restrictive in higher education. Types of possible disabilities were listed for them to choose from, which included: visual impairment, deafness or hearing loss, psychiatric disorder, physical disability, learning disability, speech disorder, chronic illness, and multiple disabilities. The findings are presented in Table 1.4.1

<b>Type of Disability</b>	<b>Number</b>	<b>Percent</b>
Visually impaired	10	43.5
Visually and physically impaired	1	4.3
Visually and physically impaired and learning difficulties	1	4.3
Deaf/Hard of hearing	4	17.4
Deaf-blind	2	8.7
Physical and learning disabilities and mental health problems	1	4.3
other	4	17.3
<b>Total</b>	<b>23</b>	<b>100.0</b>

Table 1.4.1: Type of Disabilities

According to responses, the most common disability among SWDs was blind/visual impairments (43%) while the lowest was mental disability (4.3%).

Among the overall findings, one of the significant facts was that all the SWDs were confined to the Humanities and Social Sciences. The reasons for this limitation stem partly from the University admission policy for SWDs and the limitations in school-level education. Under the university admission policy of SWDs, every year, a limited number of SWDs (0.1%) from among those who satisfy the minimum requirements for University admission are admitted to the National Universities under the category of 'special intake' into the faculties of Arts. The total number of students enrolled in national universities under special intake is small compared to overall enrolment. Out of the respondents, except one student, all the others have been admitted to the University through the special intake. This implies the difficulty for SWDs to get admission to the Universities. Further, in the school system, the SWDs are denied the right to study in the science stream in GCE (A/L) as there are no facilities including trained teachers and assistive technology to teach those subjects. Therefore, it is unlikely that SWDs qualify to be admitted into disciplines other than Arts and Humanities in universities.

However, gaining admission to a university is not the only barrier that an SWD will encounter in entering higher education but maintaining regular attendance to classes as the other students. There should be a conducive environment for them to learn within the University. One of the main requirements for most SWDs is physical accessibility to the University. For instance, although the University of Peradeniya caters to the largest number of SWD admissions in the university system in Sri Lanka until last year there was not even a disabled-accessible ramp to enter a classroom for learning. Whenever an SWD enters a classroom either the parents or the peers walk them to the classroom or carry them.

The majority of the SWDs (52%) felt that their disability had a negative impact on their academic life. However, they have received guidance in selecting the preferred Degree programme from teachers, senior students and their parents. However, all of them were not allowed to enroll in their preferred Degree programme. The reasons for these limitations are discussed in the section on attitudes towards them.

In all universities, Special Needs Support centers are being established to provide some support services for the SWDs. However, in the universities, only 39% of SWDs were aware of them. There are different types of services that are required to fulfill the needs of SWDs on a day-to-day basis, to accommodate their disability. They are such as alternate formats, adaptive technology, academic accommodations, communication technology, sign language interpreters, attendant care services, provision of mobility aids, drugs and medical supplies, guide dog/white cane, assistive listening devices, specialized transportation systems, peer support, tutor, educational assistant, mental health counseling, and others. However, the support services provided by these support centers are very limited.

#### **1.4.2 Barriers to Inclusive Education**

For the successful inclusion of SWDs in higher education, they should be free of various types of barriers that hinder the quality of higher education. These barriers can take the forms such as physical, technological, attitudinal, structural, etc. Physical accessibility means that all buildings, classrooms etc. should be accessible to all.

When considering the barriers that the SWDs encountered at the university, most students (30%) emphasized the ‘difficulties in mobility’ as one of the main barriers they faced at the university. In Universities, most of the buildings including the libraries do not have elevators and are located in different places. They found it difficult to walk to the venues where lectures are held and at the same time when lectures are conducted on the upper floors of the buildings, their difficulties are multiplied. Further, one student reported the inability to use the library facility as access to the second and third floors of the library is not provided. Another student stated “Sometimes I miss part of lectures as it takes time for me to walk from one lecture venue to another when they are far away. Not only that as I get tired when moving fast it is difficult to concentrate on lectures”. Further, explaining the issues related to mobility within the University, another student reported ‘Especially in the first year, I had to move from one department to another, I mean to every department in order to get the special notifications. This was one of the main problems faced especially during the first year. The same situation prevailed inside hostels as highlighted by the one student.

Another barrier faced by the SWDs is the non-availability of suitable materials, technology, and other special accommodations required for them to successfully complete their studies. Students with low vision impairments mentioned the difficulty of reading white/blackboards and computer screens. As a result, they had difficulty understanding diagrams and texts that were drawn on the board during lectures. One student from the University of Peradeniya mentioned that ‘especially when we have lectures in the Arts Theater, it was difficult to read (difficult to see) what the lecturer drew on the white board’. 26% of the respondents reported that the facilities at the University accommodation are not adequate.

As stated in a previous section, teachers' skills, experience and training in teaching SWDs, understanding of their needs and rights, attitudes towards the SWDs, and the inclusion of SWDs in higher education is key to the success of implementing inclusive higher education. Among the academics from the University of Peradeniya (UOP), 55% have not taught SWDs at all. 23% of the total who are from the Faculty of Arts had taught SWD's at some point in their teaching career. Only 3% of the sampled academics have had some training to teach students with disabilities, Of those who had training, 2 were from the Faculty of Arts, University of Peradeniya, 1 from the Faculty of Humanities and Social Sciences, Ruhuna University and 1 from School of Computing and IT, SLTC. It was reported that their training was mainly focused on counseling and training of trainers on special needs education.

The majority (97%) of the academics have the willingness to support the SWDs. However, in order to support them, teachers should be aware of the presence of them in their classes. Many of them (75%) reported that there are certain SWDs whose disabilities cannot be easily recognized. Therefore, it is necessary to inform the teachers beforehand and educate them about the special requirements of those students. It was evident that most of the teachers have sensitivity towards them. It was found that only 35% of the academics have learned about disability and appropriate accommodation through literature and websites, and some of them have some knowledge of the teaching and learning resources for SWDs. E.g.: software and apps. A small percentage of academics (11%) have conducted research studies related to disability.

There was an extremely high willingness (above 80% of the overall sample) of academics to provide special accommodations to SWDs in teaching. They are happy to facilitate the use of computers or recording devices for note-taking and to provide preferential seating for SWDs'. Also, they expressed their willingness to provide flexibility in terms of completing academic assignments and adjustments in teaching.

The majority of the sampled peers stated that they felt comfortable sharing their rooms with SWDs. Most of the peers expected to develop friendships, interact with the SWDs, and help them whenever possible. The majority of the peers were of the opinion that educational facilities for SWDs have to be improved, and lecturers should pay more attention to SWDs' needs and honor the importance of equal rights for free education. Peers felt that they are not disabled, but they are differently abled and multi-talented persons.

According to the responses received, peers of all Universities were highly supportive of the academic rights of SWDs. 97% showed a high willingness to extend their support to mobilize them physically and 90 % enjoyed interacting with them in their studies. From the sample, 81% and 85% of peers of University Peradeniya (UoP) and SLTC respectively did not know about the existence of SWDs in their classes. However, peers of Ruhuna (46%) and Eastern Universities (44%) were more familiar than UoP and SLTC. The majority of the UoP peers did not feel comfortable sharing rooms with SWDS.

The majority of the academic staff members have had some experience in teaching for SWDs except the Faculty of Veterinary Science. One of the notable factors found in this study was 97% of the academics agreed that equal access to higher education should be made available for SWDs. Furthermore, 74% of academics agreed that they did not use any special mechanism for teaching, for SWDs. Apart from that, 81% of the academics agreed to have SWDs attending their lectures online, if attending physically is difficult. There was more than 50% agreement among the academics on the majority of the attributes on willingness to provide special accommodation to SWDs other than providing programs for raising awareness stated in the survey. Only 13% of the academics obtained feedback on their teaching from their students. In the sample, 79% of them agreed that their subjects are suitable to teach for SWDs. However, Peradeniya had the highest



number of academics (13%) who felt their subjects were not suitable for SWDs while this percentage in the University of Ruhuna, SLTC and Eastern University were 2%, 2% and 1% respectively.

According to the data gathered from the SWDs', majority of the SWDs are come from low income families. The average monthly household income of the families was less than Rs. 31,000 while 40% of the families earn less than Rs. 10,000. Around 22% of the parent's occupation was farming and 22% reported being unemployed. Furthermore, the parents disclosed that neither the government nor Universities supported them except for the Mahapola Scholarship and bursaries provided to all eligible University students. Their immediate family (83%) was found to be the major supporting source for their disabled children. Parents' opinion on services provided by Universities/Institutes shed light on the importance and the dire need of making access to storied buildings, and provision of toilets suitably designed for SWDs to use. However, negative, and uncertain responses outnumbered the positive responses received for securing a job after graduation. The majority of parents thought that the university experience would have a positive impact on their child's future.

Lack of awareness about the needs of SWDs could be highlighted as another major issue among all stakeholders. Disability awareness is important for academic staff members as a professional development strategy. Furthermore, administrators and nonacademic staff members also need to be educated on disabilities in order to have a more positive attitude and to create an inclusive environment for all students. Research findings also found that awareness programmes are essential for all stakeholders as they would develop positive attitudes toward SWDs (Morin et al., 2008).

Only 30% of the peers were aware of the existence of an SNRC in their respective Universities. Prior to entering the university, 67% of them had some form of contact with SWDs. Overall, 61% of the peers in the sampled group have had some encounters with SWDs in their Universities. The highest observed type of disability among the SWDs in class according to the peers was Blind/Visually impaired (43%). Of the overall sample of peers, 69% felt that they were comfortable in learning with SWDs in class. Of the sample, 84% of the peers were willing to

obtain training on facilities to be provided for SWDs. The majority of the peers were unaware of whether the lecturers used special teaching techniques to teach with SWDs.

Among the suggestions for improvement of SWDs' studies at the University are, the provision of more opportunities to improve information communication technology (ICT) and English, financial assistance, opportunities, and guidance to follow postgraduate degrees, improvement of existing services, facilities and development and update them as prescribed by local and international treaties, conventions were notable.

Concerning the higher Education for SWDs, the attitudes of the different stakeholders may vary and it has been changed from time to time. For instance, if the relevant stakeholders can pay attention to the development of support systems and learning technologies that will open more opportunities for learning for SWDs. This can be noted as a positive change in stakeholders' attitudes towards the SWDs. This change has created a favorable learning environment in elementary and high schools, which enabled more SWDs to successfully complete school examinations and enter higher education. Gradually, this influence resulted in a growing demand for higher education by SWDs. In response, all higher education institutions began to develop support systems and learning technologies, which helped individuals with disabilities.

Invariably, the blind/visually impaired (51%) sector was the most catered sector of all universities by university authorities. Staff agreeing to undergo continuous special education training programs (68%) was an encouraging sign as it would improve understanding of the requirements of SWDs, the nature of disabilities, and different approaches to cater to SWDs. Except for The University of Peradeniya, other universities have not conducted research seminars and workshops. However, the survey revealed that none has published research related to SWDs in the Universities. UoP was the only institute that had collaborated with both local and international organizations. SLTC conducted recreational events for SWDs.

## 1.5 Conclusions and Recommendations

The main challenges faced by the SWDs that limit their opportunities in higher education are limited access to physical infrastructure, inadequate support services, insufficient availability of assistive technologies, lack of awareness and understanding among stakeholders, and financial constraints. These challenges significantly impact the academic progress, social integration, self-esteem, and overall well-being of SWDs. The absence of reasonable accommodations and inclusive policies also creates barriers that hinder their participation and limit their educational opportunities.

Accessibility-related obstacles faced by the SWDs at admission to Universities are a direct outcome of the teaching-learning facilities at the school level. The facilities required for offering science stream subjects at school prevent students from sitting for the GCE (A/L) examination in science streams. The small number of SWDs who are admitted to the Universities through “special intake” are admitted only to the disciplines of social sciences and humanities at the Universities and are allowed to offer only a few selected disciplines such as languages, and history. That has a negative impact on the job market opportunities for the SWDs after graduation and on their lives in the long run.

Within the universities, physical infrastructure, teaching methods, facilities for learning of SWDs, and evaluation methods are not conducive for them to successfully complete their studies. Further, awareness of the existence, needs, requirements and rights is not at a satisfactory level and the attitude of the peers and staff towards them needs a considerable improvement.

A substantial proportion of the SWDs including those with visual, hearing, and physical impairments come from low-income families. Therefore, these families are not in a position to support these students with any equipment or assistive technology that are not provided by the Universities and that will be useful in their studies.

It is recommended that consideration should be given to the improvement of education and facilities of SWDs to undertake their studies at Universities, raising awareness of the existence and

needs of SWDs among all stakeholders, increasing available facilities for SWDs, conducting continuous professional training programmes on special education for staff and peers, provide suitable accommodation for their studies and teaching and assessment mechanisms as agreed by academics and pointed out by peers and parents as well.

The most important aspect of activating and sustaining inclusive education in the higher education system is increasing awareness of the existing national as well as institutional policies, specific needs of SWDs and available assistive technologies. There should be a mechanism that identifies the level and form of transmitting the above-mentioned awareness among teaching and non-teaching staff. In order to fulfill this, the authorities from top to bottom should be sensitized to the requirements of the SWDs at every level. If all these initiatives are put into action positively contribute to reaching the expected levels of sustainable development goals.

## References

Chiparaushe, B., Mapako, O., & Makarau, A. (1970, January 1). *A survey of challenges, opportunities, and threats faced by students with disabilities in the post-independent era in Zimbabwe* by Booker Chiparaushe. Open Library.

[https://openlibrary.org/books/OL25048259M/A\\_survey\\_of\\_challenges\\_opportunities\\_and\\_threats\\_faced\\_by\\_students\\_with\\_disabilities\\_in\\_the\\_post-ind.](https://openlibrary.org/books/OL25048259M/A_survey_of_challenges_opportunities_and_threats_faced_by_students_with_disabilities_in_the_post-ind.)

Census of Population and Housing - 2012. (n.d.).

[http://www.statistics.gov.lk/PopHouSat/CPH2012Visualization/htdocs/index.php?usecase=indicator&action=Data&indId=10.](http://www.statistics.gov.lk/PopHouSat/CPH2012Visualization/htdocs/index.php?usecase=indicator&action=Data&indId=10)

Responding to educational needs of children with disabilities: Care ... (n.d.-b).

[https://www.semanticscholar.org/paper/Responding-to-Educational-Needs-of-Children-With-%3A-Furuta/31c1c5a3b65bbd0dd1e7e4446ce0871dc43e7273.](https://www.semanticscholar.org/paper/Responding-to-Educational-Needs-of-Children-With-%3A-Furuta/31c1c5a3b65bbd0dd1e7e4446ce0871dc43e7273)

- Majoko, T. (2017, November 30). *Participation in higher education: Voices of students with disabilities*. Cogent Education.  
<https://eric.ed.gov/?q=source%3A%22Empirical%2BResearch%2Bin%2BVocational%2BEducation%2Band%2BTraining&pg=1758&id=EJ1205988>.
- Sci-Hub | confronting similar challenges? disabled and non-disabled. (n.d.-c). <https://sci-hub.st/10.1080/03075070903222633>.
- Inclusive Education in higher education: Challenges and opportunities. (n.d.-b). <https://idus.us.es/bitstream/handle/11441/111443/Inclusive%20education%20in%20higher%20education%20challenges%20and%20opportunities.pdf;sequence=1>.
- Parveen, D. amina. (2023, January 15). *Inclusive Education and the challenges*. National Journal of Multi-disciplinary Research and Development. [https://www.academia.edu/66338585/Inclusive\\_education\\_and\\_the\\_challenges](https://www.academia.edu/66338585/Inclusive_education_and_the_challenges).
- Unesco, Gemr, U., & Gemriglyo, U. (1970, January 1). *Inclusion and education*. UNESCO.org. <https://www.unesco.org/gem-report/en/inclusion>.
- Wang, Z., Xu, X., Han, Q., Chen, Y., Jiang, J., & Ni, G.-X. (2021, June 3). *Factors associated with public attitudes towards persons with disabilities: A systematic review - BMC public health*. BioMed Central.  
<https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-021-11139-3>.
- World Health Organization. (n.d.). *World Report on Disability*. World Health Organization.  
<https://www.who.int/teams/noncommunicable-diseases/sensory-functions-disability-and-rehabilitation/world-report-on-disability>.
- 2023 - World Health Organization (WHO). (n.d.-a). <https://www.who.int/initiatives/sdg3-global-action-plan/progress-and-impact/progress-reports/2023>.

Schilling-Dickey, G. (2021, November 30). *Removing barriers for university students with disabilities*. *Journal of Instructional Research*. <https://eric.ed.gov/?id=EJ1363669>.

American Psychological Association. (n.d.). *Apa PsycNet*. American Psychological Association. <https://psycnet.apa.org/record/2016-61965-002>.

## CHAPTR 2

# **Policies and Issues in Developing Inclusive Education in Higher Education for Students with Disabilities in Developing Countries (With a special focus on Sri Lanka)**

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### **2.1. Introduction**

In today's globalized and interconnected world, the pursuit of inclusive education has emerged as a fundamental aspect of educational policy and practice. At the same time, education is identified as a fundamental human right. In recognizing the importance of providing equal opportunities and access to quality education has led to a heightened focus on inclusive education, particularly within the realm of higher education. However, in the context of developing countries, the journey towards inclusive higher education, particularly for students with disabilities, unfolds against a backdrop of unique challenges and special toned policy landscapes. The level of inclusivity in higher education institutions hinges significantly on the degree to which these institutions support students and staff with disabilities, ensuring they enjoy equal access to the university and comparable opportunities for academic success when compared to their peers without disabilities (Evans and Zhu, 2022). This chapter delves into the intricate web of policies and challenges associated with developing inclusive education initiatives for students with disabilities in the context of higher education, with a primary emphasis on the specific issues encountered in developing countries with a distinct focus on the island nation of Sri Lanka.

### **2.2. Definition of Inclusive Education**

Inclusive education concept has received prominence globally at all stages of learning. The global prominence for inclusive education is driven by its alignment with principles of human rights,

social inclusion, equality, and the recognition of the diverse potential of individuals. It is viewed as a transformative approach that benefits individuals, communities, and societies as a whole. Compared to developing countries, inclusive education in the developed countries have made significant strides while challenges still exist, and continuous efforts are required to address the evolving needs of students with diverse abilities. The commitment to inclusive education in these countries reflects a broader societal understanding of the value of diversity and the importance of equal educational opportunities for all. On the contrary, inclusive education in developing countries faces unique challenges due to their resource constraints, cultural factors, and systemic issues.

Over time society addressed disability from different conceptual perspectives. Initially, it was considered as a ‘medical model’, then the ‘charity model’ followed by the ‘social model’. The social model was developed along with human rights advocacies (Alghaib et al., 2019). Society, according to the social model, is at least as capable of disabling people as any impairment. Its discriminatory practices and exclusionary structures effectively bar individuals with disabilities from full participation and access to their fundamental human rights.

From the social model’s perspective, inclusive education can be identified as a philosophy and approach in education, that aims to ensure equal access, participation, and success for all students, irrespective of their diverse backgrounds, abilities, or disabilities. Various organizations and scholars provide definitions that capture the essence of inclusive education. Alongside the Salamanca Statement and Framework for Action in 1994, UNESCO presented a groundbreaking definition of inclusive education in 2009. This definition characterizes inclusive education as a dynamic approach that tackles and accommodates the diverse needs of all learners by enhancing their involvement in learning, cultures, and communities. Simultaneously, it aims to diminish exclusion both within and outside the realm of education. These and many other definitions collectively emphasize the fundamental principles of inclusion, emphasizing diversity, equity, participation, and the removal of barriers to learning for all students. Inclusive education is seen not only as an educational approach but also as a broader social and human rights perspective (UNESCO, 2009; UNESCO, 1994; and WHO & World Bank, 2011).



In the context of higher education, inclusive education retains its fundamental principles of accommodating the diverse needs and characteristics of all students, ensuring equal access, participation, and success. The following are a few definitions that specifically address inclusive education in higher education: The Higher Education Academy in 2014 defines inclusive education in higher education as "a process of increasing the presence, participation, achievement, and satisfaction of diverse learners" and while Higher Education Funding Council for England (HEFCE) in 2005, defines inclusive education in higher education as "a commitment to the idea that all students, irrespective of background, should have the same opportunities to fulfill their potential in higher education" (Higher Education Academy, 2014 & HEFCE, 2005). In higher education, the concept of inclusive education is expanded to address not only the diversity of abilities but also broader aspects of diversity, including race, ethnicity, socioeconomic status, gender, and more. The goal is to create an environment that fosters the success and well-being of all students, recognizing and valuing their unique contributions and perspectives.

In the specific case of Sri Lanka, understanding inclusive education involves unraveling the cultural, socio-economic, and educational intricacies that shape the experiences of students with disabilities in higher learning institutions. Sri Lanka's commitment to inclusivity is embedded in its vision for a free education system that reflects the diversity of its population, fostering an environment where every student can thrive academically and socially.

As we navigate the policies and challenges surrounding the development of inclusive education in higher learning institutions in the international arena, the lens turns distinctly toward Sri Lanka. This country, nestled in the Indian Ocean, grapples with its own set of opportunities and hurdles in the pursuit of an inclusive higher education landscape. By scrutinizing the policies and initiatives enacted in Sri Lanka and other parts of the world, this chapter aims to draw insights that extend beyond the local context, contributing to a broader understanding of the global discourse on inclusive education. This exploration serves as a crucial foundation for unraveling the complexities, pinpointing potential solutions, and envisioning a more inclusive future for students with disabilities in higher education, not just in Sri Lanka but across developing countries.

### 2.3. Why Policy for Inclusive Education

In many publications related to inclusive education such as conventions, treaties, reports, and research papers recognize policies as crucial for promoting and ensuring inclusive education for all learners, regardless of their abilities, backgrounds, or needs. Policies provide a framework for action and hold governments and education systems accountable for providing quality education for all (UNESCO, 2020a)

These documents emphasize the following reasons why policies are important for inclusive education. Firstly, it guarantees of right to education. Policies establish the legal basis for inclusive education, ensuring that all children have the right to access quality education alongside their peers, protect children from discrimination, and ensure equal opportunities to learn and achieve. Second is that the policies guide the allocation of resources to support inclusive education initiatives and funding for teacher training, assistive technologies, curriculum development, and specialized services. The third point is that policies promote systemic transformation within education systems such as revising curricula, adapting teaching methods, and modifying school environments to become more inclusive. Fourth is that policies are established with monitoring and evaluating mechanisms to access the progress toward inclusive education goals. To perform monitoring and evaluation, there needs to be proper data collection, analysis, and identification of areas for improvement. Finally, policies raise awareness about inclusive education and promote public understanding of its importance. This raised awareness can lead to increased support and advocacy for inclusive practices within the community (Contin, et al., 2022; Lord et al., 2017; UNESCO, 2016, 2009).

The above reason reveals how important effective policies are for creating an inclusive education system that provides all children with the opportunity to learn and reach their full potential. They provide a roadmap for progress and ensure that no child is left behind.

## 2.4. Trends in Inclusive Education in the Higher Education

Opportunities for access to higher levels of education are often insufficient, particularly in least-developed countries, resulting in a knowledge gap with serious consequences for social and economic development (UNESCO, 2016). Therefore, it is imperative to monitor the progress of inclusive education in general and specifically in higher education (UNESCO, 2016). Given below is a table with trends in students with disabilities in several developed countries in higher education found in several publications in different years.

Many studies report that there is a notable difference in the disability prevalence rates recorded all over the world due to differences in the definitions used for identifying persons with disability (Beckman et al., 2016). This is observed in the above table among some of the listed developed countries as well as the developing countries in the table and the facts discussed below.

Students who disclosed their disability at registration	(1) France (2006) *1	(2) Germany (2006) *1	(3) UK (2006) *1	(3) UK (2019/20) *6	(4) USA (2003/4) *1	(5) USA (2017)*2 (2022)*3
Sensory deficiency	25%		8%		9%	
Physical deficiency	20%		4%	3%	25%	1%
Health problems	21%	60%		9%	17%	
Psychological disorders	11%	11%	5%	28%	22%	
Language problems	8%					1%
Temporary incapacity	5%					
Visually impaired		16%		1%		4%
Hearing impaired				2%		2%
Musculoskeletal deficiency		13%				
Learning difficulties /Dyslexia			43%	34%	19%	5%
Unseen disability			16%			15%

Multiple disabilities			11%	19%		
Autistic			1%	4%		3%
SWDs of the total enrolled undergraduates	1.2%(*4)	2%(*5)		17%		25.4%(*2)
Average SWDs national University completion rate (18-24 Yrs.)						3.6%(*2)

Table 2.4.1: Students with Disabilities Enrollment Rate by Country and Disability Type

Note: - The information in the above table includes only developed countries.

- The data was obtained from the following two sources:

\*1 - Kauffman et al., 2022

\*2 - (Eve Hill et al., 2020)

\*3 - (Welding, 2023)-The data collected by the National Center for Education Statistics (NCES) is reported here. In column (5) all percentages without a “\*” are from this data source.

\*4 - Corre, 2016 – The data recorded here are for 2015 -2016 for France.

\*5 - UKEssays, 2018 – This data is for the year 2000.

\*6 - Hubble and Bolton, 2021 – For years 2019/20.

There is a considerable difference in the percentage of those who declared a disability in France (1.2% in 2006) and the percentage of SWDs that were enrolled as undergraduates in the USA (25.4% in 2017) and 17% in England. This percentage of students in the USA has been taken from a sample of enrolled undergraduate students, which might include students who might not have disclosed their disability at the time of enrollment. In the case of Germany as well the data is reported from a survey study of university students who reported that they had a disability. Among the types of disabilities sensory deficiency, physical deficiency, health problems, and psychological disorders were reported the most among these developed countries. Corre’s, 2016, study in France reveals that students with disabilities are more likely to enroll in technological university institutes and Arts, Languages, and Humanities degree programs than in the Law, Economics, Management, and Healthcare study tracks (Corre, 2016)

Beckman et al., 2016 also recognize that the huge disparities observed among the disability prevalence rates are due to the differences in how disability is defined and identified. The authors refer to a study in Liberia that revealed that only blindness, deafness, and physical disabilities are recognized as disabilities, with cognitive impairments erroneously labeled as "crazy." Similarly, another 2011 participatory research in Tanzania encountered cultural interpretations of disability influencing prevalence rates. Here, albinism was readily understood as a disability, while conditions like attention deficit disorders, autism, and hyperactivity were dismissed by one head teacher as "Western problems" with no local equivalent (Beckman et al., 2016). According to Thompson (2020) and data from 35 low- and middle-income countries, the average university completion rate for students with disabilities is around 4.5% for those aged 25-54 compared to 7.9% for their peers without disabilities. The gap persists in older age groups, with only 1.8% completing higher education compared to 3.7% without disabilities in 34 countries (Thompson, 2020).

For instance, in Egypt the attendance rate for persons with disabilities is 45.2 percent for the age group 5-14 (this group includes majority of the secondary education age groups) and 24 per cent for the 15-24 age (This group includes the SWDs in the higher education group students) (Contin et al., 2022).

	Bahrain	Egypt	Iraq	Mauritania	Morocco	Oman	Palestine	Yemen
With disability	31	14	16	14	18	18	28	18
Without disability	56	54	40	27	45	51	56	36

Table: 2.4.2: Percentage of Attendance School for Students with Disability within 15–24 age cohort in the Arab Region 2018

Source: (Contin et al., 2022).

When comparing country-specific data from a study among Middle Eastern and North African countries it is revealed that there is a significant variation in the levels of higher education

attainment among these countries (Ngo and Bjork, 2018). Higher education attainment among these countries varies. For instance, the level of higher education among students with disability in Bahrain is 8.9 % compared to those without disability at 7.1 %. This is the only country that has the figures opposite to the other countries. However, most of the countries have very low numbers such as 0.8 % in Oman for students with disabilities in higher education (Ngo and Bjork, 2018).

A publication by UNESCO in 2009 on the Policy Guideline on Inclusive Education states that a higher level of education leads to better earnings with better health and long life. Excluding people with disabilities from education costs us all for instance 7.7% of GDP in Canada alone. Disability poses a substantial economic challenge across the globe. Europe and Central Asia suffer the most, losing an estimated 35.8% of their GDP due to disability. North America, East Asia, and the Pacific are not far behind, with losses of 29.1% and 15.6%, respectively. The impact ripples throughout other regions as well, with losses exceeding 6% in Latin America and the Caribbean and surpassing 4% in the Middle East and North Africa, Sub-Saharan Africa, and South Asia (UNESCO, 2009). As of 2023, India stands out as the most populous country globally. However, the National Center for Promotion of Employment of Disabled People (NCPEDP) reported in 2015 that, despite a 3% reservation for disabled students (presently, this has increased to 5%), a mere 0.56% of students were admitted to India's top 150 colleges, universities, and institutes. The survey from 2015 further disclosed that among these students with disabilities, the highest percentage (55%) had orthopedic disabilities, while learning and mental disabilities constituted 9%. In comparison, the 2014 survey noted a slightly higher enrollment of students with disabilities at 0.63%, with 46.7% having orthopedic disabilities, 32% having visual impairments, 5% facing speech and hearing impairments, and 16% having other disabilities (Sharma, 2015).

The above global patterns in disability prevalence and inclusive education at the higher education level, this section examines the situation in Sri Lanka. According to the 2012 population census data, among individuals aged 5 years and above with disabilities, a mere 1.3% held an undergraduate degree or higher (Dorabawila et al., 2022). This notably low figure is attributed to deficiencies in implementing inclusive educational practices, both at the secondary education level and in higher education. Sri Lanka grapples with the absence of a comprehensive database encompassing individuals with disabilities, extending this gap into the higher education sector.

However, the 2017 time-use survey in Sri Lanka successfully gathered information on persons with disabilities from a selected sample of households.

According to the 2017 data from the Sri Lankan Time-Use survey, as gathered by the Department of Census and Statistics (DCS), approximately 32% of individuals with disabilities in the age brackets of 10-20 and 20-30 had never attended school. Among these individuals, the majority were those with autistic, physical, hearing, and speech disabilities. Within the mentioned age groups, 18% and 11%, respectively, of persons with disabilities attended special schools. Despite Sri Lanka having ratified relevant conventions and implemented policies for persons with disabilities, the full or partial realization of inclusive education remains incomplete. Notably, in the 20-30 age group, there were no individuals with a degree or those currently enrolled in a university. The table below provides a breakdown of persons with disabilities above the age of 30 who possess a university degree, categorized by the field of study.

Degree Type	(2) Autis/ Persons with special needs	(3) Mental disability	(4) Hearing Impaired	(5) Physically disabled	(6) Speaking Impaired	(7) Visual Impaired	(8) Other	Total	%
No Degree	41	75	90	242	25	48	43	564	98.3
Arts (53) (48) (84)	0	0	0	2	0	0	1	3	0.5
Engineering (72-7)(43-8)	0	0	0	0	0	1	1	2	0.3
Management (55)(30-4)	0	0	1	0	0	0	1	2	0.3
Commerce(86)	0	0	0	1	0	0	1	2	0.3
Science (60)	0	0	0	1	0	0	0	1	0.2
Total	41	75	91	246	25	49	47	574	100

#### 2.4.3: Persons with Disability with a Degree by Field of Study – 2017

Note: Source of data – DCS – Time-use data 2017

1. In the Degree Type column within the bracket is the age of the person and followed by the column number given above to indicate the type of disability.

There were only 1.7% of the total persons with disability with a degree from any field of study whose age ranged between 30 and 72 years.

The person who is with an engineering degree is 72 years old with a visual impairment. There is a possibility that this person developed the visual impairment later in life. The Majority of the PWDs have obtained a degree in the Arts stream followed by two from management.

Despite being eligible for university admission, only a minute 0.2% of applicants successfully entered in 2012/2013. Among them, a mere 0.003% were SWDs, highlighting the obvious lack of equal opportunities in Sri Lankan higher education. The Sri Lankan University Grants Commission in admitting students to state universities restricts to just four academic disciplines - Arts, Commerce, Biological Science, and Physical Science - significantly constrains the educational choices available to SWDs, perpetuating unequal opportunities in higher education. In addition, SWDs are admitted to the state universities on a special intake at a lower criterion as long as they fulfill the minimum admission criterion than the peer students without disability (UGC, 2014).

## **2.5. Evolution of Inclusive Education Policies:**

### **2.5.1. International frameworks and declarations promoting inclusive education**

The concept of inclusive education has evolved over the centuries, with various historical movements and ideologies contributing to its development. These precursors laid the groundwork for the formalization of inclusive education policies in the later 20th century. One of the pioneering initiatives can be identified as early education reform movements. In 18th and 19th-century thinkers like Jean-Jacques Rousseau and John Locke emphasized the importance of individualized education and respect for children's natural abilities, regardless of their background or abilities (Rousseau, 1762 & Locke, J. (1690)). Then, the next closest was the special education movement.



The late 19th and early 20th centuries saw the emergence of special education as a separate field, providing specialized support for students with disabilities. However, this approach often led to segregation and limited access to mainstream education (Cruickshank, 1975 & Mittler, 2000). In the 1950s and 1960s came the civil rights movement. The fight for civil rights and equal opportunities in the 1950s and 1960s included advocating for the rights of people with disabilities and challenging discriminatory practices in education and other spheres (Brown, 1954 & Americans with Disabilities Act of 1990). In the 1970s, the normalization and integration movements gained momentum and argued for the inclusion of people with disabilities in all aspects of society, including education (Wolfensberger, 1972, & Stainback, W., & Stainback, S., 1990). These shifts in perspective paved the way for a more inclusive approach towards education.

The Salamanca Statement on Inclusive Education, adopted by UNESCO in 1994, marked a pivotal moment in the development of inclusive education policies. This landmark document emphasized the right of all children to quality education within their communities and challenged the traditional model of segregated special education. The following salient points guide towards the materialization of inclusive education in the Salamanca Statement's key principles. One is inclusion is identified as the fundamental principle where all children, regardless of their abilities, should have access to quality education in mainstream schools. Two is that regular schools should accommodate all children and schools should be equipped to meet the diverse needs of all learners, providing individualized support and removing barriers to participation. And three is inclusive education is an ongoing process and implementing inclusive education requires continuous effort and collaboration among educators, policymakers, families, and the community (UNESCO, 1994).

Following the Salamanca Statement, several international frameworks and declarations have further solidified the global commitment to inclusive education. Of these, one of the significant conventions are the UN Convention on the Rights of Persons with Disabilities (CRPD) (2006). This is legally binding treaty that recognizes the right of all persons with disabilities (PWDs) to education on an equal basis with others.

YEAR	CONVENTION, STATUTE, GUIDELINE OR FRAMEWORK
<b>International</b>	
1948	Universal Declaration of Human Rights
1960	UNESCO Convention Against Discrimination in Education
1989	UN Convention on the Rights of the Child
1990	World Conference and Declaration on Education For All, Jomtien
1993	UN Standard Rules on Equalization of Opportunities for Persons With Disabilities
1994	Salamanca Statement and Framework for Action on Special Needs Education
2015	Sustainable Development Goals (SDGs) -The Education 2030 Agenda
2016	Convention on the Rights of Persons with Disabilities (2006)
2017	Marrakesh Treaty for persons with visual impairment or print disabled (2013)

Table; 2.5.1.1: International Legislatures for PWDs Adopted by Sri Lanka

Source:

1. Grimes, P., et al., 20211.
2. CRPD Office Sri Lanka, 2019

The Committee on the Rights of PWDs in 2016, further, introduced a set of “General comments” for States, on education, under Article 24 explaining and interpreting the right to inclusive education for all persons of disability. Article 24 highlights the importance of lifelong learning and states that Governments should ensure that PWDs can access higher education, vocational training, adult education, and lifelong learning without discrimination and on an equal basis with others (United Nations, 2007; UNICEF, 2017 & Dorabawila et al., 2022).

The Education 2030 Agenda is a global framework adopted by all United Nations Member States in 2015 to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. It is part of the wider Sustainable Development Goals (SDGs) and is specifically linked to Goal 4: Quality Education. The third of the seven key targets of the Education 2030 Agenda focuses on higher education which states “Ensure equal access for all women and

men to affordable and quality technical, vocational and tertiary education, including university.” (World Education Forum, 2016 & Dorabawila et al., 2022)

The Incheon Declaration (2015) refers to a document adopted at the World Education Forum in 2015, held in Incheon, Republic of Korea. This reaffirms the commitment to inclusive education: This is a call for governments and other stakeholders to take concrete steps to ensure that all children have access to quality education and can reach their full potential (World Education Forum, 2016).

Beyond the overarching impact of global legislation, numerous countries have implemented their impactful policies and acts that have demonstrably influenced the adoption and progress of inclusive education. Starting in the 1990s, developed countries embraced sweeping measures to boost disability inclusion that broaden the access of young adults with disabilities to tertiary education. Laws like the US's Americans with Disabilities Act, the Higher Education Opportunity Act (2008), and UK's Disability Discrimination Act, and the Equality Act (2010) banned bias and guaranteed equal access to higher education, employment, and public services. Others, like France's Equality Law, compelled schools and universities to enroll students with disabilities and provide necessary support. Ultimately, these diverse regulations, with varying degrees of enforcement, have been able to bridge the gap to a certain extent for young adults with disabilities compared to the developing countries, granting them freedom of access and opportunity in higher education (OECD, 2008 and Kioupi et al., 2023).

The above international frameworks have served as powerful tools for advocating for inclusive education policies and practices at national and local levels, both in developed and developing countries. They have played a crucial role in shaping the global discourse on educational inclusion by providing a common reference point for stakeholders around the world. For instance, the Salamanca Statement has directly influenced the development of national inclusive education policies in numerous countries, while the Convention on the Rights of Persons with Disabilities has established a legal framework for ensuring inclusive education as a fundamental human right.

### **2.5.2. National frameworks and declarations promoting inclusive education in a few developing countries and Sri Lanka**

Developing countries have pledged to reform their systems to accommodate inclusive education, having ratified relevant conventions. While inclusive education has been discussed for over two decades, with a particular focus on primary and secondary levels, it has not received sufficient attention at the higher education level in many developing countries including Sri Lanka. Given below are some examples from a few developing countries.

A Middle East disability-inclusive education study report in 2022, states that almost all the policies in the study countries (Jordan, West Bank and Gaza, Morocco, Lebanon, Algeria, Mauritania, Iraq, and Yemen) address inclusive education up to secondary education level. Other than Morocco and Mauritania, all the other countries have some reference to inclusive education in the higher education sector in their policies. But among these countries, there are countries such as Morocco and Jordan that have not realized the importance of inclusive education at the higher education level.

In these countries, disability inclusion efforts in higher education remain limited, often focusing solely on students with visual, hearing, and physical disabilities. Even for these students, while reasonable accommodations are offered, significant barriers persist. Due to the lack of resources and opportunities at the secondary level, the SWDs are admitted to higher education institutes are lower education standards than students with disabilities. This existing gap is further increased by the lack of data and understanding of non-visible disabilities, leaving their absence in HE unexplained. Finally, this study states that the issue is not with having more policies it is rather with enforcing and implementing existing policies.' in these countries (Contin et al., 2022).

A 2011 Kenyan study by Kochung also reveals the harsh reality of SWDs in most developing nations. Overcoming immense hurdles like lack of resources, inaccessible facilities, and discrimination, the majority fall short of completing secondary education. Even those who make it, face rigorous admission criteria and financial obstacles that often prevent them from reaching higher education. Despite adopting international disability conventions, most African countries

lack crucial data on the number of SWDs enrolled in higher education. This data void hinders effective support and hinders efforts to address inclusivity challenges (Kochung, 2011).

In a landmark move towards inclusivity, unlike many developing countries, the Indian Act for the Right of Persons with Disabilities (RPWD) of 2016 guarantees 5% of seats in government and government-aided higher education institutions for people with benchmark disabilities (Government of India, 2016 & Dorabawila et al., 2022). However, as stated above with all these strong legislatures in place in India, a 0.56% poor university enrollment rate brings out a question about the implementation of these policies.

The Sri Lankan Constitution of 1972 enshrines the right to education for all. It mandates the eradication of illiteracy and ensures universal and equal access to education for everyone. This right is considered a fundamental principle of government policy and a core duty of the state. By this, the Constitution explicitly guarantees education from grade 1 to university for all citizens.

The Constitution of Sri Lanka infers the need for disability-inclusive education, though it does not explicitly mention it. It can be stated that the Constitution makes indirect references based on the following clauses in several Articles of the Constitution.

Articles 12.1, 12.2, 27.1, and 29.2 directly and indirectly emphasize the equality of all individuals before the law, asserting their entitlement to equal protection. This highlights the government's responsibility to ensure equitable access to education, extending to people with disabilities. While not explicitly addressing disability, it could be inferred to fall under the category of "other status." Additionally, Article 27.1 specifies that "the State shall promote with special care the educational and cultural interests of minorities." This broad interpretation may encompass the educational needs of people with disabilities, potentially recognizing them as a minority group.

Furthermore, the Sri Lankan government has formally endorsed various international treaties explicitly addressing the right to disability-inclusive education. Notably, Sri Lanka endorsed the Salamanca Statement and Framework for Action on Special Needs Education in 1994, and the

United Nations Convention on the Rights of Persons with Disabilities (CRPD) treaty, dated 2006, was ratified by Sri Lanka in 2016 (Grimes, P., et al., 2021).

YEARS/S	CONVENTION, STATUTE, GUIDELINE OR FRAMEWORK
<b>National Education Specific</b>	
1996	Protection of the Rights of Persons with Disabilities Act No. 28
1997	Compulsory Education Ordinance/General Educational Reforms
2003	National Policy on Disability for Sri Lanka
2013-2017	'Education First' Education Sector Development Framework and Programme (ESDFP) (2013 - 2017)
2018–2025	Education Sector Development Plan 2018–2025
2019–2030	Inclusive Education Plan Sri Lanka 2019–2030
2023 – 2033	National Education Policy Framework (NEPF) - 2023 – 2033

Table; 2.5.2.1: National Education Specific Legislatures for PWDs Adopted by Sri Lanka

Source:

1. Grimes, P., et al., 2021
2. CRPD Office Sri Lanka, 2019

Sri Lanka has implemented several national policies that promote inclusive education. These policies have been identified in detail in the CRPD Country Report 2018 submitted to the Office of the High Commissioner for Human Rights in 2019 (CRPD Office Sri Lanka, 2019).

In a groundbreaking move, the 1997 General Educational Reforms embraced inclusivity for children with disabilities. No longer relegated to separate settings, students with disabilities were welcomed into the heart of learning – the ordinary classroom. This transformed the education landscape, sparking changes in teaching methodologies, curriculum design, counseling approaches, career guidance, school management, and even teacher education, all with the singular goal of empowering students with diverse abilities to thrive alongside their peers. This educational reform document does not refer to inclusive higher education in Sri Lanka.

The National Human Rights Action Plan (NHRAP) for 2017–2021 document's Chapter 6 marks a significant leap forward in recognizing and advancing the rights of persons with disabilities (PwDs) in Sri Lanka. Building on existing frameworks and action plans, it identifies key areas for improvement and outlines concrete actions to achieve tangible progress for PwDs.

In 2013, the “Education First” - Education Sector Development Framework and Programme (ESDFP) (2013 - 2017) policy document strongly advocated a detailed inclusive education plan for the SWDs in the school system. The Ministry of Education (MOE) has taken a major step towards inclusive education by drafting a comprehensive circular. This document outlines key definitions, responsibilities, and guidelines for special education and inclusion, covering areas like disability assessment, early childhood education, and awareness programs for stakeholders (Ministry of Education, 2013).

Reaching university, the gateway to higher education presents a steep climb for students with disabilities in Sri Lanka. They must compete on equal footing with their non-disabled peers, despite diverse disabilities. As of 2013, over 51,000 students with disabilities were there in the school system in Sri Lankan schools ranging from intellectual impairment (18%) and hearing impairment (6%) to visual impairment (20%) and physical limitations (5%). Additionally, 8% of students navigate multiple disabilities, 6% have behavioral challenges, and 34% face learning difficulties. These students access education through both regular classrooms and specialized education units. Some of the challenges faced by the Sri Lankan SWDs are low completion rates due to the struggle to finish compulsory education due to poverty and lack of teacher modern knowledge about appropriate teaching methods. There are only 632 special education teachers, the system lacks sufficient qualified personnel. Special education units and schools lack well-equipped classrooms and resource centers. Due to these challenges, the opportunities for SWDs to continue education beyond basic levels are scarce. For instance, blind students do not learn geometry for mathematics and contours for geography, these are excluded from their syllabi to date, however much the Sri Lankan education system has enforced various policies for inclusive education.

A true story can be revealed by a case study from Sri Lanka that emerged as a result of the Erasmus+ Capacity Building in the Higher Education project “Developing Inclusive Higher Education for Students with Disabilities in Sri Lanka (IncEdu)”.

### **A Story of Brian, a Blind Student Overcoming Educational Barriers:**

**Defying the odds:** Imagine a blind student in Sri Lanka, excelling in middle-level exams with top marks in all nine subjects in 2020. Brian, yearning for a career in science, faced a daunting reality: no blind student had ever ventured into science for their advanced-level exams. His dream seemed impossible.

**Breaking barriers through media:** Undeterred, the student took to the airwaves, sharing his story and aspirations through multiple media outlets. His voice resonated, leading to an unprecedented opportunity: admission to a regular school's science stream.

**Initial hurdles:** Yet, within the school, another obstacle emerged. He was placed in the Arts stream, seemingly isolated from his scientific aspirations. Enter the IncEdu team from the University of Peradeniya, with their international advocates for inclusive education. They saw the injustice and knew they had to act.

**Bridging the gap with UDL:** Through unwavering persistence, the IncEdu team met the school principal and teachers. They introduced them to the concept of Universal Design for Learning (UDL), a framework promoting accessible education for all students. The message resonated, and the student was finally accepted into the science stream.

**Overcoming teacher limitations:** However, simply placing the student in the right class wasn't enough. The teachers, unfamiliar with UDL and its crucial role in supporting students with disabilities, didn't know how to adapt their teaching. The dedicated IncEdu team stepped in again, providing crucial training to the teachers on UDL methods and the use of assistive technologies.



**Empowering future success:** Thanks to the team's unwavering support, the student is now prepared to take his advanced-level exams, not just in any way, but through a computer-based format designed to optimize his learning experience. His story signifies a triumph of determination, innovative solutions, and the power of collaboration to break down educational barriers.

Recognizing the critical role of education in achieving economic goals and current deficiencies, the Government assembled a high-level group to formulate and execute a National Education Policy Framework (NEPF) - 2023 – 2033 in April 2023, and currently, it is tabled in Parliament for approval. This vision extends beyond students, emphasizing the crucial role of educators. Teachers across all levels, including higher education, will receive continuous training and capacity building to equip them with inclusive practices and deliver enhanced services for students with special needs. It also expects to provide additional support to disadvantaged students, those with disabilities, and minority groups to overcome barriers and achieve success (National Education Commission, 2022). However, this framework also does not posit a specific set of guidelines or criteria that needs to be carried out to achieve inclusive education in Sri Lanka. The document is substantiated by various statistics on education in Sri Lanka but has no data on SWDs in primary, secondary, or tertiary education. Data collection and reporting of students with disability is integral for monitoring, evaluating, and assessing the progress of inclusive education in the country.

The “Education First” policy did not have specific reference to a plan for higher education while NEPF does address a separate section on higher education. But in that section, no reference is made to students with disability though it mentions inclusive education. Unless the higher authorities are sensitive and give some prominence from the policy formulation stage the SWDs will not receive due attention at all levels of their education.

The implementation of the Erasmus+ IncEdu project activities in Sri Lanka had an enormous impact on inclusive education in higher education. The project was mainly implemented in three state universities and one private university. From the inception of the project, it worked with the University Grant Commission which is the apex governing body of the universities in Sri Lanka. Along with the commencement of the project activities the UGC issued a circular requesting all

state universities to establish a supporting centre for the SWDs in 2021. Furthermore, several state universities adopted university disability policies and standard operating procedures in recognizing the rights of persons with disabilities. UGC of Sri Lanka also drafted a Policy Framework for Persons with Disabilities in the Higher Education Sector, in Sri Lanka in 2022. However, the UGC has not been able to adopt this up to now.

## 2.6 Other Policies that Support SWDs

There are several other policies and laws presented in Table 1.6 below that have been enforced in Sri Lanka that can have remarkable impacts on the progression of persons with disability in the country.

YEAR	CONVENTION, STATUTE, GUIDELINE OR FRAMEWORK
<b>National General</b>	
1988	Public Administration Circular No. 27 promotes inclusivity in the public sector by mandating that 3% of all vacancies in public services and companies be filled by talented individuals with disabilities who meet the job requirements and can effectively perform their duties.
1992	<i>1992 Trust Fund Act for the Rehabilitation of the Visually Handicapped</i> provides for education and training opportunities; financial assistance; housing provision and welfare schemes; marketing of products made by people with visual impairments; action to eliminate conditions which prevent gaining of equal rights and opportunities.
1999	The Special Educational Society (Incorporation) Act No. 3 aims to comprehensively support people with disabilities through various initiatives such as education, social inclusion, financial assistance, rights protection, basic needs, and livelihood opportunities.
2006	2006 Disabled Persons (Accessibility) Regulations in Sri Lanka set specific standards for accessible design in new construction, require existing buildings to

	become accessible within three years of the regulations' enactment, make 10% of public transportation accessible to PWDs,
2014	2014 National Action Plan for Disability has a vision to empower and mobilize differently abled people as equal contributors to society. Action plan focuses on empowerment, health and rehabilitation, education, work and employment, mainstreaming and enabling environments, data and research, and social institutional cohesion.
2016	The 2013 Marrakesh Treaty facilitates access to published materials for persons with visual impairment or print disabled.
2016	National Action Plan for the Protection and Promotion of Human Rights 2017 - 2021 - Chapter 6 - Rights of Persons with Disability.

Table 2.6.1: National General Legislatures for PWDs Adopted by Sri Lanka

Source: 1. Grimes, P., et al., 2021  
 2. CRPD Office Sri Lanka, 2019

The 2006 Disabled Persons (Accessibility) Regulations, though a commendable stride toward inclusivity, have not been fully realized in terms of widespread accessibility in Sri Lanka, especially within public transportation. This legislation emphasizes the need for improved traffic safety and accessibility by mandating intersections to have audible and automatic visual signals, catering to individuals with vision and hearing impairments. Despite establishing clear standards for new constructions, setting accessibility deadlines for existing structures, and stipulating a minimum of 10% accessibility for public transport, implementation remains a significant challenge. Nearly two decades later, no transportation system fully or partially meets the 10% minimum accessibility requirement, and no traffic lights feature audible and automatic visual signals in Sri Lanka. These high lights systemic obstacles in enforcing the regulations.

In the realm of higher education in Sri Lanka, physical accessibility poses a substantial barrier for students with disabilities, in stark contrast to secondary education. This critical stage of life marks a transition to independence, and if students with disabilities must rely on family or peers for

transportation to the university and participation in various activities, the environment cannot be deemed inclusive and accessible. Several studies in Sri Lanka underscore the extremely poor accessibility to universities (Hettiarachchi et al., 2014; Yatigamma et al., 2021). University authorities must ensure a transportation mechanism for these students and simultaneously guarantee that university buildings are accessible to individuals with disabilities. Except for the Faculty of Arts at the University of Peradeniya, the majority of state universities in Sri Lanka lack accessibility for individuals with disabilities. Therefore, addressing accessibility should adopt a holistic approach beyond transportation. In the Sri Lankan context, as well as in many developing countries, advocating for and implementing accessible public spaces, workplaces, and services is crucial to fostering a truly inclusive society.

The 2013 Marrakesh Treaty facilitates access to published materials for persons with visual impairment or print disabled. This is an international copyright treaty that has been enforced since 2017 in Sri Lanka. It aims to reduce the global shortage of print materials in special accessible formats for visually impaired persons (CRPD Office Sri Lanka, 2019).

The National Action Plan for the Protection and Promotion of Human Rights 2017–2021 is a comprehensive document crucial for Sri Lanka, provided it is effectively implemented. Chapter 6 of this action plan focuses on the rights of persons with disabilities, particularly in the tertiary education sector. The Ministry of Education is identified as responsible for various provisions in higher education institutions. These include the provision of reasonable accommodations to ensure accessibility of the built environment, communications, and information for students with disabilities. Another aspect is the availability of teaching and learning materials in accessible formats. This is a major issue in many public and private universities in Sri Lanka. It has become an issue due to a lack of awareness about the importance of inclusive education in higher education. The academic and non-academic staff are unaware of the available assistive technologies and teaching and learning methods (Yatigamma et al., 2021) The plan also advocates for the development of a quota system to facilitate the access of persons with disabilities to education across all fields of study. Importantly, it addresses intra-disability sector marginalization, ensuring equitable benefits for individuals with various disabilities (Government of Sri Lanka, 2016).

Moreover, the plan incorporates evaluation criteria to gauge progress in meeting these requirements. This involves conducting audits of all tertiary education centers to assess levels of accessibility, the percentage of students with different types of disabilities, recommendations for improvements, the percentage of universities with accessible materials, and the enrollment rate of students with disabilities. Short-term reviews are also conducted to continually assess progress. In addition, one critical aspect lacking in the higher education system is a comprehensive database on persons with disabilities.

## **2.7 Conclusion**

In this detailed exploration of "Policies and Issues in Developing Inclusive Education in Higher Education for Students with Disabilities in Developing Countries," with a special focus on Sri Lanka, this journey has unraveled the complexity of challenges, policies, and trends shaping the landscape of inclusive higher education. As we conclude this chapter, several key insights emerge, shedding light on the global discourse and Sri Lanka's distinctive position in this narrative.

The investigation into global trends reveals significant disparities in disability prevalence rates and inclusive education practices across developed and developing countries. Developed nations, with their well-established policies and resources, exhibit higher enrollment rates and diverse representations of disabilities in higher education. Conversely, developing countries, constrained by resource limitations and systemic challenges, grapple with lower enrollment rates and limited educational choices for students with disabilities.

Turning our focus to Sri Lanka, a nation with a rich multifaceted cultural landscape, our exploration underscores the unique challenges faced by students with disabilities in accessing higher education. Despite Sri Lanka's commitment to inclusivity in its education system, barriers persist, as evidenced by low enrollment numbers, restricted academic disciplines, and the need for a more comprehensive database to inform inclusive policies.

These conventions, statutes, guidelines, policies, and frameworks in Sri Lanka and many other developing countries encompass a broad spectrum of areas essential for the comprehensive implementation of an inclusive environment benefiting all persons with disabilities (PWDs).

However, a notable challenge emerges as these countries significantly lag in achieving inclusive education, particularly in the higher education sector. A critical factor contributing to this disparity is the absence of visionary leadership to spearhead this transformative process.

To illustrate, Croatia stands out as an example where an Ombudswoman for persons with disabilities has played a pivotal role. Endowed with the responsibility to protect, promote, and monitor the rights of persons with disabilities in Croatia, the Ombudswoman has successfully advocated for the rights of this community. Her proactive approach and effective communication with authorities have resulted in tangible advancements for persons with disabilities in Croatia, showcasing the impactful role that dedicated leadership can play in driving inclusive initiatives. This emphasizes the need for similarly committed and influential figures and groups in other countries to champion the cause of inclusive education in general and specifically in higher education and propel positive change.

The pivotal role of policies in fostering inclusive education becomes evident throughout the discussion. Policies serve as the bedrock for ensuring equal opportunities, guiding resource allocation, promoting systemic transformation, and raising awareness. They provide a roadmap for progress, holding governments and education systems accountable for creating an inclusive educational landscape.

Highlighting the economic implications of excluding people with disabilities from education, our exploration draws attention to the substantial economic challenges faced globally. The loss in GDP due to disability highlights the urgency of prioritizing inclusive education as an investment in human capital, economic growth, and societal well-being.

For Sri Lanka, the data reveals a need for urgent action to bridge the gap in inclusive higher education. The constraints imposed by limited academic disciplines, special intakes, and the absence of a comprehensive database call for a reevaluation of policies to ensure broader choices, equal opportunities, and a more inclusive higher educational system.

As we navigate the intricate terrain of inclusive education, the insights gleaned from global trends and Sri Lanka's context provide a foundation for envisioning a more inclusive future. The journey toward inclusive higher education demands collaboration, innovative policies, and a collective commitment to dismantling barriers. Sri Lanka stands at a crossroads, poised to reshape its higher education landscape and pave the way for a future where every student, regardless of ability, can fully participate, achieve, and contribute to the wealth blend of knowledge and innovation. In this collective endeavor, policies will play a pivotal role in shaping and guiding to a more inclusive, equitable, and transformative education system for students with disabilities in developing countries.

**Reference:**

Alghaib, O.A., Schoeman, M., Deluca, M., 2019. Inclusive education for persons with disabilities – Are we making progress? (UNESCO report). Leonard Cheshire.

Beckman, P.J., Abera, N., Sabella, T., Podzimek, K., Joseph, L., 2016. From Rights to Realities: Confronting the Challenge of Educating Persons with Disabilities in Developing Countries *Global Education Review*, 3 (3). 4-27.

Contin, R., Khochen-Bagshaw, M., Stephsn, C., Khoury, N., 2022. Middle East Education, Research, and Training Support **DISABILITY INCLUSIVE EDUCATION STUDY** Roberta Contin, Maha Khochen-Bagshaw, Carole Stephan, and Natalie Khoury.

Corre, F., 2016. Students with disabilities in higher education - France. *High. Educ. Res. Fr. Facts Fig.* 9th Ed. - Novemb. 2016.

CRPD Office Sri Lanka, 2019. Initial report submitted by Sri Lanka under article 35 of the Convention 2018.

Cruickshank, W. M., 1975. The historical roots of special education. In W. M. Cruickshank &

D. P. Hallahan (Eds.), *Perceptual and Learning Disabilities in Children* (Vol. 1, pp. 1-21). Syracuse University Press.

De Beco, G., 2022. The Right to 'Inclusive' Education. *Mod. Law Rev.* 85, 1329–1356.  
<https://doi.org/10.1111/1468-2230.12742>

Department of Census and Statistics, Sri Lanka (2020). *Time Use Surveys Sri Lanka*.  
<https://nada.statistics.gov.lk/index.php/catalog/449>

Dorabawila, S., Yatigammana, S., Abhayaratne, A., 2022. Inclusive Education and Sustainable Development: Challenges and Opportunities in Higher Education for Students with Disabilities, in: *The Wiley Handbook of Sustainability in Higher Education Learning and Teaching*. Wiley-Blackwell, 2022.

Evans, C., Zhu, X., 2022. *The Disability Inclusion Institutional Framework (DIIF)*. University of Lincoln, UK, University of Southampton, UK.

Eve Hill, J.D., Shaewitz, D., Queener, J., 2020. *Higher Education's Next Great Challenge: Ensuring Full Inclusion for Students with Disabilities*. Institute for Educational Leadership, Washington, DC.

Grimes, P., et al., 2021. *Disability-Inclusive Education Practices in Sri Lanka*.

Government of Sri Lanka, 2016. *National Human Rights Action Plan 2017-2021*.

Hettiarachchi, S., Attanayake, L.D., Ranaweera, M. et al. (2014). Accessing tertiary education: expectations and realities for students experiencing disabilities. *Journal of the Faculty of the Graduate Studies* 3: 147–170.

Hubble, S., Bolton, P., 2021. *Support for disabled students in higher education in England (BRIEFING PAPER Number 8716)*. House of Commons Library.



- Kauffman, J., Anastasiou, D., Felder, M., Lopes, J., Hallenbeck, B., Hornby, G., Ahrbeck, B., 2022. Trends and Issues Involving Disabilities in Higher Education. *Trends High. Educ.* 2, 1–15. <https://doi.org/10.3390/higheredu2010001>.
- Kioupi, V., Nawire, A.W., Musungu, S., Nzuve, F., Giannopoulos, G., 2023. Policy and Practice on Inclusive Higher Education in the UK and Kenya: A Theoretical Framework and Recommendations. *Sustainability* 15, 13540. <https://doi.org/10.3390/su151813540>.
- Kochung, E.J., 2011. Role of Higher Education in Promoting Inclusive Education: Kenyan Perspective. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)* 2(2):81-87 (ISSN:2141-6990).
- Locke, J. (1690). *An Essay Concerning Human Understanding*.
- Lord et al., J., 2017. Needs assessment of persons with disabilities in egyptian public universities and regional technical colleges.
- Ministry of Education, 2013. *Education First Education Sector Development Framework and Programme 2013 - 2017*.
- Mittler, P. (2000). *A History of Special Education*. Routledge.
- National Education Commission, 2022. *National-Education-Policy-Framework-2020-2030*.
- Ngo, L., Bjork, A., 2018. *Disability in the Arab Region 2018*. United Nations Economic and Social Commission for Western Asia, Beirut, Lebanon.
- OECD, 2008. *Pathways for People with Disabilities Towards Tertiary Education and Employment: Preliminary Findings from A Literature Review Covering Selected OECD Countries [WWW Document]*. URL

[https://one.oecd.org/document/EDU/EDPC/SEN\(2008\)10/En/pdf](https://one.oecd.org/document/EDU/EDPC/SEN(2008)10/En/pdf) (accessed 12.18.23).

Rousseau, J.-J. (1762). *Emile, or On Education*.

Sharma, N.C., 2015. India's top 150 colleges have less than 1 per cent disabled candidates [WWW Document]. *India Today*. URL <https://www.indiatoday.in/india/story/india-top-colleges-disabled-student-candidates-247190-2015-02-13> (accessed 12.25.23).

Stainback, W., & Stainback, S. (1990). *Support networks for inclusive schooling: Interdependent integrated education*. Paul H. Brookes Publishing Co.

Thompson, S., 2020. Developing disability-inclusive higher education systems [WWW Document]. *Univ. World News*. URL <https://www.universityworldnews.com/post.php?story=20200122104602834> (accessed 12.21.23).

University Grants Commission (UGC), 2014. *Annual Report – University Grant Commission – 2014*. University Grant Commission

UKEssays, 2018. *Students with Disabilities in Higher Education in Germany* [WWW Document]. URL <https://www.ukessays.com/essays/education/students-with-disabilities-in-higher-education-in-germany-education-essay.php> (accessed 12.23.23).

UNESCO, 2020. *Higher education and inclusion (Background paper prepared for the 2020 Global Education Monitoring Report No. ED/GEMR/MRT/2020/P1/19)*.

UNESCO, 2016. *Education 2030: Incheon Declaration and Framework for Action: towards inclusive and equitable quality education and lifelong learning for all* [WWW Document]. URL <https://unesdoc.unesco.org/ark:/48223/pf0000243278> (accessed 12.10.23).

UNESCO, 2009. *Policy guidelines on inclusion in education*. U. N. Educ. Sci. Cult. Organ. Fr. UNESCO 2009.

UNICEF, U.R.O. for E. and C.A., 2017. Inclusive Education - Understanding Article 24 of the Convention on the Rights of Persons with Disabilities. Incl. Educ. Reg. Off. Eur. Cent. Asia Palais Nations CH-1211 Geneva 10 Switz.

United Nations, 2007. Text of the Convention on the Rights of Persons with Disabilities [WWW Document]. URL <https://www.un.org/esa/socdev/enable/rights/convtexte.htm> (accessed 12.10.23).

Welding, L., 2023. Students with Disabilities in Higher Education: Facts and Statistics | BestColleges [WWW Document]. URL <https://www.bestcolleges.com/research/students-with-disabilities-higher-education-statistics/> (accessed 12.22.23).

WHO 2011. World Report on Disability.

[http://www.who.int/disabilities/world\\_report/2011/report.pdf](http://www.who.int/disabilities/world_report/2011/report.pdf).

Wolfensberger, W. (1972). Normalization: The principle of normalization in human services. National Institute on Mental Retardation.

Yatigamma, S., Dorabawila, S., and Abhayaratne, A. (2021). Developing inclusive education for students with disabilities in Sri Lankan universities – IncEdu Need Assessment Report, Survey.

## CHAPTER 3

# Attitudes of Lecturers in Sri Lankan Higher Educational Institutes towards teaching with SWDs

*Chandani Dissanayake, Achini Gamage*

### 3.1 Introduction

Inclusive education is a core aspect aimed at providing equal opportunities to all individuals, including those with disabilities. It underscores the idea that every child should have the opportunity to learn together, regardless of any challenges or distinctions they may face (Monteiro et al., 2012). This philosophy is rooted in the belief that educational institutes should cater to the requirements of all students, regardless of their abilities or disabilities, to ensure that every student can access the social advantages of education. Moreover, numerous research studies have emphasized the pivotal role of teachers' attitudes toward students with disabilities in establishing inclusive learning environments. Teachers assume a significant responsibility in implementing inclusive education and fostering an atmosphere that accommodates the learning needs of students with disabilities. Research consistently demonstrates that educators' attitudes and beliefs concerning teaching students with disabilities profoundly influence the success of inclusive education practices (Fu et al., 2021).

Teachers are widely recognized as essential contributors to the effective implementation of inclusive education, as they hold a crucial role in the integration of students with disabilities into regular classrooms. The attitudes of teachers hold significant importance in ensuring the success of inclusive practices. The effectiveness of an inclusive program can be jeopardized when regular classroom teachers maintain unfavorable attitudes towards the inclusion of students with disabilities. Hence, it is not sufficient to merely prioritize inclusive education as a fundamental component of the education system; the attitudes of teachers towards inclusion are equally crucial (Singh et al., 2020). Teachers' attitudes play a pivotal role in ensuring the successful execution of

inclusive education and have a profound impact on the teaching and learning dynamics within the classroom. In line with the findings of Goddard and Evans, attitudes toward inclusion among primary pre-service teachers tend to be generally positive and tend to strengthen over the course of their training years.

It is important to acknowledge that educators' attitudes towards teaching students with disabilities can differ significantly. Some educators have positive attitudes and beliefs, recognizing the value of inclusive education and its advantages for all students. On the contrary, there are educators who have negative attitudes, perceiving the inclusion of students with disabilities as potentially troublesome or disruptive to the classroom environment. The crucial role of teachers' attitudes and beliefs in facilitating children with disabilities has been underlined by numerous studies. These studies emphasize the necessity for educators to have positive attitudes towards teaching students with disabilities to promote an inclusive learning environment effectively. Research consistently shows that teachers' attitudes towards teaching students with disabilities have a substantial impact on the success of inclusive education practices. Educators with positive attitudes towards inclusion are more inclined to adapt instructional materials and methodologies to accommodate the needs of students with disabilities, as evidenced by Jamsai (Jasmai,2019). Moreover, these educators tend to set high expectations for students with disabilities and offer the necessary support for their success.

On the contrary, studies have revealed that educators with negative attitudes towards inclusion tend to have lower expectations for students with disabilities and may inadvertently create an unwelcoming or unsupportive environment for these students. Additionally, these negative attitudes can adversely affect students' self-esteem and motivation to learn.

Therefore, it can be identified that the attitudes of educators play a pivotal role in shaping the educational experiences of students, which emphasizes the integration of students with disabilities into mainstream classrooms, has gained widespread recognition as an essential component of modern educational systems. In this context, the attitudes of lecturers, or higher education instructors, toward teaching students with disabilities become particularly significant.

Thus, this particular study explores the attitudes of Lecturers in Sri Lanka educational institutes when it comes to teaching to students with disabilities (SWDs). The principle aim of conducting this study is that researching the attitudes of lecturers or teachers towards teaching students with disabilities serves several important purposes such as understanding how lecturers' attitudes help in designing training programs and professional development that address their specific needs and misconceptions, to promote the inclusive education which is to show that how it helps to gauge the extent to which inclusive education principles are being implemented in classrooms, to identify barriers or challenges lecturers face when teaching students with disabilities, and most importantly to foster the quality education for all since the attitudes of lecturers can significantly impact the quality of education students with disabilities receive. Positive attitudes can enhance the learning experience, while negative attitudes can hinder it.

Additionally, the successful implementation of inclusive practices within higher education institutions hinges on the willingness, openness, and beliefs of lecturers. These educators are entrusted with the critical task of imparting knowledge and fostering an inclusive learning environment where all students, regardless of their abilities or disabilities, can thrive academically and personally. Hence, understanding the attitudes of lecturers towards teaching students with disabilities is a matter of great importance in the pursuit of equitable educational opportunities.

### **3.2 Literature Review**

The most of the available publications focus on understanding the attitudes of lecturers towards SWDs, identifying the factors that affect these attitudes, and investigating potential strategies for fostering a positive attitude and inclusive teaching practices (Matos et al., 2021). While the number of publications is not considerable, the existing literature provides valuable insights into this specific context and sheds light on the challenges faced by lecturers in supporting SWDs in higher education (Serbati et al., 2020), (hendriarto, p. et al.,2021).

The literature can be categorized into several sub themes such as perception of disability, attitudes towards inclusion, knowledge and preparedness, barriers and challenges, support systems and resources, cultural factors etc. When looking at how lecturers' attitudes towards disability and their

understanding of disability rights and equality impact their interactions with SWDs, it can be identified that some lecturers may hold misconceptions or stereotypes about disabilities, which can influence their teaching approaches and support provided to SWDs (Carabajal et al., 2017). The literature suggests that a change in lecturers' attitudes towards students with disabilities is imperative (Kurniawati & Novita, 2018). To overcome the hindrance facilitators encounter while instructing these students effectively, it's crucial to establish a nurturing and inclusive atmosphere, coupled with offering relevant training and resources. Sri Lankan university academics exhibit differing attitudes towards students with disabilities, reflecting a spectrum of perspectives (Hettiarachchi & Das, 2014). It is vital to recognize and address these variations, working towards fostering a more inclusive and supportive atmosphere within higher educational institutions. The implementation of training initiatives and awareness campaigns holds significant potential in reshaping attitudes and advancing the cause of inclusive education.

In line with existing literature, the findings underscore elevated levels of anxiety concerning reasonable adjustments and a clear demand for additional training and support (Almutairi, 2022). Notably, the data also underscores a deficiency in understanding the legal obligation and responsibility to implement reasonable adjustments as a means of countering discrimination and exclusion ((Little et al., 2023).

It is important to note that the rate of publication in this subject area is increasing. Over the past decade, there has been a noticeable growth in the number of published studies examining the attitudes of lecturers towards teaching SWDs in Sri Lankan higher educational institutes. This indicates a growing interest in understanding and improving the educational experiences of SWDs in this specific context. In summary, the literature on attitudes of lecturers in Sri Lankan Higher Educational Institutes towards teaching students with disabilities (SWDs) demonstrates a moderate amount of published research. While the quantity of publications is not extensive, the existing literature provides valuable insights into the challenges faced by lecturers and highlights the need for further research in this area. The citation activity suggests that the field is still emerging and has yet to gain significant recognition. However, the rate of publication is increasing, indicating a growing interest in improving inclusive practices in higher education for SWDs in Sri Lanka.

### **3.3 Method**

Lecturers are passionate about teaching. Naturally, they are in thirst of different teaching techniques to transfer their knowledge to the next generation. The most challenging part for them is the diversity within the classroom. In Sri Lankan context, the lecturers face difficulty in managing their task when the classroom is diverse knowledge wise, ability wise, attitude wise, and fluency in handling English. The willingness to adapt several different teaching methods and technology according to the diverse group in the class is a key factor for students being successful in their undergraduate studies. Providing adequate appropriate teacher training programs for the academic staff is mandatory in order to make them ready for such challenges. The personal qualities of lecturers also make an impact on providing quality education in higher education institutes. Considering these facts, it is essential to investigate attitudes of lectures in Sri Lankan higher educational institutes towards teaching students with disabilities (SWDs). For that purpose, the following questionnaire was distributed among lectures in some selected Sri Lankan universities as an anonymous survey.

This questionnaire consists of seventeen questions. Out of these seventeen questions, two questions were designed to get an idea about the participants' background regarding the teaching students with SWDs and ten questions were to understand their attitudes towards teaching students with SWDs.

### **3.4 Results**

42 lecturers had filled the google sheet which was sent as an open invitation. There were 20 female and 22 male lecturers in the sample while 18 were PhD holders and 17 were MSc holders. The responses can be summarized as follows.



## Part 1: Basic Information

There were seven questions for the first part.

Gender.  
42 responses

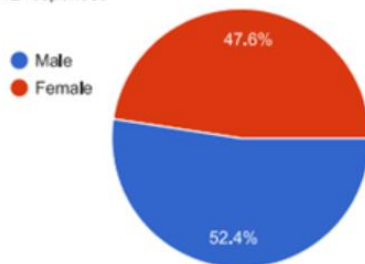


Figure 3.4.1: Gender

Your age group?  
42 responses

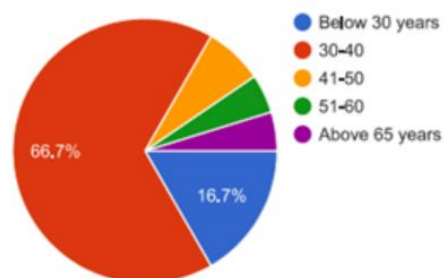


Figure 3.4.2: Age group

Highest education qualification  
42 responses

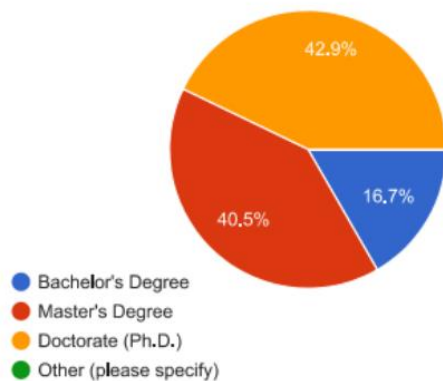


Figure 3.4. 3: Highest Education

Years of experience in higher education teaching.  
42 responses

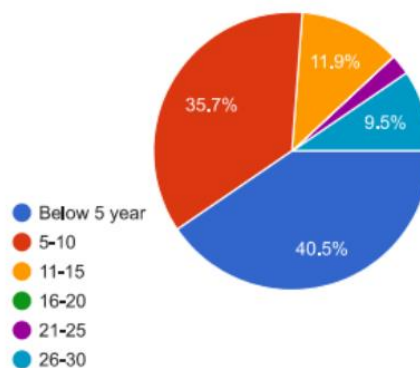


Figure 3.4. 4: Years of Experience

Have you participated in any teacher training programs in higher education?

42 responses

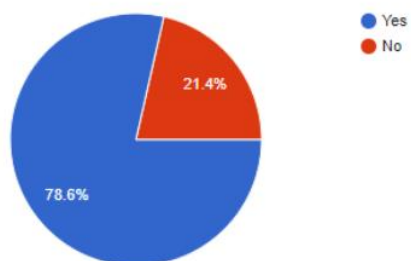


Figure 3.4. 5: Experience in training programs

Do you have any experience in teaching students with disabilities?

42 responses

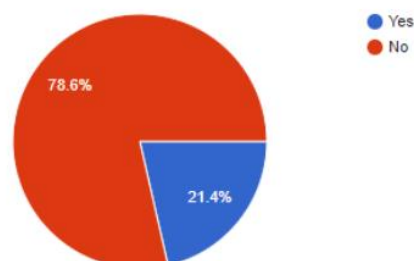


Figure 3.4. 6: Experience with SWDs

Do you have a proper training in teaching students with disabilities?

42 responses

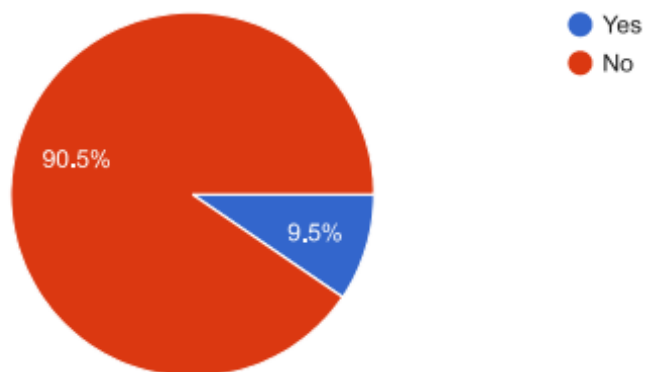


Figure 3.4.7: Training in teaching with SWDs

## Part 2: Attitudes towards teaching students with SWDs in higher education

There were ten questions in the second part of the questionnaire.

I believe that students with disabilities have the potential to succeed academically in higher education.

42 responses

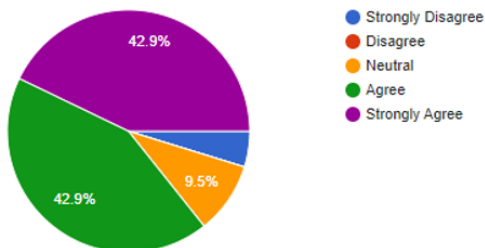


Figure 3.4. 8: Attitudes about potential of SWDs of SWDs

I believe that students with disabilities should be given the same academic standards as their peers.

42 responses

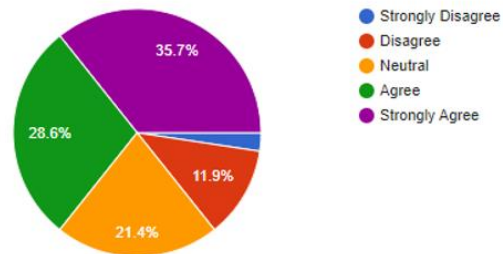


Figure 3.4. 9: Attitudes about the rights of SWDs

I feel confident in my ability to provide effective support to students with disabilities in my classes.

42 responses

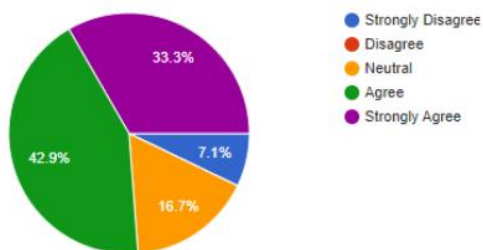


Figure 3.4.10: Confident of the lecturer

I believe that creating an inclusive classroom environment benefits all students, including those with disabilities.

42 responses

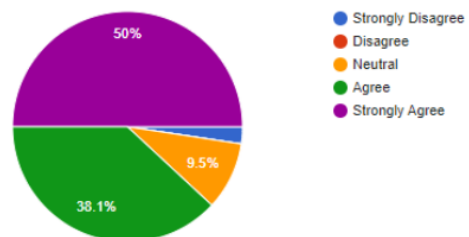


Figure 3.4.11: Importance of inclusive classrooms

I am willing to make necessary accommodations to ensure equal access for students with disabilities.

42 responses

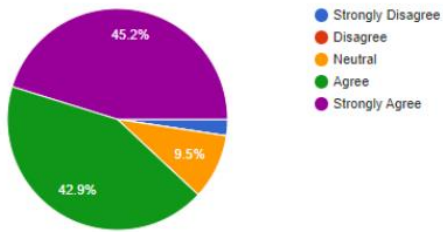


Figure 3.4.12: Flexibility to work

I am open to adapting my teaching methods to accommodate the diverse needs of students with disabilities.

42 responses

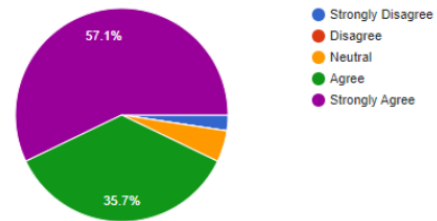


Figure 3.4.13: Flexibility for teaching methods

I think that faculty should receive adequate training on working with students with disabilities.

42 responses

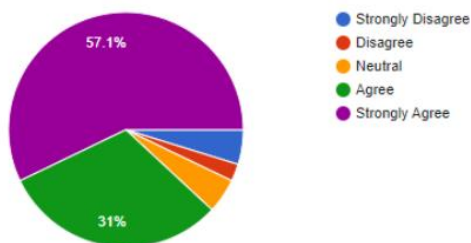


Figure 3.4.14: Requirement of trainings

I am aware of the available support services and resources for students with disabilities on campus.

42 responses

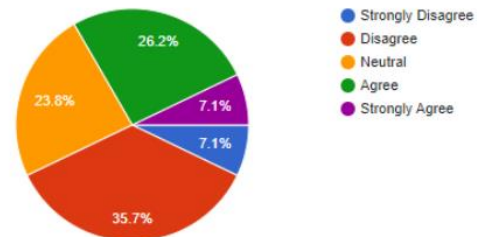


Figure 3.4.15: Awareness about resources

I am willing to collaborate with support staff to ensure the success of students with disabilities in my courses.

42 responses

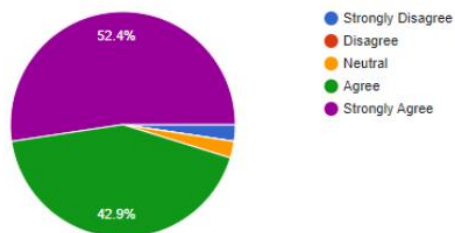


Figure 3.4.16: Flexibility for collaborations improvements

I recognize the importance of ongoing professional development to improve my ability to work effectively with students with disabilities.

42 responses

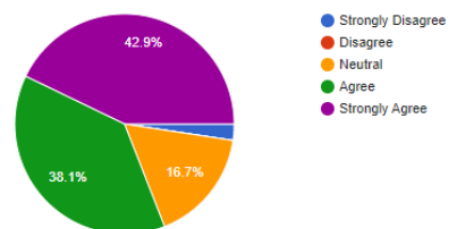


Figure 3.4.17: Motivation for self-

### 3.5 Conclusion and Discussion

The results show that more than 90% of the sample has positive attitudes towards teaching students with SWDs in higher education institutes. If adequate training can be provided to academic staff, an inclusive learning environment can be guaranteed and all students including SWDs can have a potential to succeed academically in higher education. 83.4% of academics respond to the questionnaire is under 40 years. Hence, there is a chance to change the conclusion made about the attitudes of lecturers towards teaching students with SWDs whenever the percentages of age groups are changed. In order to preserve the positive attitudes, it is needed to provide appropriate training frequently. There is no argument that creating an inclusive classroom environment benefits all students, including those with disabilities. Therefore, organizing workshops, seminars, and guest talks to share the experiences of lecturers who have already involved with SWDs is an essential move.

### Reference

- Almutairi, N.R. (2022) 'Investigating the extent of training needs of teachers of students with learning disabilities: A survey of teachers' perspectives', *International Journal of Learning, Teaching and Educational Research*, 21(7), pp. 241–268. doi:10.26803/ijlter.21.7.13.
- Carabajal, I.G., Marshall, A.M. and Atchison, C.L. (2017) 'A synthesis of instructional strategies in geoscience education literature that address barriers to inclusion for students with disabilities', *Journal of Geoscience Education*, 65(4), pp. 531–541. doi:10.5408/16-211.1.
- Fu, W., Xie, Y., Li, R., & He, X. (2021, December 31). General Teachers' Attitude toward Inclusive Education in Yunnan Province in China. <https://scite.ai/reports/10.23937/2572-4037.1510052>
- Hendriarto, p., 2021. Identifying the Gap between Lecturer Competencies and Student Learning Outcomes in the Challenging Era of the 21 st Century. *Journal of Contemporary Issues in Business and Government*| Vol, 27(2), p.1958.

- Hettiarachchi, S. and Das, A. (2014) 'Perceptions of "inclusion" and perceived preparedness among school teachers in Sri Lanka', *Teaching and Teacher Education*, 43, pp. 143–153. doi:10.1016/j.tate.2014.07.003.
- Jamsai, P. (2019, August 18). Thai secondary teacher attitudes towards the inclusion of students with learning disabilities. <https://scite.ai/reports/10.18510/hssr.2019.7154>.
- Kurniawati, F. and Novita, S. (2018) 'Students with disabilities in Universitas Indonesia: Lecturer attitudes and willingness to practice inclusive teaching strategies', *Proceedings of the 2nd INDOEDUC4ALL - Indonesian Education for All (INDOEDUC 2018)* [Preprint]. doi:10.2991/indoeduc-18.2018.44.
- Little, C., Pearson, A. and Gimblett, K. (2023) 'Reasonable adjustment, unfair advantage or optional extra? teaching staff attitudes towards reasonable adjustments for students with disabilities', *Journal of Perspectives in Applied Academic Practice*, 11(2), pp. 135–146. doi:10.56433/jpaap.v11i2.546.
- Matos, M. da, Iaochite, R.T. and Sharp, J.G. (2021) 'Lecturer self-efficacy beliefs: An integrative review and synthesis of relevant literature', *Journal of Further and Higher Education*, 46(2), pp. 225–245. doi:10.1080/0309877x.2021.1905155.
- Monteiro, G B M., Temporini, E R., & Carvalho, K M D. (2012, June 1). Optical aids for low vision: use of the Internet to guide teachers of the visually impaired. <https://scite.ai/reports/10.1590/s0004-27492012000300003>
- Serbati, A. et al. (2020) 'Exploring good teaching practices and needs for improvement: Implications for staff development', *ECPS - Educational Cultural and Psychological Studies* [Preprint], (21). doi:10.7358/ecps-2020-021-serb.
- Singh, S., Kumar, S., & Singh, R. (2020, December 1). A Study of Attitude of Teachers towards Inclusive Education. <https://scite.ai/reports/10.34293/education.v9i1.3511>

Sitti Roskina Mas (2021) 'Identifying the gap between lecturer competencies and student learning outcomes in the challenging era of the 21st Century', *Journal of Contemporary Issues in Business and Government*, 27(02). doi:10.47750/cibg.2021.27.02.206.

## CHAPTER 4

### Assistive Technologies and Their Contribution for Learning

*Sakunthala Yatigamma Ekanayake, Samanmala Dorabawila and Anoma Abhayaratne*

#### 4.1 Introduction

Assistive Technology (AT) is an umbrella term for any piece of equipment, software program, or system that provides practical solutions to everyday life activities. There are many ways to define assistive technologies (Cook & Polgar, 2008). One widely used definition is provided in Public Law (PL) 100- 407, the Technical Assistance to the States Act in the United States: Any item, piece of equipment, or product system whether acquired commercially off the shelf, modified, or customized that is used to increase, maintain or improve functional capabilities of individuals with disabilities (Cited in Cook & Polger, 2008, p. 5). According to Johnston, Beard, & Carpenter, (2007, p. 4), assistive technology is defined as "an item or piece of equipment or product system either acquired commercially, off the shelf, modified, or customized and used to increase, maintain, or improve the functional capability for a people with disabilities.

In the last thirty years, the evolution and application of assistive technologies (AT) have greatly aided people with disabilities. Basically, assistive technologies refer to a broad range of tools, devices, software, and equipment designed to assist people with disabilities in performing daily tasks, improving their independence, and enhancing their overall quality of life. These technologies aim to bridge the gap between people with disabilities and their ability to engage with the world around them.

Assistive technologies can address various types of disabilities, including physical, sensory, cognitive, and developmental impairments. They can range from simple and low-tech solutions to complex and high-tech devices, depending on the specific needs of the individual. Among them, physical disabilities may be addressed through assistive technologies such as wheelchairs,



prosthetics, and mobility aids. Sensory impairments addressed via visual or hearing loss can be assisted with technologies like screen readers, hearing aids, or captioning devices. Similarly, cognitive disabilities may benefit from tools like cognitive aids, reminder systems, or speech recognition software.

Assistive technologies can provide numerous benefits to people with disabilities as people with special needs have unique transportation needs and face significant barriers to reaching essential services and living an independent life (Litman, 2017; Wong et al., 2018; Yigitcanlar et al., 2019). The support of assistive technologies for people with disabilities has been widened as the field of assistive technologies continues to evolve rapidly, driven by advancements in technology and a growing focus on accessibility and inclusion. Moreover, researchers, engineers, and innovators are constantly developing new solutions to address the diverse needs of individuals with disabilities. As a result of these promoting independence, inclusion, and equal opportunities, assistive technologies play a crucial role in enhancing the lives of people with disabilities, enabling them to overcome challenges and achieve their full potential.

It is well recognized that Assistive technologies can enhance people with disabilities' communication, facilitate learning, promote employment opportunities, support independent living, and foster social inclusion. Not only that, but also these technologies empower individuals to participate more actively in society, access information and services, and overcome barriers that may otherwise limit their abilities. Among these provisions offered by the assistive technologies for people with disabilities, this chapter describes only the support or the potential of assistive technologies toward the learning of people with disabilities. In this regard, it is important to explore the different types of assistive technologies that support the learning of people with disabilities directly or indirectly.

## **4.2 Types of Assistive Technologies and their Educational Potential**

Assistive technologies are designed to assist individuals with disabilities or limitations in performing various tasks, improving their independence, accessibility, and overall quality of life

directly or indirectly supporting their learning. Here are some common types of assistive technologies:

**Mobility Aids:** Mobility is one of the important factors that affect a person's learning when it happens physically as people with disabilities need to move to the context where the learning is happening. For this purpose, the support of assistive technologies with mobility impairments such as wheelchairs, walkers, crutches, canes, and motorized scooters are remarkable. These devices provide several benefits to people with disabilities, including more independence, reduced pain, and increased confidence and self-esteem. Some forms of modern technology have increased mobility among special needs populations. For example, mobile phone apps in conjunction with GPS technology, can help navigate people with special needs on public transit systems (Barbeau et al., 2010), and rideshare services help further increase their mobility, particularly for the blind (Bleach et al., 2020). On flat surfaces, these wheels enable smooth movements without vibration and the exertion of force. However, according to Lee et al., (2023), on non-flat surfaces, such as steps, smooth movement is impossible and these barriers limit the activity range of people who use mobility-assisting devices [Click or tap here to enter text.](#)

**Hearing Aids:** These devices help individuals with hearing loss by amplifying sound. They are worn in or behind the ear and can be customized based on the individual's specific hearing needs. These devices help to improve the student's auditory processing and communication abilities while enhancing their active classroom participation as they can hear and mimic sounds more accurately, especially with students with conditions like speech and language disorders. Further, it reduces the social isolation of people with disabilities in the learning contexts. By enabling better communication and participation in classroom activities, hearing aids can boost a student's self-esteem and confidence, which in turn can have a positive impact on their academic performance. Further, regarding access to audio-based resources such as educational videos, online content, and interactive learning tools, expanding their learning opportunities. In addition to the above hearing aids support auditory learners who rely on listening and verbal instruction to grasp concepts and information.

**Vision Aids:** These technologies assist people with visual impairments or blindness. Vision aids can be instrumental in supporting the learning of people with Specific Learning Disabilities who have visual impairments or low vision. These aids help learners access educational materials and the learning environment, making it possible for them to participate in the educational process more effectively. Examples include screen readers, magnifiers, braille displays, and electronic travel aids. Further magnifiers, screen readers, and braille displays enable them to access textbooks, worksheets, and other printed resources, making it possible for them to keep up with their sighted peers. Among them screen readers convert written text into speech or braille, allowing students with visual impairments to listen to and understand the content of books, articles, and digital documents thus enhancing their active participation in learning.

**Communication Aids:** Communication aids play a crucial role in supporting individuals with speech and language disorders (SWDs) in their learning and communication processes. These aids can help individuals with SWDs express themselves, understand and process information, and participate more fully in educational and social environment. For instance Augmented and Alternative Communication systems, such as communication boards, speech-generating devices, and mobile apps, help persons with difficulties in communicating specially when speech is difficult or impossible. Augmentative and alternative communication devices allow them to express their thoughts, needs, and ideas, enhancing their ability to participate in classroom discussions and activities.

**Cognitive Aids:** Cognitive aids are tools and strategies that can be immensely beneficial in supporting the learning and educational success of individuals with Specific Learning Disabilities (SLDs) or other cognitive impairments. These aids are designed to help individuals compensate for difficulties in persons with cognitive impairments or conditions such as dementia or traumatic brain injury. They include memory aids, reminder systems, electronic organizers, and cognitive games or apps. For instance, Note-Taking Tools such as Digital Note-Taking Apps like OneNote, Evernote, or voice-recognition apps can help to take and organize notes more efficiently. Similarly, smartpens are also useful as a cognitive aid which can be used to record audio while a person takes handwritten notes, allowing for later review and reinforcement.

**Adaptive Computer Technologies:** These technologies assist individuals with physical or cognitive disabilities in using computers and accessing digital information. Examples include alternative keyboards, voice recognition software, screen readers, and specialized software.

The next section will discuss how these different types of assistive technologies support for learning of persons with disabilities.

### **4.3 Contribution of Assistive Technologies for meaningful learning**

In the process of teaching and learning, technology is typically used to enhance the effectiveness of the process of learning. However, when it comes to persons with disabilities, assistive technologies make them possible to learn in diverse ways. Assistive technologies play a pivotal role in providing meaningful learning experiences for a person with a disability, by fostering independence among individuals. This is due to the fact that assistive technologies are specifically designed to aid with a range of impairments, including those that are physical, cognitive, sensory, or communication-related. Therefore, assistive technologies have transformed education for individuals with disabilities by providing tools and resources that empower educators to create inclusive learning environments and enable persons with disabilities to access, participate in, and benefit from educational activities.

They can be described further as follows.

**Accessibility:** Assistive technologies play a critical role in promoting inclusivity in education, ensuring that students with disabilities have equal access to learning materials and opportunities, allowing them to thrive academically. Assistive technologies enhance the accessibility of educational materials and content for students with disabilities.

Further, Assistive technologies provide valuable support to students with disabilities (SWDs) to access learning by addressing various challenges they may face. Some ways in which assistive technologies help disabled people to access learning are described in the below.

**Text-to-Speech (TTS) Software:** This software reads digital text aloud, making written materials accessible to students with visual impairments, dyslexia, or other reading difficulties. It helps them understand and engage with course materials.

**Speech-to-Text Software:** This technology allows students with speech or motor impairments to convert spoken words into text. It's beneficial for those who may have difficulty with traditional typing or writing, enabling them to participate in written assignments and discussions.

**Screen Readers:** Screen readers convert digital text and on-screen content into audio or braille, making websites, documents, and applications accessible to students with visual impairments.

**Braille Displays:** These devices present digital text in braille, allowing students with visual impairments to read and interact with content in their preferred format.

**Augmentative and Alternative Communication (AAC) Devices:** AAC devices help students with communication disorders express themselves. They can use symbols, pictures, or text-to-speech capabilities to engage in class discussions and communicate with peers and instructors.

**Accessible E-books and Digital Materials:** Assistive technologies ensure that digital textbooks and course materials are available in accessible formats, making it easier for SWDs to read and interact with the content.

**Note-Taking Apps and Assistive Software:** These tools help students with various disabilities, such as attention deficits or physical impairments, organize and take notes during classes. They may include features like speech recognition and the ability to convert voice recordings into text.

**Closed Captioning and Transcripts:** For students with hearing impairments or those who benefit from visual reinforcement, captioned videos and transcripts are essential to understanding multimedia content.

**Adaptive Computer Interfaces:** Specialized keyboards, mice, and input devices are designed for students with motor impairments, allowing them to navigate and interact with computers effectively.

**Text and Language Support Tools:** Assistive technologies may include tools for grammar checking, vocabulary enhancement, and language translation, which benefit students with language-related disabilities or English as a second language.

**Math and Science Tools:** SWDs can use specialized software and tools designed to support the understanding and solving of mathematical and scientific problems, which may be challenging due to cognitive or sensory impairments. Students with cognitive or motor impairments benefit from assistive technologies designed for math and science tasks. These tools offer alternatives to traditional paper-and-pencil tasks, providing features such as voice input, equation solving, or tactile graphics.

**Sensory and Environmental Support:** Technologies like noise-canceling headphones, sensory integration tools, or adjustable lighting can create a more comfortable and focused learning environment for students with sensory sensitivities.

Active Participation, personalised learning and collaboration enhances the quality of learning and the following section elaborate how assistive technologies support people with disabilities to experience meaningful learning experience through active participation, personalised and collaborations.

Assistive technologies help students with disabilities (SWDs) actively participate in learning by providing tools and resources tailored to their specific needs. For instances the possibility of communication is important in active participation. The communication aids such as

Augmentative and Alternative Communication (AAC) devices, including communication boards and speech-generating devices, enable SWDs with communication impairments to express themselves, engage in class discussions, and interact with peers and instructors and actively participating in classroom discussions.

Assistive technologies devices like augmentative and alternative communication (AAC) systems assist individuals with speech and communication disabilities in expressing themselves. These tools can range from simple picture boards to sophisticated speech-generating devices and are designed to help individuals with disabilities or communication difficulties interact with others, express themselves, and access information. For instance, Speech-to-Text and Text-to-Speech software tools convert spoken language into written text and vice versa.

Further, Text-to-Speech (TTS) Software support in reading digital text aloud, allowing SWDs with reading difficulties, visual impairments, or dyslexia to access and engage with written materials or to active read them and communicate with their own reflections and views promoting their active participation, making it easier for individuals with speech or hearing impairments to communicate with others. Similarly, Speech-to-Text Software support SWDs with speech or motor impairments to convert spoken words into text, making it easier for them to actively participate in written assignments, discussions, and collaborative projects. Further word prediction tools, and grammar checkers aid students with dyslexia, dysgraphia, or other reading and writing difficulties making it easier for students to read and compose written assignments actively.

Further, Various software applications and mobile apps are available to facilitate communication through text, symbols, or speech output. Importantly, these tools are often customizable to suit the user's specific needs. Braille displays and notetakers enable people with visual impairments to read and write text in Braille, access digital content, and take notes in a Braille format. Hearing aids and cochlear implants enhance auditory communication for individuals with hearing impairments by amplifying sound or directly stimulating the auditory nerve.

In addition, screen readers also support SWDs active participation by converting digital text and on-screen content into audio or braille, enabling SWDs with visual impairments to access and

participate in online materials, websites, and applications. To engage in lectures and discussions students' possibility of note-taking is important and Note-Taking Apps and Software support students with disabilities to take notes using digital note-taking apps and software with features like voice recognition and the ability to convert voice recordings into text, ensuring their active participation. Adaptive Computer Interfaces such as specialized keyboards, mice, and input devices are designed for students with motor impairments, enabling them to actively participate in navigating and interacting with computers effectively, which is crucial for active participation in digital learning activities. Generally, SWDs active participation in science or mathematics learning environments is low due to fact that the abstract nature of some concepts. However, specialized software and tools support SWDs in understanding and solving mathematical and scientific problems, making active participation, thus enhancing their active participation in learning. In addition to the above the ability to work collaboratively is also an important aspect in quality learning. The collaborative software with accessibility features allows SWDs to work together with their peers on equal footing while enhancing opportunities to actively participate in group projects and discussions. By providing these tools and resources, assistive technologies empower SWDs to actively participate in learning activities, discussions, and assessments, contributing to a more inclusive and equitable educational experience.

In the process of quality learning personalized Learning Experiences are crucial. As the assistive technologies support students to customize settings and preferences to match their unique learning needs. This personalization includes adjustments in font size, color contrast, speech rate, or input methods, which enhances engagement and understanding.

Moreover, assistive technologies promote collaboration and communication among students with disabilities and their peers. Tools like video conferencing platforms, accessible chat apps, and collaborative software ensure that everyone can participate in group projects and discussions.

**Enhanced Independence:** Assistive technologies (AT) have played a crucial role in empowering individuals with disabilities to attain a higher degree of independence in their daily lives. These technologies encompass a wide range of tools and devices designed to alleviate the challenges posed by various disabilities. Mobility aids, such as wheelchairs and walkers, stand out as



prominent examples of AT that have been extensively studied for their impact on independence and quality of life.

Numerous studies have demonstrated the transformative effects of mobility aids on individuals with mobility impairments. A review article in "Disability and Rehabilitation: Assistive Technology" by Hoenig et al. in 2012 highlights the positive influence of mobility assistive devices in promoting community participation and reducing dependence on caregivers.

Furthermore, assistive technologies play a pivotal role in facilitating communication for individuals with speech impairments. Augmentative and alternative communication (AAC) systems, including communication devices with text-to-speech capabilities and pictorial communication boards, have been instrumental in enabling individuals to express themselves and engage in social interactions. A study published in the "Journal of Communication Disorders" by Soto et al. in 2017 explored the effectiveness of AAC interventions in improving communication and enhancing the quality of life for individuals with speech disorders.

In essence, assistive technologies, encompassing mobility aids and communication devices, have garnered substantial empirical support for their ability to enhance independence and autonomy among individuals with disabilities. These technologies not only address practical challenges but also contribute to the broader goal of social inclusion and an improved quality of life for this population

**Improved Accessibility:** In accessing quality education for people with disabilities, the accessibility is an important aspect. Assistive technologies contribute to a more accessible world for people with disabilities by providing facilitate access to information, transportation, and public spaces. Assistive technologies encompass any item, piece of equipment, or product used to enhance, maintain, or improve the functional capabilities of individuals with disabilities (Tangcharoensathien et al., 2018) and these technologies play a pivotal role in enhancing accessibility for individuals with disabilities by bridging the gap between a person's abilities and the demands of their environment.

For instance, screen readers and braille displays help blind individuals access digital content, while ramps and elevators improve physical access to buildings. Furthermore, assistive technologies support improved accessibility in numerous ways, including enhancing communication through Screen Readers and Augmentative and Alternative Communication (AAC) Devices, as well as aiding mobility and navigation through Wheelchairs, Mobility Aids, and GPS and Navigation Apps.

#### **4.4 Conclusion**

In conclusion, the evolution and widespread application of assistive technologies (AT) over the past three decades have significantly transformed the lives of individuals with disabilities. Defined as a diverse array of tools, devices, software, and equipment, assistive technologies aim to bridge the gap between people with disabilities and their ability to engage with the world. This chapter explores various types of assistive technologies and their educational potential, emphasizing their role in supporting the learning experiences of individuals with diverse needs.

The discussion highlighted the broad spectrum of assistive technologies designed to address physical, sensory, cognitive, and developmental impairments. From mobility aids to hearing aids, vision aids, communication aids, cognitive aids, and adaptive computer technologies, these tools cater to specific challenges, fostering independence and improving overall quality of life. Notably, assistive technologies have become instrumental in overcoming barriers, promoting independence, inclusion, and equal opportunities for individuals with disabilities.

The subsequent section delved into the educational potential of assistive technologies, emphasizing their role in creating inclusive learning environments. The chapter demonstrated how various assistive technology tools, such as text-to-speech software, speech-to-text software, screen readers, braille displays, and adaptive computer interfaces, enhance accessibility and active participation in educational activities. These technologies have revolutionized the learning experiences of individuals with disabilities, providing customized solutions that address their unique needs.

Furthermore, assistive technologies contribute to meaningful learning experiences by facilitating active participation, personalized learning, and collaboration. The chapter discussed how communication aids, note-taking tools, specialized software, and sensory support technologies enable students with disabilities to actively engage in classroom discussions, assignments, and group projects. Personalization features allow students to customize settings, fostering engagement and understanding, while collaborative tools ensure equal participation in group activities.

Additionally, assistive technologies have significantly enhanced the independence of individuals with disabilities. Mobility aids and communication devices, including augmentative and alternative communication systems, have proven transformative in promoting community participation and reducing dependence on caregivers. Improved accessibility, both in terms of physical access to buildings and digital access to information, has been a key outcome of assistive technologies, contributing to a more inclusive and accessible world.

In essence, the chapter underscores the crucial role of assistive technologies in facilitating meaningful learning experiences, empowering individuals with disabilities to overcome challenges, actively participate in education, and lead more independent lives. As technology continues to advance, the ongoing development of innovative solutions promises to further enhance the impact of assistive technologies in promoting inclusivity and improving the overall quality of life for individuals with disabilities.

## References

- Barbeau, S.J., Winters, P.L., Georggi, N.L., Labrador, M.A., Perez, R., 2010. Travel assistance device: Utilising global positioning system-enabled mobile phones to aid transit riders with special needs. *IET Intel. Transport Syst.* 4 (1), 12–23.
- Bleach, K., Fairchild, N., Rogers, P., Rosenblum, L.P., 2020. *Improving Transportation Systems for People with Vision Loss*. American Foundation for the Blind, p. 20.

- Lee, C., Ward, C., Raue, M., D'Ambrosio, L., Coughlin, J.F., 2017. Age Differences in Acceptance of Self-driving Cars: A Survey of Perceptions and Attitudes. In: Zhou, J., Salvendy, G. (Eds.), *Human Aspects of IT for the Aged Population. Aging, Design and User Experience*. Springer International Publishing, pp. 3–13. [https://doi.org/10.1007/978-3-319-58530-7\\_1](https://doi.org/10.1007/978-3-319-58530-7_1).
- Litman (2017) *Autonomous Vehicle Implementation Predictions. Implications for Transport Planning*. 8 September 2017. Victoria Transport Policy Institute.
- World Health Organization. (2018, September 1). *Improving access to assistive technologies: Challenges and solutions in low- and middle-income countries*. World Health Organization. <https://apps.who.int/iris/handle/10665/329578>.
- Cook, A., Polgar, J., & Hussey, S. (2008). *Cook & Hussey's assistive technologies : principles and practice*. St. Louis, Mo: Mosby Elsevier.
- Cooper, R. A., Boninger, M. L., Spaeth, D. M., Ding, D., Guo, S., Koontz, A. M., Fitzgerald, S. G., Cooper, R., Kelleher, A., & Collins, D. M. (n.d.). *Engineering better wheelchairs to enhance community participation*. UTMB Health Research Expert Profiles. <https://researchexperts.utmb.edu/en/publications/engineering-better-wheelchairs-to-enhance-community-participation>
- Hoenig, H., Taylor, D. H., & Sloan, F. A. (2012). Does assistive technology substitute for personal assistance among the disabled elderly? *American Journal of Public Health*, 92(3), 330-337.
- Johnston, L., Beard, L. A., & Carpenter, L. B. (2007). *Assistive technology: Access for all students*. Columbus, OH: Pearson Merrill Prentice Hall.
- Wong, R.C.P., Szeto, W.Y., Yang, L., Li, Y.C., Wong, S.C., 2018. Public transport policy measures for improving elderly mobility. *Transp. Policy* 63, 73–79. <https://doi.org/10.1016/j.tranpol.2017.12.015>.

Yigitcanlar, T., Mohamed, A., Kamruzzaman, M., Piracha, A., 2019. Understanding transport-related social exclusion: a multidimensional approach. *Urban Res. Policy* 37 (1), 97–110.  
<https://doi.org/10.1080/08111146.2018.1533461>.

## CHAPTER 5

### Online Teaching and Learning for Students with Disabilities

*Nanda Gunawardhana, Migara Karunaratne, Madushani Senevirathne*

#### 5.1 Introduction

Online teaching and learning have become popular in higher education, benefiting students by offering flexible and convenient learning options (ICCE 2021). It has been especially helpful for students with disabilities (Higher education students with disabilities perceptions of emergency remote learning – exploring the benefits and barriers of e-learning). As technology continues to shape the educational landscape, it becomes increasingly important to provide students with disabilities an equitable opportunity to engage in online learning environments (UNESCO - Inclusive distance learning for students with disabilities at the University of Padua). This book chapter delves into the critical topic of improving accessibility and inclusion in online teaching and learning for students with disabilities in higher education. The chapter also highlights the advantages that online education brings, such as flexibility, individualized learning paths, and accessibility to assistive technology (UNESCO - Inclusive Distance Learning for students with disabilities at the University of Padua).

The chapter begins by discussing the challenges encountered by students with disabilities in online learning. These challenges encompass communication barriers, limited engagement, and restricted access to necessary resources (Creating accessible course materials). It emphasizes the importance of addressing these challenges to ensure that students with disabilities have equal access to educational opportunities and can fully participate in online learning experiences.

Moving forward, the chapter explores online learning opportunities for students with disabilities. It emphasizes the flexibility that online education provides, enabling students to learn at their own pace and in their preferred environment (TeachingSupport@UMN.edu). Additionally, online

learning opens doors to specialized resources and assistive technology that can enhance the learning experience for students with disabilities (Batanero et al., 2022). The chapter highlights how online learning can empower these students by providing additional support through personalized assistance from tutors and mentors (UNESCO - Inclusive Distance Learning for students with disabilities at the University of Padua).

To promote accessibility and inclusiveness, the chapter presents best practices for online teaching and learning. It emphasizes the importance of designing course materials with accessibility in mind, such as using inclusive language, providing alternative formats, and ensuring compatibility with assistive technology (Making Online Teaching Accessible: Inclusive Course Design for Students with Disabilities). The chapter also explores various technologies and tools that can enhance accessibility in online learning environments, enabling students with disabilities to fully engage and participate (Online teaching in Emergencies: Accessibility Best Practices | Office of Accessibility Resources & Services).

Furthermore, the chapter addresses the significance of addressing equity and inclusion in online teaching and learning. It highlights the importance of embracing diverse perspectives, promoting inclusive language, and fostering a welcoming and inclusive environment for all students (BU - Diversity, Equity, Inclusion in Remote Teaching Environments). By creating an environment that respects and values differences, educational institutions can foster a sense of belonging and ensure that students with disabilities feel supported and empowered in their online learning journey.

The chapter also discusses methods for evaluating the effectiveness of online teaching and learning for students with disabilities. It emphasizes the need for ongoing assessment and improvement to ensure that the accessibility measures put in place are effective and beneficial for students (Google Scholar).

Finally, the chapter explores future directions for online teaching and learning for students with disabilities in higher education. It discusses potential advancements in assistive technology, a stronger focus on universal design principles, and a heightened emphasis on equality and inclusion (Reyes et al., 2022). By staying informed about emerging trends and continuously striving for

improvement, institutions and educators can create inclusive online learning environments that empower students with disabilities to thrive and achieve their academic goals.

## **5.2 Challenges Faced by Students with Disabilities in Online Learning**

Online learning has gained significant traction in recent years, with its growth accelerated by the global pandemic. While this mode of education offers numerous advantages such as flexibility and convenience, it also brings few challenges for students with disabilities (Reyes et al., 2022). In this chapter, we will explore the hurdles faced by these students in online learning and propose potential solutions to address them effectively.

One of the primary challenges encountered by students with disabilities in online learning is access to technology (AHEAD, n.d.). Many of these students require specialized equipment or software to fully engage in online learning (Reyes et al., 2022). For instance, individuals with visual impairments may rely on screen readers or Braille displays, while those with hearing impairments may require closed captioning or sign language interpretation. However, not all online platforms or course materials are compatible with assistive technology, thereby limiting the ability of students with disabilities to participate fully. To address this challenge, educators and institutions should ensure that all online course materials are compatible with commonly used assistive technologies (Online Learning Strategies for Students with Disabilities | AccessComputing, n.d.). Additionally, institutions should provide necessary access to specialized technology and software as required by students with disabilities.

Another significant challenge lies in the accessibility of course materials (Making Online Teaching Accessible: Inclusive Course Design for Students with Disabilities, 2010). Online courses often heavily rely on visual or auditory materials, such as videos or PowerPoint presentations. Unfortunately, these materials may not be accessible for students with disabilities, particularly those with visual or hearing impairments (Creating accessible course materials, n.d.). Furthermore, the use of inaccessible materials can hinder the ability of students with disabilities to fully comprehend and engage with course content. To tackle this challenge, educators should provide alternative formats for course materials, such as text-based versions of videos or audio recordings



accompanied by transcripts (Creating accessible course materials, n.d.). Institutions should also prioritize the design of all course materials with accessibility in mind, following established guidelines such as the Web Content Accessibility Guidelines (WCAG) (UNESCO - Inclusive Distance Learning for students with disabilities at the University of Padua).

Communication poses another challenge for students with disabilities in online learning. In traditional classroom settings, students with disabilities often benefit from in-person communication with their instructors and peers (TeachingSupport@UMN.edu, n.d.). However, online communication can prove to be more complex, especially for students with hearing or speech impairments (Online Learning Strategies for Students with Disabilities | AccessComputing, n.d.). Online discussions and chat rooms may lack accessibility, and video conferencing may present additional challenges. To address this issue, educators should provide multiple communication options, including chat, email, and video conferencing with closed captioning or sign language interpretation (Online teaching in Emergencies: Accessibility Best Practices | Office of Accessibility Resources & Services, n.d.). Additionally, instructors should proactively reach out to students with disabilities to ensure their full participation in online discussions and group projects.

Social support is an essential aspect of the learning experience, particularly for students with disabilities (Online Learning Strategies for Students with Disabilities | AccessComputing, n.d.). These students often rely on peer support or mentoring to navigate academic and personal challenges (Reyes et al., 2022). However, online learning may limit opportunities for social interaction and support, particularly if students are unable to participate in online discussions or group projects (Online Learning Strategies for Students with Disabilities | Access Computing, n.d.). To overcome this challenge, institutions should provide avenues for social interaction and support outside the virtual classroom, such as virtual social events or peer mentoring programs (Online Learning Strategies for Students with Disabilities | Access Computing, n.d.). Educators should also be mindful of the potential for social isolation among students with disabilities and make efforts to connect with them individually.

In conclusion, while online learning offers numerous benefits, it also presents challenges for students with disabilities (Reyes et al., 2022). Addressing access to technology, the accessibility of course materials, communication barriers, and the provision of social support are crucial considerations for educators and institutions to ensure the full participation of students with disabilities in online learning. By tackling these challenges head-on and implementing best practices for accessibility and inclusion (Making Online Teaching Accessible: Inclusive Course Design for Students with Disabilities; Online Teaching in Emergencies: Accessibility Best Practices | Office of Accessibility Resources & Services), we can create a learning environment that is more equitable and accessible for all students

### **5.3 Opportunities for Students with Disabilities in Online Learning**

Online learning has revolutionized education and has particularly provided opportunities for students with disabilities to access and excel in their academic pursuits. The flexibility that online learning offers is one of the key advantages for students with disabilities (TeachingSupport@UMN.edu). Many students face physical or other limitations that make attending classes on campus challenging (Higher education students with disabilities perceptions of emergency remote learning – exploring the benefits and barriers of e-learning). Online learning allows them to participate in courses from any location and at any time, accommodating their unique needs. This flexibility is especially beneficial for students with chronic illnesses, mobility impairments, or other disabilities that may hinder their ability to attend traditional classes regularly (UNESCO - Inclusive distance learning for Students with Disabilities at the University of Padua). By customizing their learning schedules, students can better manage their time and responsibilities. Furthermore, online learning platforms provide specialized resources and support that greatly assist students with disabilities (Batanero et al., 2022). These resources include closed captioning or sign language interpretation for videos, text-to-speech or alternative formats for course materials, and additional support from tutors, mentors, or disability services staff. Such resources help level the playing field and enable students with disabilities to fully engage and participate in their courses.

Another advantage of online learning is the promotion of self-directed learning and independence. In traditional classroom settings, students with disabilities often rely on support from others. However, students take greater responsibility for managing their learning in online learning environments. This empowers them to develop self-advocacy skills and take ownership of their educational journey. Additionally, the ability to learn at their own pace and in a manner that suits their individual needs can boost students' confidence in their abilities.

Inclusive distance learning also fosters an equitable and inclusive learning environment (UNESCO - Inclusive distance learning for students with disabilities at the University of Padua). Traditional classrooms may present barriers to participation and engagement for students with disabilities, but online learning can provide a more inclusive experience, especially when course materials are designed with accessibility in mind. Additionally, online learning connects students who may not have access to traditional classrooms due to geographical constraints. Students with disabilities in rural or remote areas, for instance, can connect with a larger community of learners through online platforms.

Finally, online learning opens doors for students with disabilities to pursue academic programs and careers that may have been previously inaccessible. Physical disabilities, for example, may pose challenges in traveling to attend classes on campus. However, with online learning, students can complete their coursework from the comfort of their homes. This expanded accessibility enables students with disabilities to pursue careers that require specialized education or training that may not be locally available.

In conclusion, online learning offers a plethora of opportunities for students with disabilities to access education, develop skills, and achieve their academic and career goals. The flexibility, availability of specialized resources, promotion of self-directed learning, and inclusiveness of online learning environments all contribute to the success of students with disabilities. It is vital to continually improve the accessibility of online learning platforms and course materials while providing necessary support and resources to enable students with disabilities to fully engage and participate in online learning.

## **5.4 Best Practices for Ensuring Accessibility in Online Teaching and Learning for Students with Disabilities**

To ensure online teaching and learning are accessible for students with disabilities, instructors should follow best practices tailored to their unique needs (*Making Online Teaching Accessible: Inclusive Course Design for Students with Disabilities*). Designing course materials with accessibility in mind is crucial, including providing alternative text descriptions for images, using readable fonts and colors, and ensuring videos have captions and audio descriptions. These measures enable students with visual or hearing impairments to fully access course materials.

In addition, clear and consistent organization and navigation are essential for online courses ([TeachingSupport@UMN.edu](mailto:TeachingSupport@UMN.edu)). Headings, labels, and explicit instructions for assignments and assessments help students with cognitive or learning disabilities navigate the course effectively, reducing frustration and improving engagement for all learners.

Compatibility with assistive technology is another key aspect of accessibility. Many students with disabilities rely on tools such as screen readers, Braille displays, and other assistive technologies. It is vital to test course compatibility with various assistive technologies and provide alternative formats for materials that aren't compatible. This ensures that all students can access course content and actively participate in online learning activities.

Effective communication methods are critical for the full engagement of students with disabilities (*Online Learning Strategies for Students with Disabilities | Access Computing*). Instructors should offer multiple communication channels such as chat rooms, discussion forums, and video conferencing. This inclusivity allows all students to participate in class discussions and collaborate with their peers. Clear communication guidelines and instructions help students understand how to engage effectively in the online environment.

Additional support may be necessary for students with disabilities to fully participate in online learning (Reyes et al., 2022). Accommodations can include extended time for assignments and

assessments, access to tutoring or mentoring, and collaboration with disability services. Instructors must be responsive to individual needs and provide personalized support as required.

Regular accessibility audits ensure online course materials and platforms remain accessible. These audits identify accessibility issues and guide how to address them. By conducting regular audits and implementing ongoing improvements, instructors ensure their online courses remain accessible and inclusive for all students.

In conclusion, creating an inclusive and equitable learning environment for students with disabilities in online teaching and learning is essential. By following best practices that address their unique needs, instructors can design accessible, engaging, and effective courses for all learners. Instructors must listen to feedback from students with disabilities and continuously improve the accessibility of their online teaching and learning practices. By prioritizing accessibility, instructors and institutions can foster a more inclusive online learning environment for students with disabilities.

### **5.5 Technologies and Tools for Enhancing Accessibility in Online Teaching and Learning for Students with Disabilities**

Advancements in technology have opened up new opportunities for enhancing accessibility in online teaching and learning environments for students with disabilities (Batanero et al., 2022). By leveraging various technologies and tools, instructors and institutions can create more inclusive and equitable learning experiences for all students (Online Learning Strategies for Students with Disabilities | AccessComputing). This chapter focuses on exploring the technologies and tools that can be used to enhance accessibility in online teaching and learning for students with disabilities. Screen readers are software programs that can read digital text aloud, making them useful for students with visual impairments or learning disabilities that affect reading. Similarly, speech recognition software allows students with mobility impairments or learning disabilities to dictate text instead of typing, which can be particularly helpful for those who have difficulty with fine motor skills. Closed captioning and transcription tools can help students who are deaf or hard of hearing to access video content, and they can also be useful for students who prefer to read rather

than listen to content. Text-to-speech software can read digital text aloud, which can be helpful for students with visual impairments or learning disabilities.

Online course materials should be provided in alternative formats to ensure accessibility. Providing materials in PDF, HTML, and EPUB formats can make them easily readable by screen readers and other assistive technologies. In addition, accessibility plug-ins and extensions can be added to web browsers to make websites and online course platforms more accessible. Examples include the Web Accessibility Evaluation Tool (WAVE) and the NoCoffee vision simulator.

Learning management systems (LMS) can also be designed to be accessible to students with disabilities. For example, LMS platforms can include accessibility features such as keyboard navigation and closed captioning for videos. Augmented and virtual reality tools can provide students with immersive learning experiences that can be particularly helpful for students with disabilities. For example, virtual reality simulations can provide hands-on learning opportunities for students with mobility impairments.

Artificial Intelligence (AI) is another technology that can assist students with disabilities in online learning. AI can provide personalized learning experiences by analyzing the student's performance and learning style and can provide tailored content and learning resources that cater to their individual needs. Text-to-speech and speech-to-text tools can also be incredibly useful for students with visual impairments or dyslexia. Virtual assistants can answer questions and provide feedback in real-time, which can be particularly helpful for students who struggle to communicate verbally. Automated transcription and captioning can also make it easier for students with hearing impairments to access and engage with course content. Finally, adaptive assessments can adjust the difficulty level of questions based on the student's performance, providing a more accurate assessment of their abilities.

It is important to note that technology is only one aspect of creating accessible online learning environments and that it should be used in conjunction with other best practices and strategies for ensuring accessibility. Instructors and institutions should work closely with disability services to ensure that the technologies and tools they use are appropriate and effective for students with

disabilities. Regular accessibility audits should also be conducted to ensure that the online course materials and platforms remain accessible.

In conclusion, technology has opened up new possibilities for enhancing accessibility in online teaching and learning for students with disabilities. By leveraging various technologies and tools, instructors and institutions can create more inclusive and equitable learning experiences for all students. However, it is important to keep in mind that technology is only one aspect of creating accessible online learning environments and that it should be used in conjunction with other best practices and strategies for ensuring accessibility. By working together with disability services and conducting regular accessibility audits, instructors and institutions can create truly inclusive and accessible online teaching and learning environments for all students.

## **5.6 Designing Accessible Course Materials for Online Learning**

The shift towards online learning has revolutionized the way education is delivered to students. However, with this transition comes a need to ensure that all students have equal access to learning materials. Accessibility is crucial for students with disabilities, and course developers and instructors need to prioritize the design of accessible course materials (Creating accessible course materials). In this chapter, we will explore tips and strategies for designing accessible course materials for online learning.

### **5.6.1 Using Clear and Simple Language**

Clear and simple language is essential for making course materials accessible to students with cognitive disabilities or limited language proficiency (AHEAD). It is important to use plain language and avoid technical jargon or complex sentence structures. Shorter sentences and paragraphs can also make the content more digestible. By using clear and simple language, all students will be able to understand and engage with the course materials.

### **5.6.2 Using Readable Fonts and Colors**

Fonts and colors are important for making course materials accessible to students with visual impairments (Creating accessible course materials). It is crucial to use fonts that are easy to read and colors that provide sufficient contrast between the text and the background. Avoid using small fonts or fonts that are difficult to read, such as script fonts. Use sans-serif fonts, such as Arial or Verdana, for body text and serif fonts, such as Times New Roman or Georgia, for headings. Colors should be in high contrast, such as black text on a white background.

### **5.6.3 Providing Alternative Text Descriptions for Images**

Alternative text descriptions should be provided for all images used in course materials, such as charts, graphs, and diagrams (Creating accessible course materials). This helps to make the content more accessible to students who use screen readers or have visual impairments. Alternative text should describe the content and purpose of the image. It is also important to ensure that images are not used to convey essential information that is not included in the text.

### **5.6.4 Ensuring Compatibility with Assistive Technology**

Course materials should be designed to be compatible with assistive technology, such as screen readers and Braille displays (Creating accessible course materials). This includes providing accessible document formats such as HTML, PDF, and EPUB, which can be easily read by screen readers. In addition, multimedia content should be designed to be accessible, with captions and transcripts provided for video and audio content.

### **5.6.5 Using Accessible Video and Audio Content**

Video and audio content should be captioned and transcribed to make them accessible to students who are deaf or hard of hearing (Creating accessible course materials). It is also important to provide audio descriptions for visual content, such as videos or images. Captions should be synchronized with the audio and include speaker identification and sound effects. Transcripts should include all spoken words as well as descriptions of visual content.



### **5.6.6 Providing Accessible Links and Navigation**

Links and navigation should be labeled and easily accessible for all students (Creating accessible course materials). This includes providing descriptive text for links and using headings and lists to organize course materials. Navigation should be consistent and intuitive, with clear instructions provided for accessing different sections of the course materials.

### **5.6.7 Considering Different Learning Styles**

Students have different learning styles, and course materials should be designed to accommodate these differences (Creating accessible course materials). For example, providing audio and visual content can help students who learn best through auditory or visual means. Interactive activities and quizzes can also engage students who prefer hands-on learning.

### **5.6.8 Testing for Accessibility**

It is important to test course materials for accessibility before making them available to students (Creating accessible course materials). This can include using accessibility checkers, testing materials with screen readers, and getting feedback from students with disabilities. Testing should be ongoing, with course materials evaluated and updated as needed to ensure continued accessibility.

Designing accessible course materials is essential for ensuring all students have equal access to education. By using clear and simple language, readable fonts and colors, alternative text descriptions, compatibility with assistive technology, accessible video and audio content, accessible links, and navigation, and by considering different learning styles, instructors can create course materials that are accessible and inclusive. By prioritizing accessibility in the design process and testing for accessibility, instructors can provide an equitable learning experience for all students.

## 5.7 Providing Support and Accommodations for Students with Disabilities in Online Learning

In recent years, online learning has become an increasingly popular mode of education. While online learning offers many benefits, such as flexibility and convenience, it can also present unique challenges for students with disabilities (Reyes et al., 2022). To ensure that all students have equal access to education, it is crucial to provide support and accommodations for students with disabilities in online learning environments.

One important strategy for supporting students with disabilities in online learning is to communicate with them regularly (Online teaching in Emergencies: Accessibility Best Practices | Office of Accessibility Resources & Services). By checking in with students and understanding their needs, instructors can provide the necessary support to help them succeed. This can include offering alternative methods of communication, such as email or video conferencing, and providing regular check-ins or office hours to answer questions and provide guidance. Also, instructors can monitor students' progress via assessments which is an indicator of the success of the used methods (TeachingSupport@UMN.edu). On the other hand, poor response or no response to evaluations means the methods are not working properly. If a student is progressing with their work, instructors can encourage them by rewards/gifts, etc.

Providing reasonable accommodations is also essential for ensuring that students with disabilities have equal access to education (Making Online Teaching Accessible: Inclusive Course Design for Students with Disabilities). Accommodations can include extended time on exams, access to assistive technology, and alternative formats for course materials. By providing accommodations, instructors can help students with disabilities to overcome barriers and succeed in their coursework. However, when providing accommodation, the students' medical conditions also need to be considered, and necessary safety measures also should be provided. The safety of the student becomes the responsibility of the accommodation provider.

Flexibility in course delivery can also benefit students with disabilities (Online teaching in Emergencies: Accessibility Best Practices | Office of Accessibility Resources & Services). For

example, providing recorded lectures and transcripts of live sessions can accommodate students with hearing or vision impairments, and providing asynchronous learning options can accommodate students with disabilities that impact their attendance or participation in live sessions.

Creating a welcoming and inclusive environment is another important strategy for supporting students with disabilities in online learning. Instructors can use inclusive language and avoid stereotypes, and incorporate diverse perspectives and experiences into course materials. This can help to create a sense of belonging for students with disabilities and promote a more inclusive learning environment.

Instructors and staff should also be trained on how to provide support and accommodations for students with disabilities (AHEAD). This includes providing training on assistive technology, accessibility guidelines, and disability etiquette. By providing training, instructors and staff can better understand the needs of students with disabilities and provide the necessary support to help them succeed.

Peer support programs can also be helpful for students with disabilities. Connecting students with disabilities with peer mentors or support groups can provide a sense of community and help to address social isolation (Inclusive distance learning for students with disabilities at the University of Padua). Providing resources and tools that are readily available can also help students with disabilities access the support they need to succeed in their coursework.

In conclusion, providing support and accommodations for students with disabilities in online learning is essential for ensuring all students have equal access to education (Online Learning Strategies for Students with Disabilities | AccessComputing). By communicating with students, providing reasonable accommodations, offering flexible learning options, creating a welcoming and inclusive environment, training instructors and staff, providing peer support, and making resources readily available, instructors and institutions can help to ensure that students with disabilities have the support they need to succeed in their coursework. It is important to continually

evaluate and improve support and accommodations to ensure that they meet the needs of students with disabilities in online learning environments.

## **5.8 Addressing Equity and Inclusion in Online Teaching and Learning for Students with Disabilities**

Equity and inclusion are essential in creating an accessible and welcoming learning environment for students with disabilities in online education (UNESCO). Instructors and institutions can implement various strategies to address equity and inclusion in their teaching and learning practices.

Incorporating diverse perspectives is a critical step toward creating an inclusive learning environment (Creating accessible course materials). Including diverse perspectives and experiences, including those of individuals with disabilities, in the course materials can help students understand the challenges faced by those with disabilities and promote disability culture and identity. In addition, incorporating topics related to disability rights and inclusion can help create a culture of inclusion.

Inclusive language is also critical for creating a welcoming and respectful learning environment (Creating accessible course materials). Instructors should avoid using derogatory or stigmatizing language towards individuals with disabilities and use person-first language, which puts the person before their disability. For instance, saying “person with a disability” rather than “disabled person.”

Promoting disability awareness and education can help address the stigma and misconceptions surrounding disability (UNESCO). Providing information on disability rights and inclusion and promoting disability culture and identity can help create a supportive learning environment.

Providing accessible and diverse learning materials is essential for ensuring equal access to education (Making Online Teaching Accessible: Inclusive Course Design for Students with Disabilities). Instructors should ensure that course materials are accessible to all students,

including those with disabilities. This includes providing captioned video content, accessible document formats, and ensuring that all course content meets accessibility guidelines.

Incorporating universal design principles into course design can help to ensure that all students have equal access to education (TeachingSupport@UMN.edu). This means designing courses with multiple means of representation, engagement, and expression, and providing multiple modes of content delivery and assessment. For instance, providing closed captioning, audio descriptions, and alternative text for visual content can help make course materials accessible to students with disabilities.

Creating a culture of inclusivity and respect is also critical in online education for students with disabilities. Instructors should promote inclusive classroom norms, such as active listening and mutual respect. They should also address instances of bias or discrimination and create a safe and supportive learning environment.

In conclusion, addressing equity and inclusion in online teaching and learning for students with disabilities is essential for creating an accessible and equitable learning environment. Instructors and institutions can implement various strategies to ensure that all students have equal access to education, including incorporating diverse perspectives, using inclusive language, promoting disability awareness and education, providing accessible and diverse learning materials, incorporating universal design principles, and fostering a culture of inclusivity and respect. It is crucial to continually evaluate and improve course design and instruction to ensure that they meet the needs of all students, including those with disabilities.

## **5.9 Evaluating the Effectiveness of Online Teaching and Learning for Students with Disabilities**

Evaluating the effectiveness of online teaching and learning for students with disabilities is crucial for ensuring that all students can achieve their learning goals and that the learning environment is accessible and equitable. Several strategies can be used to effectively evaluate the effectiveness of online teaching and learning for students with disabilities.

One important strategy is to use multiple methods of assessment (Google Scholar). By using a variety of assessment methods, such as exams, quizzes, essays, and projects, instructors can obtain a more comprehensive picture of student learning. This can help to ensure that students with disabilities are not unfairly penalized by a single mode of assessment that may not align with their strengths or accommodations. For example, a student with a visual impairment may struggle with a written exam but excel in a project-based assessment.

Collecting and analyzing data on student performance is another important strategy for evaluating the effectiveness of online teaching and learning for students with disabilities (Reyes et al., 2022). This can help to identify trends and patterns in student learning and to identify areas where students with disabilities may need additional support or accommodations. For example, if students with disabilities are consistently scoring lower on a particular assessment, instructors may need to provide additional support or accommodations to help these students succeed.

Soliciting feedback from students, including those with disabilities, is also an important strategy for evaluating the effectiveness of online teaching and learning (Online Learning Strategies for Students with Disabilities | AccessComputing). This can provide valuable insights into the student experience and can help to identify areas for improvement. Instructors can gather feedback through surveys or focus groups and incorporate this feedback into course design and instruction.

Monitoring accessibility and accommodation usage is another important strategy for evaluating the effectiveness of online teaching and learning for students with disabilities (Online teaching in Emergencies: Accessibility Best Practices | Office of Accessibility Resources & Services). This can help to ensure that students with disabilities are receiving the support they need to succeed. Instructors can monitor the use of assistive technology and alternative formats for course materials and ensure that accommodations are being provided as needed.

Collaborating with disability services and support staff is also essential for evaluating the effectiveness of online teaching and learning for students with disabilities (TeachingSupport@UMN.edu). These professionals can provide valuable expertise and support for students with disabilities and can help instructors identify and provide accommodations. By

working with disability services and support staff, instructors can ensure that all students have the support they need to succeed.

Overall, evaluating the effectiveness of online teaching and learning for students with disabilities is critical for creating an accessible and equitable learning environment. By using multiple methods of assessment, collecting and analyzing data on student performance, soliciting feedback from students, monitoring accessibility and accommodation usage, and collaborating with disability services and support staff, instructors can ensure that all students can achieve their learning goals. It is important to continually evaluate and improve course design and instruction to ensure that they meet the needs of all students, including those with disabilities.

### **5.10 Future Directions for Online Teaching and Learning for Students with Disabilities in Higher Education**

The field of online teaching and learning is rapidly evolving, and there are several potential future directions for improving accessibility and equity for students with disabilities in higher education. One important area of development is in the field of assistive technology (Batanero et al., 2022). As technology continues to advance, there is potential for new and innovative assistive technologies to be developed that can further enhance accessibility for students with disabilities. For example, advances in artificial intelligence and machine learning may lead to new assistive technologies that can more accurately and efficiently transcribe speech to text, making it easier for students with hearing impairments to access course materials.

Another important direction for the future is a greater emphasis on universal design principles in online teaching and learning (Making Online Teaching Accessible: Inclusive Course Design for Students with Disabilities). The versatile design focuses on designing learning environments that are accessible and inclusive for all learners, including those with disabilities. As the principles of universal design become more widely adopted, online courses and materials will likely become even more accessible to students with disabilities.

Collaboration between disability services and instructional designers is another important future direction. By working together, disability services and instructional designers can help to ensure that courses are designed with accessibility in mind from the outset. This can involve working together to create accessible course materials, as well as providing training and support for faculty on how to effectively teach students with disabilities in online courses.

Alternative formats are also becoming increasingly popular in online teaching and learning (Creating accessible course materials). These formats can provide greater flexibility and accessibility for students with disabilities who may have difficulty accessing traditional text-based materials. For example, audio and video content can be used to provide students with visual impairments or dyslexia with alternative ways of accessing course content.

Finally, there is a growing focus on promoting equity and inclusion in online teaching and learning (Inclusive distance learning for students with disabilities at the University of Padua). This includes a greater emphasis on promoting diversity and inclusion in course materials and instructional design, and a continued effort to address bias and discrimination in online learning environments. By focusing on these future directions, institutions and instructors can help to create more accessible and equitable online learning environments for students with disabilities in higher education.

Overall, institutions and instructors need to continue to evaluate and improve online teaching and learning to ensure that all students, including those with disabilities, have equal access to education. By incorporating these future directions, online teaching and learning can become even more accessible, inclusive, and effective for all learners.

## **5.11 Conclusion**

In conclusion, this book chapter has illuminated the imperative task of enhancing accessibility and inclusivity in the realm of online teaching and learning for students with disabilities in higher education. As technology continues to reshape the landscape of education, it is incumbent upon us



to ensure that students with disabilities are not left behind but are afforded equitable opportunities to thrive in online learning environments.

We have explored the formidable challenges faced by these students in the digital realm, including communication barriers, limited engagement, and restricted access to essential resources. Simultaneously, we have celebrated the virtues of online education, extolling its flexibility, personalized learning pathways, and the accessibility it provides through assistive technology.

Throughout this chapter, we have delved into the principles of best practices to enhance accessibility. We have stressed the importance of creating course materials that are inherently accessible, embracing inclusive language, and ensuring compatibility with assistive technology. Furthermore, we have examined the array of technologies and tools available to augment accessibility, allowing students with disabilities to engage fully in online learning.

Moreover, we have underlined the pivotal role of equity and inclusion in online teaching and learning. We have emphasized the necessity of embracing diversity, promoting inclusive language, and fostering an environment that is not only welcoming but also supportive for all students. By doing so, educational institutions can foster a sense of belonging and empowerment for students with disabilities on their online learning journeys.

The chapter has also provided insights into evaluating the effectiveness of online teaching and learning for students with disabilities, emphasizing the need for ongoing assessment and adaptation to ensure that accessibility measures genuinely serve the needs of these students.

Looking ahead, we have explored future directions, anticipating advancements in assistive technology, an intensified focus on universal design principles, and an increased commitment to equality and inclusion. By keeping pace with these evolving trends and continuously striving for improvement, educational institutions and educators can forge inclusive online learning environments that empower students with disabilities to not only participate but also excel in their academic pursuits.

In summary, this chapter serves as a compass, guiding us toward the critical goal of improving accessibility and inclusion in online teaching and learning for students with disabilities. Through the implementation of the strategies and practices outlined herein, we have the potential to create digital learning environments where students with disabilities are not only accommodated but also enriched, ultimately contributing to a more inclusive and equitable educational landscape. It is our collective responsibility to ensure that every student, regardless of their abilities, has the opportunity to achieve their academic goals and thrive in the online learning era.

## References

AHEAD. (n.d.). Higher education students with disabilities perceptions of emergency remote learning – exploring the benefits and barriers of e-learning.

<https://www.ahead.ie/journal/Higher-education-students-with-disabilities-perceptions-of-emergency-remote-learning-exploring-the-benefits-and-barriers-of-e-learning>.

Batanero, J. M. F., Rueda, M. M., Fernández-Cerero, J., & García-Martínez, I. (2022). Assistive technology for the inclusion of students with disabilities: a systematic review. *Educational Technology Research and Development*, 70(5), 1911–1930. <https://doi.org/10.1007/s11423-022-10127-7>.

Creating accessible course materials. (n.d.). <https://drc.ucsc.edu/faculty/creating-accessible-course-materials.html>.

Google Scholar. (n.d.).

[https://scholar.google.com/scholar?q=Evaluating+the+Effectiveness+of+Online+Teaching+and+Learning+for+Students+with+Disabilities&hl=en&as\\_sdt=0&as\\_vis=1&oi=scholar](https://scholar.google.com/scholar?q=Evaluating+the+Effectiveness+of+Online+Teaching+and+Learning+for+Students+with+Disabilities&hl=en&as_sdt=0&as_vis=1&oi=scholar).

Inclusive distance learning for students with disabilities at the University of Padua. (2023a).

UNESCO. <https://www.unesco.org/en/articles/inclusive-distance-learning-students-disabilities-university-padua>.

Making Online Teaching Accessible: Inclusive Course Design for Students with Disabilities. (2010, October 12). Wiley.com.

<https://www.wiley.com/enus/Making+Online+Teaching+Accessible%3A+Inclusive+Course+Design+for+Students+with+Disabilities-p-9780470499047>.

Online Learning Strategies for Students with Disabilities | AccessComputing. (n.d.). <https://www.washington.edu/accesscomputing/online-learning-strategies-students-disabilities>.

Online teaching in Emergencies: Accessibility Best Practices | Office of Accessibility Resources & Services. (n.d.). <https://oars.uncg.edu/online-teaching-in-emergencies-accessibility-best-practices/>.

Reyes, J. I., Meneses, J., & Xavier, M. (2022). Suitability of Online Higher Education for Learners with Disabilities: The Students' Voices. *Journal of Special Education Technology*, 38(3), 370–383. <https://doi.org/10.1177/01626434221131772>.

TeachingSupport@UMN.edu. (n.d.). Accessibility and inclusive teaching. Pressbooks. <https://pressbooks.umn.edu/guidelinesforonlineteaching/chapter/university-design-for-learning-and-accessibility/>.

## CHAPTER 6

# The Impact of Aesthetic Studies on Students with Disabilities (SWDs) in the Higher Education Sector in Sri Lanka

*S M Dinendri Niroshani K Senevirathne*

### 6.1 Introduction:

Education is a fundamental right that should be accessible to all individuals, regardless of their abilities or disabilities. In recent times, there has been a notable global focus on the significance of inclusive education, with the goal of ensuring that students with disabilities (SWDs) have equal educational opportunities alongside their peers. Sri Lanka, known as a culturally diverse nation, the higher education sector is increasingly acknowledging the transformative potential of aesthetic studies for students with disabilities (SWDs). By embracing aesthetic subjects such as music, dance, visual arts, drama, film and television, institutions have paved the way for a more inclusive and empowering educational experience for SWDs, enabling them to develop their talents, enhance their self-expression to build up self-esteem, self-satisfaction and foster social integration.

In Sri Lanka, as in many countries, students with disabilities have historically faced numerous barriers to accessing higher education. However, recent advancements in educational policies and practices have focused on promoting inclusive education for SWDs, recognizing the value of their unique abilities and talents. Aesthetic studies have become a fundamental element of this inclusive approach, offering students with disabilities (SWDs) a platform to nurture their artistic potential, enhance their self-esteem and self-satisfaction, and, consequently, make substantial contributions to their future careers.

*Recognizing that disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with other.*

( Source: [https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-jakarta/documents/presentation/wcms\\_160663.pdf](https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-jakarta/documents/presentation/wcms_160663.pdf).)

One significant aspect of the impact of aesthetic studies on SWDs in Sri Lanka's higher education sector is the development of artistic talent. Artistic disciplines such as music, dance, visual arts, Film studies and drama provide SWDs with an opportunity to showcase their abilities and creativity. Through specialized teaching methods and adaptive technologies, educators can tailor the curriculum to meet the diverse learning needs of SWDs. This can commence in early childhood education and then progress into the higher education sector. A country like Sri Lanka, in particular, requires specialized training for teachers in the field of special education. These trained educators can individually identify students' talents and provide guidance to help them find their correct paths.

Art is one of the social activities that by its nature can be quite inclusive. But, on the other hand, the social foundation of art supports the thesis that art reflects social reality. Realizing one's potential, exploring ways of expression, communicating experiences and emotions, critical reflection on everyday life, communicating with the wider society are just some of the benefits of artistic creation, both for persons with and without disabilities". (Benzon, Ivić-Hofman, Nataša.2022: p.117)

This personalized approach empowers students with visual impairments to explore Music, Drama or Painting through special auditory soft wears and tactile graphics. It allows individuals with physical disabilities to engage in Dance and movement or engage with music through adapted various techniques, and also students with cognitive impairments to express themselves through various Visual art forms. By embracing these aesthetic subjects, the higher education sector in Sri Lanka cultivates a nurturing environment that encourages SWDs to develop their artistic skills, paving the way for future careers and personal fulfillment.

In addition to talent and mental development, aesthetic studies also foster self-expression and confidence among SWDs. Many students with disabilities encounter social and communication difficulties, resulting in emotions of isolation, apprehension, and reduced self-esteem as a result of societal obstacles. However, through artistic mediums, these barriers can be overcome. Music allows individuals to express emotions and thoughts that may be challenging to convey themselves through conventional means, Dance enables the exploration of movement and body language as a means of self-expression, Visual arts encourage self-reflection and well-being, and Drama provides a platform for role-playing and for communication skills development. Hence, engaging in aesthetic studies provides students with disabilities (SWDs) with a voice and a unique perspective, enabling them to communicate, explore, and genuinely express themselves. This, in turn, enhances their self-confidence and empowers them to interact with society.

The arts have been instrumental in elucidating the political, personal, and aesthetic facets of disability's true essence. They comprise deliberately created artworks by a diverse community of Persons with Disabilities (PWD), marked by diversity in disability, race, class, gender, and sexuality. This community collectively holds distinct expectations, values, and perspectives. Art designed for disabled individuals effectively challenges stereotypes, accentuating the real-life experiences of disability and the emergence of alternative aesthetics inspired by the distinctive characteristics of an individual's body and mind. (Benzon, Ivić-Hofman, Nataša.2022)

Moreover, the impact of aesthetic studies on SWDs goes beyond individual development and extends to social integration and inclusivity. By participating in aesthetic subjects, SWDs are given opportunities to collaborate and interact with their peers, fostering understanding, sharing, and mutual respect. In the higher education sector in Sri Lanka, inclusive classrooms that incorporate aesthetic studies serve as spaces where students from diverse backgrounds can come together, appreciate each other's abilities, and celebrate the unique contributions of each individual. Through individual or group performances, exhibitions, and productions, SWDs are able to showcase their talents to a wider audience, breaking down societal barriers and challenging preconceived notions about disability. This increased visibility and social integration not only benefit for SWDs but also promote a culture of inclusivity within the broader community.

Despite the significant progress made in promoting aesthetic studies for SWDs in Sri Lanka's higher education sector, several challenges remain. Limited resources, including special equipment, software, trained staff or educators, and accessible infrastructure, pose hurdles to the full realization of inclusive education. Additionally, societal attitudes and misconceptions about disability can hinder the acceptance and support that SWDs require to thrive in educational settings. Addressing these challenges requires ongoing collaboration between policymakers, educators, disability advocates, and the wider community to ensure that aesthetic studies are accessible and inclusive for all.

## 6.2 The Benefits of Studying Aesthetic Subjects for Students with Disabilities in Higher Education in Sri Lanka

In the realm of higher education in Sri Lanka, the significance of inclusive learning and the empowerment of students with disabilities have gained growing attention and importance. A key component of this educational paradigm is the exploration of aesthetic subjects, which extend far beyond the confines of art alone. This discourse delves into the manifold benefits of studying aesthetic subjects in higher education in Sri Lanka, shedding light on the transformative potential of these disciplines for individuals with diverse abilities. Aesthetic subjects form a bridge between knowledge, assessment, transformation, and communication, all interconnected with perception.

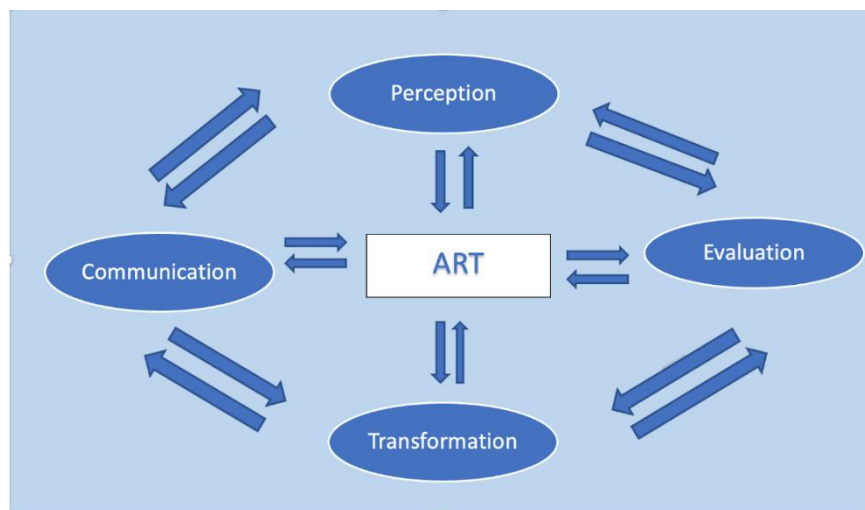


Figure 6.2.1: Art is an intricate web of interconnected processes involving perception, evaluation, transformation, and communication

By nurturing these domains, SWDs can enhance their capacity for rational thinking through the medium of art.

However, several factors can significantly contribute to the advancement of careers for individuals with disabilities (SWDs) within the arts.

### **6.2.1 Enhancing Personal Growth**

Studying aesthetic subjects provide students with disabilities a platform for self-expression and creativity. Artistic outlets foster a sense of identity and self-worth, allowing students to communicate their thoughts, emotions, and experiences. By engaging in creative processes, individuals develop resilience, self-confidence, and a positive self-image, which are fundamental aspects of personal growth. This journey of self-discovery not only aids in understanding one's capabilities but also fosters a sense of empowerment, encouraging students with disabilities to overcome challenges and embrace their uniqueness.

### **6.2.2 Skill Development and Cognitive Benefits**

Aesthetic subjects offer diverse opportunities for skill development. For instance, visual arts refine fine motor skills and spatial cognition, music enhances auditory perception, and literature nurtures critical thinking and analytical skills. These disciplines stimulate cognitive functions and enhance memory retention, helping students with disabilities build mental acumen. Moreover, engaging with aesthetic subjects encourage problem-solving, lateral thinking, and creativity, which are transferable skills applicable across various academic and professional domains. (Hina, 2010)

### **6.2.3 Promoting Social Integration**

Participation in aesthetic subjects facilitate social interaction and integration for students with disabilities. Collaborative projects, group performances, and exhibitions create inclusive environments that promote peer support, inter relationships and mutual respect. These subjects enable students to connect beyond their disabilities, fostering a sense of belonging and reducing social isolation. Inclusive art spaces provide opportunities for individuals to celebrate diversity and share their experiences, thereby breaking down barriers and building meaningful connections.



#### **6.2.4 Fostering Emotional Well-being**

The study of aesthetic subjects can significantly contribute to the emotional well-being of students with disabilities. Engaging in creative activities acts as a therapeutic outlet, allowing individuals to manage stress, anxiety, and other emotional challenges. Painting, music, dance and literature offer mediums through which students can express emotions that might be difficult to articulate verbally. This emotional release contributes to mental well-being and can positively impact their overall quality of life.

#### **6.2.5 Career Opportunities and Empowerment**

Studying aesthetic subjects equips students with disabilities with a diverse skill set that opens up new career possibilities. The creative industry offers roles in various domains such as graphic design, multimedia, animation, writing, and performing arts. As the world increasingly values creativity and innovation, individuals with disabilities who possess artistic skills can contribute meaningfully to these sectors. By pursuing careers aligned with their interests and talents, students with disabilities can achieve economic independence and empowerment.

*Artists with disabilities have started to draw public attention. The portrait of artists with disabilities that emerges from this coverage attests not only to the value of their work but also to the complicated impact of disability on their creativity. Rather than being lauded simply for producing art despite their disabilities, artists with disabilities are beginning to gain recognition for bringing fresh perspectives to the world of art and arts training. In the arts, as in the larger world, individuals with disabilities are more visible than ever before.*

(Source: Carol J, Carrie, 2009, p 05)

#### **6.2.6 Challenges and Recommendations**

While the benefits of studying aesthetic subjects for students with disabilities are substantial, challenges exist that need to be addressed. Inadequate accessibility to artistic facilities, lack of specialized training for educators, and societal misconceptions about the capabilities of individuals

with disabilities are some hurdles. To overcome these challenges, collaboration between educational institutions, disability support services, and the government is crucial. Establishing accessible infrastructure, providing inclusive training for educators, and raising awareness about the potential of students with disabilities are steps towards creating a more enabling environment.

### **6.3 A case study: “*Beautiful Moments*”, an exploring the Collaborative Study of Dance with “Abilities Dance” in Boston, USA, and Students from the Department of Fine Arts, Faculty of Arts, University of Peradeniya**

Aesthetic subjects can address people's minds in diverse ways. One of its most significant forms of transcendence is in breaking down the barriers that too frequently separate people on a global scale—barriers such as language, borders, culture, economics, politics etc. During the time, amidst the backdrop of the shared challenge of the COVID-19 pandemic, we tried to explore new ways to connect creatively through music and dance movements with “Abilities Dance group in Boston”. Ellice Patterson is the executive director of the Abilities Dance group and their vision is,

*“We disrupt antiquated ableist beliefs and disseminate the value of inclusion through dance”*

(Source: <https://www.abilitiesdanceboston.org/>)

Due to the pandemic, she conducted an online meeting with few academic staff members from the Department of Fine Arts through the facilitation of Ashley Fagnoli, a Fulbright Scholar, distinguished dancer, and visiting lecturer at the University of Peradeniya in Sri Lanka. During this session, she elaborated on her project's aims and objectives. Following a lengthy discussion on the collaborative project, a dance movement with music pieces were conceptualized involving artists from the Department of Fine Arts at the University of Peradeniya, encompassing both staff and students, in conjunction with the artists from the Abilities Dance group in Boston. This endeavor aimed to transcend the barriers presented by the pandemic, and the artistic expression was encapsulated in the project titled “*Beautiful Moments*”. These exceptionally skilled artists adeptly orchestrated the creation of a cross-border virtual concert, underpinned by the profound aesthetic significance woven throughout its diverse compositions. In the initial phase, we organized ourselves into four groups, each comprising a small number of dancers and a musician

from both Abilities Dance group in the USA and the Department of Fine Arts at the University of Peradeniya.

Each dancer was presented on either four, three, or two separate Zoom screens, each showcasing different backgrounds. These backgrounds included indoor and outdoor settings. The unique energies and qualities of these spaces came together in a captivating and memorable manner. Every section contained different and unison movements with individual pauses. The performers' interconnect gestures were evident, despite being separated by great distances and joining through the digital space.

*“Regarding movement quality, there was contrast between a linear and a serpentine feeling in the movement vocabulary. Dancers reached up, standing to squarely face the camera with their feet hips distance apart. Their arms then moved into a circling quality, finding an embrace of the air around them and the energy of the performance that connected them. The juxtaposition of these dynamics, at seemingly opposites ends of a spectrum, was both visually and energetically satisfying”*

(Source: Dance Information: 2021)

In a particular segment, two performers were featured: one in a wheelchair (a dancer from Boston), and the other standing (from the Department of Fine Arts). They synchronized their arm movements in both lateral and circular patterns, with impactful moments when they reached towards the camera in unison. The movement of four, three or two Zoom screens were provided both visual and energetic dimensions for the virtual audience.

*“We can remember that while also acknowledging that the limitations of that medium are quite real. The dancers completed the piece with reaching their arms up and then taking prayer hands at their heart — importantly, it felt like, in their own timing. This development underscored the spiritual potential of dance and movement and that we can, and should, find that in our ways”*

(Source: Dance Information: 2021)

Another noteworthy aspect is that each performance was accompanied by a background narrator. The primary aim was to provide an audio description of each movement and pause, ensuring that individuals who couldn't visually experience the virtual performance could still engage with and comprehend the intricacies of the performance.

In this project, my role was that of a music composer for a specific group. Ellice wanted us to create music that could embody the dance movements energetically and rhythmically. Sava, the music composer from Abilities Dance, and I deliberated on the creation of the piece and their vision of infusing the concept of 'flow' into it. Following Sava's guidance, we collaboratively composed music pieces that blended elements of both Western, Eastern and Sri Lankan musical traditions. It was captivating to reflect on how our music was instrumental in facilitating the dancers' seamless transitions within the flow of their movements.

(Source: <https://www.youtube.com/watch?v=hhRFFVAsq6o&t=1420s>)

## 6.4 Challenges

The primary focus revolved around two critical elements: timing and movement quality. When it came to timing, dancers executing the same dance vocabulary at different intervals in a more informal manner. This effect may have been influenced by Zoom lag and the inherent challenges of coordinating timing through the platform. However, it also introduced an improvisational dimension that felt profoundly human and relatable. It prompted contemplation and brought joy as we engaged with one another through imperfect digital mediums, especially during this challenging time.

*"That we can dance together, no matter where we are in the world — in the most meaningful cases, thereby transcending barriers of language, borders and preconceived notions — is another important reminder. This time has brought us much suffering and hardship, for people across the world, but it's also underscored our common destiny and all else connecting us. Engaging creatively through the body can only deepen and sustain*

*such understandings. Thank you to all artists in Beautiful Moments for highlighting these essential truths, in such an engaging and pleasing way. Beautiful moments indeed!”*

(Source: Dance Information: 2021)



Figure 6.4.1: Three dancers, expressing creativity through their bodies and movements



Figure 6.4.2: Practices through the virtual platform in different locations



Figure 6.4.3: The flyer of the final art work

## 6.5 Conclusion

In conclusion, the impact of aesthetic studies on SWDs in the higher education sector in Sri Lanka is multi-faceted and transformative. By recognizing the artistic talents of SWDs and providing them with opportunities to express themselves, higher education institutions foster personal growth, self-expression, and social integration. Through inclusive classrooms and collaborative initiatives, aesthetic studies contribute to a more inclusive society that values the diverse abilities and talents of all individuals. Moving forward, it is crucial for Sri Lanka's higher education sector to continue investing in the necessary resources, infrastructure, and support systems to ensure that aesthetic studies are accessible and beneficial to SWDs, creating an educational environment that embraces diversity and empowers all students to reach their full potential. As Sri Lanka progresses towards a more inclusive higher education landscape, recognizing and promoting the benefits of

aesthetic subjects for students with disabilities will play a pivotal role in shaping a brighter and more inclusive future for all.

## References

Admin. (2021, February 10). “*Beautiful moments*” from *Abilities Dance Boston*. Dance Informa Magazine. <https://www.danceinforma.com/2021/02/10/beautiful-moments-from-abilities-dance-boston-artists-of-the-university-of-peradeniya-dancing-across-borders/>.

Careers in the arts for people with disabilities: (n.d.-a). [https://artsedge.kennedy-center.org/2009NEASummit/docs/RevisedSummitReport\\_GillSandahl\\_7\\_16\\_09.doc](https://artsedge.kennedy-center.org/2009NEASummit/docs/RevisedSummitReport_GillSandahl_7_16_09.doc).

Convention on the rights of persons with disabilities and optional protocol. (n.d.-b). <https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>.

Human rights and reconciliation in the post-conflict multicultural ... (n.d.-c). <https://opac.wyb.ac.lk/cgi-bin/koha/opac-detail.pl?biblionumber=63343>.

Interactive Arts and Disability: A conceptual model toward ... (n.d.-d). [https://www.researchgate.net/publication/343234029\\_Interactive\\_Arts\\_and\\_Disability\\_A\\_Conceptual\\_Model\\_Toward\\_Understanding\\_Participation](https://www.researchgate.net/publication/343234029_Interactive_Arts_and_Disability_A_Conceptual_Model_Toward_Understanding_Participation).

Mauron, C. (n.d.). *Aesthetics and psychology*. Google Books. [https://books.google.com/books/about/%C3%86sthetics\\_and\\_Psychology.html?id=0zk\\_AAAAIAAJ](https://books.google.com/books/about/%C3%86sthetics_and_Psychology.html?id=0zk_AAAAIAAJ).

Ocvirk, O. G. (2013). *Art fundamentals: Theory and practice*. Amazon. <https://www.amazon.com/Art-Fundamentals-Practice-Otto-Ocvirk/dp/007240700X>

OSOBE s invaliditetom - unios. (n.d.-e). <http://www.uaos.unios.hr/wp-content/uploads/2021/12/OSI-Zbornik-FINAL-WEB.pdf>

Person, Tessa, & Dalley. (1984, July 19). *Art as therapy: An introduction to the use of art as a therapeutic te*. Taylor & Francis.

<https://www.taylorfrancis.com/books/mono/10.4324/9780203134825/art-therapy-tessa-dalley>

Use of art/art work and cognitive skill for the rehabilitation of ... - ed. (n.d.-f).

<https://files.eric.ed.gov/fulltext/EJ1137145.pdf>



## CHAPTER 7

# Developing Diversity, Equality and Inclusion (DEI) Mechanisms in Sri Lankan State Universities - Policies, Practicalities and Strategies

*Mr. G. Vickneswaram*

### 7.1 Introduction

The institutional academic and administrative systems, which are shared by all state universities, have several procedures that could make it easier to meet the needs of students with disabilities (SWDs) in the universities. This chapter investigates the prevalence of policy mechanisms established at Eastern University, Sri Lanka and the effectiveness of those mechanisms to meet the needs of SWDs in the university. The chapter focuses on certain areas; teaching and learning, academic administrative structures, social environment, staff development, financial allocation and monitoring and evaluation, to evaluate the practical processes of policy-based establishments of DEI mechanisms at the university.

The chapter is the outcome of a study conducted at Eastern University, Sri Lanka. The overall objective of the study is to investigate the effectiveness of existing academic and welfare mechanisms available at Eastern University as a state university education system for students with disabilities, and to identify the gaps in policy orientations and the practicalities in the available mechanisms. Accordingly specific objectives of the study are to identify what mechanisms and policies are currently available to facilitate special needs or inclusive education at state universities like Eastern University, Sri Lanka, to analyze the drawbacks and potentialities of the existing academic and administrative arrangements of state universities in assisting teaching, learning and welfare provisions and to advocate possible strategies to improve the existing mechanisms and to implement new policy decisions.

The study was a cross sectional study based on case study methodology and the study is also based on descriptive type in its nature using qualitative methods. The study universe is mainly confined to students of arts, humanities and social sciences of three Sri Lankan state universities of IncEdu Project; University of Peradeniya, University of Ruhuna and Eastern University, Sri Lanka, . This is not to say that the study failed to focus on other streams of students in the faculties of Science, Agriculture and Commerce and Management. Since intake of students with disabilities is officially included for faculties of arts, humanities and social sciences under the student allocation process of the University Grants Commission (UGC), it was planned to mainly concentrate on SWDs of arts, humanities and social sciences, consisting large number than other faculties, as it is essentially convenient to get the empirical information related to teaching and learning conditions. However, the study has taken welfare and administrative related situations of other faculty students in these universities into consideration.

In order to gather qualitative data for this study, focus groups and interviews were used. Key informant interviews (KII) and in-depth interviews were used to collect qualitative information from students and staff. Key informant interviews were done with the employees at the partner Universities in Sri Lanka, focusing on individuals who hold administrative roles primarily handling student matters and those with extensive work history in university staff positions. Moreover, in-depth interviews were used to gather some of the respondents' case histories relating to their practical experience linked to service delivery and facilitation for SWDs at partner Universities in Sri Lanka. Focus Group Discussions (FGDs) were held among staff and students to gather information regarding the general and collective perceptions of the stakeholders of these universities in addition to KII and in-depth interviews.

The chapter delineates the findings of the study that state institutions in Sri Lanka have well-established procedures for student welfare systems as well as centrally guided policy processes for teaching and learning. Although universities have adequate academic and administrative structural arrangements, some of those arrangements' activities are inadequate for a variety of reasons, making it difficult to meet the unique needs of SWDs. Beyond the fact that some policy mechanisms must be freshly developed to sustain financial and technological resources, it is

possible to operate current mechanisms efficiently with the resources at hand to meet the academic and welfare needs of SWDs.

## **7.2. Policies on Diversity, Equality and Inclusion (DEI) in Sri Lankan Context**

Cultures in Sri Lanka have always valued diversity, equality, and inclusion (DEI). They are the core principles of Sri Lankan communities' religions and traditions. However, due to the socio-economic changes throughout the colonial times, Sri Lankans along with other South Asian countries were unable to maintain such historically assigned ideals. As a result, diversity, equality, and inclusion have been passed on to Sri Lankans as western concepts through international conventions. From this vantage point, Sri Lanka made outstanding and historically significant progress in ensuring that its citizens had access to legislative protections for inclusion and equality originating during British colonial rule. The internationally recognized statutes guaranteeing DEI during British administration in Sri Lanka are the Universal Franchise of the 1931 Donoughmore Constitution and Section 29 (II) of the 1947 Soulbury Constitution. Considering DEI policy and Legal Frameworks in education, international conventions had a significant impact on and influenced Sri Lankan policies and related constitutional laws. Sri Lanka ratified the 1989 convention on rights of Child as a state party. In 2016, Sri Lanka adopted the 2006 UN Convention on the Rights of Persons with Disabilities. The United Nations (2006) Convention on the Rights of Persons with Disabilities (CRPD) states that “persons with disabilities are able to access general tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others.” Sri Lanka is the state party of the convention.

Article 12.2 of the 1978 Constitution, which was amended in 2015, promotes education for all citizens and forbids discrimination on the basis of race, religion, language, caste, sex, political opinion, and place of birth, but it does not specifically state that education is exempt from discrimination on the basis of disability. (Sri Lanka, 2015). However, Sri Lanka enacted the Protection of Rights of Persons with Disabilities Act No. 28 in 1996, establishing a foundation for the elimination of discrimination in education and guaranteeing compulsory and free education for all through the Compulsory Education Ordinance 1997. (Sri Lanka, 1996). In pursuit of greater disability inclusion, the 2003 National Policy on Disability for Sri Lanka provides a

comprehensive framework for persons with disabilities to be included in all aspects of society. Inclusive education was explicitly defined in the policy, demonstrating the country's commitment to include children with disabilities in general education through learner-centered teaching approaches. (Ministry of Education, 2009). In 2013, the Education First policy reaffirmed the inclusion of children with disabilities in education, and, to the extent possible, should be taught in regular classrooms. The Education Sector Development Plan (ESDP) 2018–2025 promotes inclusive education in parallel with strengthening special education. It specifically focuses on strengthening special education, inclusive education and non-formal education. (Abeywickrama, Jayashinghe and Sumanasena, 2017)

Even though there are notable developments in policy formation and establishments of legal frameworks in ensuring equality and inclusion in primary and secondary education, there has been no any national policies and mechanisms introduced in tertiary educational sector in Sri Lanka. A policy to safeguard the rights of Students with Disabilities (SWDs) is yet to be created for the Higher Educational Institutions (HEI) in Sri Lanka. However, there are certain mechanisms under the institutional academic and administrative systems, common to all state universities that could facilitate to satisfy the requirements of SWDs in the universities despite of the absence of a national policy for SWDs for universities. This chapter evaluates the effectiveness of those mechanisms in serving SWDs to meet their needs in universities. It focuses on specific areas; teaching and learning, academic administrative structures, social environment, staff development, financial allocation and monitoring and evaluation.

### **7.3. Enhancing Teaching and Learning Facilities**

Inclusion involves the participation of SWDs in a regular classroom with the aim of providing equal opportunities and experiences as non-disabled students. (Marston, 1996). SWDs of all sorts of impairments have difficulties in acquainting with the entire teaching and learning system of the university. It ranges from accessing the class room to selecting and following the courses in a degree program. Teaching is considered as a designing process and teachers are deemed to implement the learning designs to achieve the objectives of student learning. (Laurillard, 2012). Therefore, teaching and learning process in a university is not just limited to transferring the

knowledge in a class room. It entails systematic planning and designing degree programs, curriculums, lessons and evaluation methods in an academic entity with the conducive arrangements of built environment.

### **7.3.1. Creating Physical Learning Environment**

The constructed layout of the classrooms should be accessible for various SWDs to gain entry. Universities in Sri Lanka have physical structures with accessible amenities for nearly all categories of disabled people. Sri Lanka adopted the Disabled Persons (Accessibility) Regulations, No. 1 of 2006 which clearly indicates, “all existing public buildings, public places and places where common services are available, shall within a period of three years from the coming into operation of these regulations, be made accessible to persons with disabilities in compliance with the provisions of these regulations” (The Protection of the Rights of Persons with Disabilities Act, 1996). The lecture halls are also equipped with accessible seating, and new university buildings have been built with accessible ramps, lifts, hand rails, and grab bars. It is obvious that modifications were done to include facilities accessible to people with disabilities, even in older buildings.

To facilitate the learning activities of SWDs in universities, very few classrooms are outfitted with assistive technologies. Assistive technologies are seen as tools for enhancing personal functioning and independence and having an impact on the wellness of people with disabilities. (Khasnabis, Mirza and MacLachlan 2015). Clearly, there is a lack of assistive devices in lecture halls that would allow SWDs to participate actively in learning activities. It is a fact that neither pullout lecture halls for providing particular care to SWDs in the classroom nor full inclusion lecture halls where SWDs might have assistive technologies to equally engage in learning activities with other students are present in state universities in Sri Lanka. Most public universities are unable to technologically upgrade the lecture rooms with contemporary assistive devices due to a lack of funding. Therefore, it is understandable that SWDs struggle for their individual functioning and autonomous learning in lecture halls without assistive devices. It is necessary to all state universities to follow the Universal Design for Learning (UDL) to ensure the equal access of any physical environment in the universities for SWDs. The concept of universal design (UD), which is used in product and architectural design, has been updated to address the needs of educators and

is now known as universal design for learning. (Davies et al, 2013). Implementing UDL principles in the Sri Lankan state universities will ensure the inclusive and equitable teaching and learning model within the system.

### **7.3.2. Promoting Learner Support Systems**

This chapter focuses on learning support systems for SWDs in state universities when it comes to teaching and learning activities at higher educational institutions, in addition to the supportive physical infrastructure facilities. First, peer tutoring assistance services for SWDs in undergraduate programs are the focus of the research investigation. It mainly examined whether the degree program handbooks in the state universities included for the study contain particular SWD evaluation methodologies. Sri Lankan universities introduced a number of new CAT modes based on KSAM principles based on the Sri Lanka Quality Assurance Framework (SLQF). Commission Circular No. 11/2020 enables state universities to adopt various recommended methods for continuous assessments. It is apparent that state Universities in Sri Lanka have gradually moved away from the conventional kind of interim assessment procedures. However, the compatibility of the modes with the unique needs of SWDs has received very little attention. It was determined that there aren't any systems in place for figuring out which evaluation techniques are most suited for the various sorts of SWDs and their varying capacities to follow those techniques.

The study also considers the learning accommodations that are offered to SWDs in universities. Disability Resource Centers (DRC) are deemed as the ideal place to serve the learning accommodations to SWDs at Universities and few state universities have recently been established DRCs. The ideal way to meet the learning demands of SWDs with diverse special needs is through these resource centers. (Affleck, Madge, Adams and Lowenbraun, 1988). Despite the absence of other accessible academic arrangements, DRCs outfitted with cutting-edge accessible technologies could aid SWDs in their academic pursuits. DRCs are entities that contribute to policy decisions and administrative initiatives connected to the welfare of SWDs in order to encourage their inclusive and equal engagement in learning, in addition to academic facilitation. However, DRCs have not yet progressed toward integrated coordination in conjunction with classroom activities. To meet the unique needs of SWDs who have trouble integrating into conventional lecture hall activities, DRCs must blend their activities with those of the teaching and learning that take place

there. In order to give SWDs access to helpful technologies so they can respond to the assessments, DRCs should collaborate with examination centers. Otherwise, the challenges remain intact.

### **7.3.3. Designing Curriculum Structures**

According to SWDs in the study, not all course structures in the undergraduate degree programs that their faculties provide are appropriate for them. However, students in many state universities are free to choose appropriate courses based on their choices. It is clear that the adaptable course structure enables SWDs to choose courses that are appropriate for their skill levels. Even while Sri Lankan universities gave students in the faculty of arts a wide variety of subjects in various sectors, it is observed that few faculties had restricted the options available to students due to the overwhelming number of students. Introducing “basket system” in the course selection which allows students to select certain subjects that are grouped into a category, faculty had restricted students’ freedom in selecting subjects which they prefer. SWDs perceive this system incompatible to their interests that selecting courses suitable to their abilities and specific needs.

It is almost mandatory under SLQF that course structure of every degree program in undergraduate level should have Fallback Qualifications. The system benefits students who unable to pass examinations throughout the entire academic years to gain a certification for their engagement in the course of study. It explicitly benefits SWDs who have more difficulties in succeeding examinations due to the lack of accessible facilities, assistive technologies and specific modes of evaluations. There is a considerable improvement in Sri Lankan state universities in introducing Early Exit Points and Fallback Options to undergraduate course structure with implementation of Commission Circular No. 04/2021 of UGC.

Major drawback observed in the curriculum design and course structure the universities have no credit transfer system. Credit transfer system enable students to follow some semesters in one university and follow further semesters in another university. The system is more preferable for SWDs to follow courses in a degree program in a university and transfer it to the same nature of the degree in other university. It enables them to continue studies in their accessible universities. However, despite of many changes in the course designs, and even the UGC allowed prior learning,

credit transfer and lateral entry under the Commission Circular No. 05/2021, the system has not been implemented in any state universities in Sri Lanka for the undergraduates.

#### **7.4. Improving Academic-administrative structures**

Universities, which are semi-governmental institutions, are free to create centers or sub-administrative entities as well as by-laws and operational procedures with regard to policy decisions and implementations. Universities can create rules to guarantee diversity, inclusion, and equality. There are number of policies related with diversity of other types, but very few universities have formed a policy for SWDs. Notably three universities, University of Peradeniya, Eastern University of Sri Lanka and University of Ruhuna have recently established SWD policy for their universities as a result of their partnership in IncEdu Project. The policy is instrumental to enforce further academic and welfare administrative facilitation to SWDs in these universities.

There are administrative units commonly established in all state universities under the ordinance of University Grants Commission in Sri Lanka to look after the student welfare requirements. In Sri Lankan universities, there is a generally approved structures of student welfare system in all state universities; notably, Office of the Deputy vice chancellor, Office of the Director for Student Support Service and Student Welfare (SSSSW), Office of the Senior Student Counsellor and Student Affairs department generally known as student welfare office. All these academic administrative bodies are responsibly related to cater the welfare needs of students including SWDs. Nevertheless, the effectiveness of delivering welfare services in coordination to cater the special needs of SWDs is in question. Except few disciplinary inquiry processes like Board of Discipline (BOD), each unit engages separately in attending welfare issues of students. There are no formal coordinating arrangements among these units so as to respond welfare affairs of the students. It doesn't mean that each unit is ineffective to attend welfare issues of students without coordination among them, but it is evident that there are issues taken up by one of these units left incomplete due to lack of coordination.

There are approved bodies of student representations and committees for various purposes under this student welfare system. Student unions are independent entities which plays pivotal role in



addressing issues of students, particularly welfare issues. There are committees established to respond needs and issues of students like gender cell at state universities. However, no committee has been formed for SWDs as an approved entity within the student welfare system in these universities. It leads to the perception that SWDs have no room to address their specific needs and let alone SWDs with the sense of being marginalized.

There are certain financial provisions being extended to the universities by the Ministry of Higher Education to the state universities. Universities are given financial allocations based on the number of the students in a single intake. Diversity doesn't matter here, but the numbers only do work. Even though universities receive financial allocations based on students' number, no financial allocations are made for SWDs from UGC; SWDs are enumerated as normal intakes in financial allocations and no special financial provisions for welfare of the SWDs are set to be allocated yet. Therefore, it is quite difficult for state universities to provide special need care for SWDs with in the university environment.

### **7.5. Developing Staff competencies**

To train academic, administrative, and non-academic staff members and to improve their skills so they may better serve the system, almost every state university established their own Staff Development Centers (SDC). Offering training programs and short courses on diversity, equity, and inclusion (DEI) through the centers is an innovative idea to promote the welfare of SWDs in Universities.

SDCs in Universities specifically conduct Induction course on Teaching Methodology; a compulsory course to train newly recruited academics in teaching methods. All permanent academics in all state universities have to complete this course as it is mandatory for them to get confirmed in their position. The study found that though the course is specifically aimed to train academic staff in teaching methods for university students, the course curriculum poorly incorporates concerns about SWDs. In both universities, Induction course on Teaching Methodology does not consist course contents to train candidates on specific methods in teaching SWDs and to disseminate knowledge about the special needs of SWDs. It is also identified that

there is no general curriculum developed in common for all universities for the course. Each university designed their own curriculum for the course. Considering the drawback, a policy guideline is thus necessitated to streamline the course contents so as to incorporate teaching methods for special need students.

## **7.6. Conclusion**

All university stakeholders have a duty to promote an atmosphere that is fair and flexible in culture. It also avoids harassment and bigotry and is respectful, pleasant, and professional. The university must promote a welcoming atmosphere. They like the power that comes from uniqueness and they appreciate and respect it. Strategies and action plans should be put in place to promote and advance diversity and equality for both staff and students, regardless of gender, sexual orientation, ability, or ethnicity. (Dhanapala, 2006).

State institutions in Sri Lanka have well-established procedures for student welfare systems as well as centrally guided policy processes for teaching and learning. Although universities have adequate academic and administrative structural arrangements, some of those arrangements' activities are inadequate for a variety of reasons, making it difficult to meet the unique needs of SWDs. Beyond the fact that some policy mechanisms must be freshly developed to sustain financial and technological resources, it is possible to operate current mechanisms efficiently with the resources at hand to meet the academic and welfare needs of SWDs. It is obvious that Sri Lankan State Universities has their own liberty to enforce certain policies and procedures under the 1978 university act. It can be used to ameliorate the conditions of SWDs in the universities. However, it is notable that even though there are provisions under UGC ordinances and Circulars to incorporate certain process such as credit transfer to make fruitful changes in the academic system of the university, State universities are still reluctant to practice them.

## References

- Abeywickrama, S. P., Jayasinghe, I. K., & Sumanasena, S. P. (1970, January 1). *Excluded in inclusive schools: Experiences of children with disabilities, their families and teachers in Sri Lanka*. UoK Repository Home. <http://repository.kln.ac.lk/handle/123456789/2313>.
- American Psychological Association. (n.d.). *Apa PsycNet*. American Psychological Association. Measuring the effectiveness of universal design for learning ... (n.d.-e).
- Icevi.org. (n.d.-d). <https://icevi.org/wp-content/uploads/2018/05/Success-of-Inclusion-in-Sri-Lanka-by-T.D.T.L.-Dhanapala-ICEVI-World-Conference-12-July-2006.doc>.
- M;, K. C. Z. (n.d.). *Opening the Gate to inclusion for people with disabilities*. Lancet (London, England).
- Frankenberg, G. (2010b). Constitutional transfer: The IKEA theory revisited. *Icon-international Journal of Constitutional Law*, 8(3), 563–579.
- Laurillard, D. (2013). Teaching as a design science. In *Routledge eBooks*.
- Marston, D. (1996). A Comparison of Inclusion Only, Pull-Out Only, and Combined Service Models for Students with Mild Disabilities. *Journal of Special Education*, 30(2), 121–132.
- Including disabled people in poverty reduction work ... - researchgate. (n.d.-c). [https://www.researchgate.net/publication/233569902\\_Including\\_Disabled\\_People\\_in\\_Pove\\_rty\\_Reduction\\_Work\\_''Nothing\\_About\\_Us\\_Without\\_Us''](https://www.researchgate.net/publication/233569902_Including_Disabled_People_in_Pove_rty_Reduction_Work_''Nothing_About_Us_Without_Us'').

## CHAPTER 8

# Peer Support for Students with Disabilities - a Useful Tool in the Academic Environment

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### 8.1 Introduction

The diverse world we live in has the potential to foster excellence and innovation, but it can also perpetuate inequality and discrimination (Swartz et al., 2019). Diversity encompasses various aspects, including personal background, age, gender, sexual orientation, race, ethnicity, culture, religion, geography, socioeconomic status, and (dis)ability. People with disabilities make up a large portion of the global population, with an estimated 1.3 billion people (16 % of the population) experiencing some form of disability (Disability, 2023). Although disability prevalence rates differ across countries (e.g., developing countries tend to have higher rates of disability, as per data from the World Health Organization, 2011), it is crucial to consider contextual factors when interpreting and understanding the data. These factors may include variations in procedures for determining disability, diverse approaches to exercising rights based on personal disability, and the specific laws and legal mechanisms in each country for obtaining disability status, among others.

People with disabilities face heightened risks throughout their lives when compared to those without disabilities. They are more susceptible to adverse socioeconomic outcomes, including a higher risk of poverty or social exclusion (EUROSTAT, 2022), lower employment rates (Houtenville and Boege, 2019), and lower education (Seen, Counted, Included: Using data to shed light on the well-being of children with disabilities, 2021). EUROSTAT (2022) data indicate that in 2021, 29.7 % of individuals aged 16 or older with disabilities (activity limitation) in the EU were at risk of poverty or social exclusion, compared to 18.8 % of those without disabilities. Houtenville and Boege (2019) presented data showing that in 2017, the poverty rate for people with disabilities (aged 18-64) in the U.S. was 29.6 %, while the poverty rate for people without

disabilities was estimated at 13.2 %. Furthermore, data from *Seen, Counted, Included: Using data to shed light on the well-being of children with disabilities (2021)* show that children with disabilities are 49 % more likely than their peers without disabilities to have never attended school, 47 % more likely to have dropped out of elementary school, and 27 % more likely to have dropped out of high school.

According to the Postsecondary National Policy Institute's report on students with disabilities in higher education (Postsecondary National Policy Institute, 2023), among the 38 million people in the U.S. aged 25 or older who have reported having a disability, approximately 6.7 million (18 %) possessed a bachelor's degree or higher in 2019, marking an increase from 13 % in 2010. Comparatively, the report emphasizes that people with disabilities are significantly less likely to hold a higher education degree compared to the 36 % of the population who reported no disability in 2019. At the EU level, recent data indicates that 20.3 % of people with disabilities left school prematurely, in contrast to 10.8 % of those without disabilities. Additionally, only 30.9 % of learners with disabilities pursued tertiary education (European Disability Forum, 2020).

Despite the growing efforts of higher education institutions in numerous countries to foster inclusivity, the task of achieving inclusion remains a significant challenge. While there are proven societal benefits to including people with disabilities in higher education, barriers persist, leading to heightened dissatisfaction among students with disabilities compared to their non-disabled peers (Smith, Woodhead, and Chin-Newman, 2021). Rooney (2019) posits that the rhetoric employed by many higher education institutions is often aspirational rather than grounded in a genuine understanding of or connection to the circumstances and lived experiences of students with disabilities. To address this issue, there is a pressing need to expand participation strategies, programs, and processes within higher education institutions to foster a more inclusive environment.

Arainscow, Slee, and Best (2019) define barriers to inclusion as factors or conditions that impede or limit equal learning, belonging, and participation in educational processes. Darrow (2009) categorizes barriers into three areas: organizational, altitudinal, and knowledge barriers. Drawing from a comprehensive review of twenty-three empirical research studies, Toutain (2019) identifies

the most common barriers encountered when making accommodations for students with disabilities in higher education. These barriers include students' lack of knowledge or awareness of available campus resources, inability to adequately document a disability, a lack of accommodations that effectively meet students' needs, and negative reactions from peers and faculty members when disclosing their disability or requesting accommodations.

Higher education institutions employ various strategies to foster the inclusion of students with disabilities and address the challenges they encounter. Some of these strategies may be difficult and costly to implement, such as providing environmental accommodations and specialized assistive technologies. Additionally, the successful implementation of these strategies often relies on the willingness and attitudes of faculty and administrative staff. Another critical factor is the acceptance and attitudes of fellow students towards their peers with disabilities. Consequently, institutions of higher education are tasked with developing and implementing inclusion strategies that are both reasonable, in terms of providing reasonable accommodations, and sustainable. These strategies should also focus on enhancing knowledge about students with disabilities and fostering attitudes that promote inclusivity.

## **8.2 Peer Support in Higher Education**

Peer support encompasses a range of activities, spanning from counselling interventions where young individuals engage in quality assurance to activities led by adults to collaborative problem-solving initiatives involving both young people and adults (Kranželić and Ferić Šlehan, 2012). Grounded in the inherent capacity of friends to naturally provide support to one another, peer support can occur in any setting, across diverse organizations, and among individuals of all age groups. Consequently, peer support systems can be established and made accessible to children, adolescents, young adults, and seniors alike.

According to Aziz et al. (2018), peer support refers to a process in which individuals or groups with a particular experience or condition provide emotional, social, and informational support to others with similar situations. Magasi and Papadimitriou (2022) define peer support intervention as an umbrella term encompassing various programs that leverage the strengths and experiential

knowledge within the disability community to improve the health, participation, and quality of life of people with disabilities. Similarly, Brock and Huber (2017) describe peer support as a form of peer-mediated intervention wherein students without disabilities provide support to students with disabilities, promoting skill development and fostering inclusive educational opportunities. While peer support is most developed in school-age groups, its implementation and effectiveness in secondary and higher education settings have received less attention. However, it is recognized as a valuable tool in academic environments as a form of support to vulnerable student groups, including those with disabilities.

Peer support is founded upon the principles of respect, shared responsibility, and mutual understanding (Bartone et al., 2018), embracing values such as hope, recovery, empathy, and self-determination. It emphasizes interpersonal communication skills, critical thinking, and personal growth, while upholding strong commitment to ethics, an understanding of the role of peer support, and a nonjudgmental approach (Sunderland et al., 2013). Non-hierarchical relationships, choice, positive role modelling, reciprocity, support, community, self-help, and self-determination are identified as core values that underpin peer support (Johnsen, Teague and Herr, 2005). Mead and MacNeil (2006) explain that peer support encompasses emotional and instrumental/practical support and is intended to be mutually beneficial through a reciprocal process of "give and take." Peer support fosters the development of personal and social skills both for those offering support and those receiving it. It primarily cultivates communication skills, self-esteem, negotiation abilities, self-advocacy, and the capacity to seek and provide support, along with various other social-emotional skills that contribute to the establishment and maintenance of meaningful relationships. Moreover, engaging in peer support allows individuals to assume new roles and responsibilities, thereby promoting the development of teamwork and leadership skills (Kranželić and Ferić Šlehan, 2012).

Peer support arrangements for students with disabilities offer numerous benefits, including the promotion of social interactions and social benefits (Carter et al., 2016; Brock and Huber, 2017), positive changes in self-confidence, self-esteem, self-management, hope, empowerment, and reduced loneliness (King and Fazel, 2021; White et al., 2020; Resnick and Rosenheck, 2008), career and academic outcomes (Osborn et al., 2022; Marly and Wilcox, 2021), and improved

psychological well-being and mental health (Byrom, 2018; Rebinsky et al., 2022). Research suggests that new students who do not develop a sense of belonging within eight weeks of starting college face an elevated risk of dropout (Leake and Stodden, 2014). Among students with disabilities, data reveals that 25 % drop out by the end of their first year, and 35 % by the end of their second year (December, 2017), underscoring the importance of peer support in higher education.

Early literature, as summarized by Carter et al. (2009), highlights the benefits for students without disabilities who engage in peer support activities: (1) personal growth, including a deeper sense of self; (2) improved views of people with disabilities; (3) increased views of the value of diversity; (4) development of advocacy skills; and (5) friendship. Franjkić, Kiš-Glavaš and Novak Žižić (2014) conducted a study at the University of Zagreb, attempting to determine the students' perceptions about the opportunities for students with disabilities to meet study program requirements. The research considered variables, such as gender, field of science, previous experience with people with disabilities, and knowledge about people with disabilities provided by the study program. The results showed that students perceive the opportunities of blind students in higher education as highly unfavourable, while the opportunities of students with dyslexia, motor disorders, and chronic diseases were rated as high. The results also revealed that students without inclusive educational experiences held more negative perceptions of opportunities for people with disabilities in higher education, and that current experiences with people with disabilities had a greater impact on positive attitudes than previous experiences. Other authors, such as Blakstad Bjørnerås et al. (2022) and Leigers et al. (2017), also emphasize the importance of developing positive perceptions and experiences with people with disabilities.

According to Carter et al. (2009), peer support arrangements have unique characteristics compared to other peer-mediated approaches. These include (1) a focus on providing social support and engagement in a social experience; (2) flexibility in support structure that can be influenced by the strengths and interests of individual participants; (3) a smaller number of students; (4) focusing on supporting students with minor disabilities, and (5) focusing on delivery in an inclusive setting. For peer support to be effective, it should be grounded in relevant theoretical concepts and supported by evaluation research. Effective peer support programs exhibit qualities such as youth



empowerment, competent adult supervision, cultural competence, diversity, responsiveness to the specific needs of the target population, fair resolution of mediated conflicts, and measurable outcomes (Blakeway et al., 2007).

Blakstad Bjørnerås et al. (2022) conducted a review study on student peer support interventions for students with disabilities in higher education and identified three key concepts: peer guidance and supportive relationships, building strategies and transferable skills, and advocating for change. Recommendations from other studies include establishing clear goals for peer support (to define the procedures and scope of peer support), clear criteria for recruiting peer students, providing high-quality training for peer students necessary to be able to provide support, and ensuring supervision and monitoring by experienced mentors (Mirbahaeddin and Chreim, 2022; Daniels et al., 2012; Rebeiro Gruhl, LaCarte, and Calixte, 2016).

Daniels et al. (2012) identified core elements of peer support programs based on an extensive literature review. The elements include: (1) training, supervision, and monitoring – effective training and ongoing monitoring and supervision to implement structured peer support interventions; (2) providing social connections and support – peer support interventions should foster social connections; (3) creating a safe environment – ensuring a welcoming, safe, and respected environment and confidentiality to reduce stigma; (4) ongoing peer and participant engagement – ensuring a high level of engagement before the program begins for peer assistants (to stay connected, share concerns, and learn from each other) and for students with disabilities (encouraging proactivity and active initiation of peer support); (5) recruiting students to provide peer support with specific peer characteristics – good communication skills, authentic, motivated, calm, non-judgmental, high levels of compassion, optimism, and acceptance. Building trust and openness between students providing peer support and those with disabilities is also important through ensuring a good match between them.

To ensure positive outcomes, it is crucial to adhere to certain standards in implementing peer support programs. One key aspect is providing education and ongoing supervision for peer assistants. Through education, peer assistants gain knowledge about the characteristics and needs of individuals receiving peer support, learn how to effectively deliver peer support, and have the

opportunity to explore and improve their own social-emotional skills. This preparation equips them to provide effective peer support and facilitate the development of same skills in peer support users.

Peer support in higher education has emerged as a promising practice for promoting inclusion, offering numerous benefits to both students with disabilities and those providing support. It not only supports academic achievement but also has the potential to foster social inclusion by changing attitudes toward people with disabilities, faculty, and administrative staff. By implementing peer support interventions, higher education institutions can contribute to sustainable and effective inclusion, ensuring equal access to education for all students (Hill, Shaewitz and Queener, 2020). Upholding the fundamental human right to education for people with disabilities reduces socio-economic risks and provides them with equal opportunities to access social resources and actively contribute to the development of society.

### **8.3 The Background of the Development of "Peer Support for Students with Disabilities," at the University of Zagreb: TEMPUS project "Edu Quality"**

In 2009, a group of enthusiasts from the University of Zagreb, mainly from the Faculty of Education and Rehabilitation Sciences, sought funding through the European Commission's Tempus projects (similar to today's Erasmus+ capacity building projects) to establish a comprehensive support system for students with disabilities in higher education in the Republic of Croatia.

The current situation in higher education in the Republic of Croatia highlights several important points:

- students with disabilities who need the most support are just one of the stakeholders in higher education, and support should be provided to all individuals involved, including the university teachers, administrative and other staff, their fellow peers and others,

- even seemingly “small obstacles” can become significant barriers without proper support in place,
- there are university teachers willing to provide support to students with disabilities, but they may lack the knowledge and guidance on how to effectively provide that support.

Based on the current situation, the following ideas have been developed for building a support system for students with disabilities in higher education:

- create simple and cost-effective support tools that can be easily implemented and sustained over time,
- establish both institutional and individual forms of support for students with disabilities,
- encourage university teachers to actively engage in the higher education of all students, with institutional support serving as advisors and initiators of positive change and support for those assisting students,
- lead by example by demonstrating the "what and how" of inclusive practices,
- foster collaboration among individuals, organisations, and institutions that prioritize equal opportunities for all in higher education and are capable of taking responsibility,
- propose a framework outlining minimum standards for accessibility in higher education for students with disabilities.

As part of the Tempus Joint Project "Education for Equal Opportunities at Croatian Universities - EduQuality," the course "Peer Support for Students with Disabilities" was developed with the aim of creating equal opportunities for students with disabilities in the higher education system of the Republic of Croatia. This course was one of the project tasks undertaken to achieve the main goal of the project.

The TEMPUS program was established in 1990 and funded under the PHARE program. The fourth phase of the Tempus programme, which covered the period from 2007 to 2013, focused on contributing to the facilitation of cooperation in the field of higher education between the Member States of the European Union and partner countries in the surrounding area. The European Union Agency for Education, Audiovisual and Culture was responsible for managing this call for proposals (Eacea, 2009).

Through the TEMPUS program, funding was available for Joint Projects and Structural Measures. Joint projects fostered collaboration between universities in EU member states and universities in the partner countries, aiming to facilitate knowledge transfer and exchange of experience. On the other hand, the Structural Measures projects focused on enhancing the development and reform of higher education systems and institutions in the partner countries, with the aim of improving their quality, recognition, and alignment with European Union trends. The program's priorities aligned with the higher education modernization policy pursued by the EU, emphasizing reforms in study programs, management, and the connection between higher education and society.

The project "Education for Equal Opportunities at Croatian Universities" took place from 2010 to 2013 and was classified as a university management and student services project under the category of Student Services. In this project, university teachers, university administrative staff and students participated as project staff as well as a target group. The overall objective of the project was to promote equal opportunities in higher education for students with disabilities in the Republic of Croatia. This was to be achieved through the enhancement of existing support systems and the development of new ones, the initiation of national standards and guidelines for the development of accessibility in higher education, and the establishment of an accessible, sustainable, and high-quality support system for equalization of opportunities.

The project had six public universities in Croatia as partners, namely the University of Zagreb, University of Split, University of Rijeka, University of Zadar, University of Dubrovnik, and Josip Juraj Strossmayer University of Osijek. Additionally, the Institute for the Development of Education, a non-governmental organization that has done much to improve education quality in Croatia, and the Croatian Student Council, represented by students with disabilities, were also

involved. The project further collaborated with four renowned European universities: University of Strathclyde in Glasgow (United Kingdom), University of Gothenburg (Sweden), Masaryk University in Brno (Czech Republic), and Aarhus University (Denmark).

Based on good practices from universities in partner countries, as well as personal expertise, experience, and professional literature, the project led to the implementation of the "Peer Support for Students with Disabilities" course, the publication of eight handbooks on adapting academic activities for students with disabilities, the training of 24 educators who trained 131 university teachers and 108 university administrators and other staff during the project. The project also played a significant role in laying the groundwork for the establishment of national standards and guidelines for the development of accessibility in higher education for students with disabilities in Croatia. Developing of project and its improvement as well as all activities was attended through internal and external methods of evaluation.

During the project, a network of representatives from all Croatian universities was formed. This network played a crucial role in supporting and further implementing the project's activities, with a specific focus on promoting accessibility, quality, and equal opportunities in higher education for students with disabilities. As a result, by the end of the project, each Croatian university had established some form of official support service for students with disabilities, which included a designated responsible person, established committees, and dedicated offices.

To ensure the widespread dissemination of the project's results, a web portal was created at the beginning of the project. It served as a centralized platform that provided comprehensive information about all implemented and planned project activities, all results and reports on the implementation and evaluation, and was regularly updated throughout the project duration.

#### **8.4 Development and Structure of the Course “Peer Support for Students with Disabilities”**

As previously mentioned, the course, “Peer Support for Students with Disabilities” was developed as one of the measures to promote equal possibilities for students with disabilities in higher education in the Republic of Croatia.

The idea for this course emerged from a recognition of the barriers and challenges faced by students with disabilities in higher education, as highlighted in the analysis conducted by Kiš-Glavaš, Ružkan and Rudić (2005). The analysis revealed that seemingly small obstacles in the academic environment can become insurmountable when there is a lack of support for students with disabilities.

An example provided was the case of an elevator at a faculty at the University of Zagreb. While the elevator was available for students who used wheelchairs, the elevator doors did not open automatically, requiring considerable muscle power to open them. Many students using the elevator did not possess the necessary muscle strength to do so. There was no available finances to replace the door, so the students needed assistance to move vertically in the elevator. Although their fellow students often assisted them in opening the doors, there were instances when no one was available to help. It was impractical to rely solely on volunteers, as it was challenging to ensure their availability precisely when needed. Additionally, there was limited funding to hire dedicated assistants.

As a solution, the idea emerged to involve peer students in supporting their peers with disabilities in various activities. It was recognized that educating these peer students on how to effectively provide support to students with disabilities was crucial.

In developing the idea of peer support activities, it was important to ensure the sustainability of such activities at universities. During that time, there were no financial resources to fund the support of students with disabilities, which remains a challenge even today. However, the Republic of Croatia now promotes the activities of higher education institutions to achieve goals related to the social dimension of higher education, as stated in Decision of the Croatian Government on the conditions, criteria, and manner of subsidizing the participation fees for the study of full-time students and co-financing of material costs for public higher education institutions in the Republic of Croatia in the academic years 2015/2016, 2016/2017 and 2017/2018.

Considering this, the idea of developing and implementing the course "Peer Support for Students with Disabilities" with ECTS credits emerged. This approach aimed to validate the work of

students providing support and ensuring sustainability. Structured peer support, including education and supervision, also ensures that peer assistants are sensitized and competent, enabling them to contribute to creating conditions for students with disabilities that overcome a whole range of organizational and objective barriers within the higher education system in the Republic of Croatia. Additionally, the peer assistants themselves gain invaluable experience and develop a range of socially desirable skills and abilities through the knowledge and skills acquired in the preparatory workshop.

The syllabus for the course "Peer Support for Students with Disabilities" was developed with the collaboration of 10 university teachers and experts from Croatian partner universities who possessed extensive experience in working with people with disabilities. These individuals also had the necessary theoretical knowledge and skills to effectively train peer assistants in providing high-quality peer support. The authors of the course had the opportunity to familiarize themselves with the exemplary peer support system at the University of Gothenburg. In addition to experts from this university, colleagues from the University of Strathclyde, Masaryk University, and Aarhus University provided supervision and guidance in the development of the syllabus and course content. The course is led by university teachers, primarily from the Faculty of Education and Rehabilitation Sciences, who are experts with extensive experience in working with people with various impairments, diseases, and disorders. Furthermore, a professional associate from the Office for Students with Disabilities at the University of Zagreb is involved in facilitating the course.

Being the first and currently the only university-wide course at the University of Zagreb, the course is not tied to a specific degree program. It is designed to be inclusive and open to students from all faculties, academies, and departments of the University, regardless of their level of study (undergraduate, graduate, or postgraduate). Moreover, the course is offered every semester to address the ongoing systemic needs of students with disabilities.

The course was initially introduced at the University of Zagreb during the academic year 2011/2012. Since then, it has been successfully completed by over 80 students. In subsequent years, the course was also implemented at the University of Rijeka and the University of Pula. The

main focus of peer support within the course is to provide assistance and support to students with motor, visual, and hearing disabilities.

To enroll in the course, a key requirement is for the student to have a connection with a fellow student with a disability who requires peer support. The student enrolling in the course must have the consent of the student with a disability to serve as their peer assistant (pair). Furthermore, it is essential that the pair belong to the same field of study and are at the same level of study in terms of semester/year of enrollment.

These enrolment requirements for the course were designed to ensure that students with disabilities receive support from their closest peers. The idea was to prevent peer assistants from being overwhelmed with their support responsibilities, thereby safeguarding their own academic commitments. Given that support is provided within an academic context, the activities of peer assistants and students with disabilities are often similar. Therefore, support is provided during everyday study activities, such as assisting with navigation within the faculty, classrooms, offices, libraries, and dining areas. Peer assistants also provide support in managing administrative procedures and taking lecture notes. They may verbally describe visually presented content and facilitate communication in social situations (mediating communication). Personal assistance, such as accompanying students to restrooms, may also be required. Many of the support activities provided by peer assistants not only assist students with disabilities but also help them better manage the academic and personal demands they face (e.g., reading lecture notes aloud to a student with a disability, obtaining literature, or taking a meal at a student restaurant). Furthermore, these support activities often occur within social contexts, allowing students to interact and form friendships.

The course aims to educate students on how to provide quality peer support to students with disabilities in the academic environment. Its purpose is to provide peer support and create conditions that help students with disabilities overcome various organizational and objective

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<sup>1</sup>Vršnjačka potpora, <http://www.unizg.hr/studiji-i-studiranje/podrska-studentima/podrska-studentima-s-invaliditetom/vrsnjačka-potpóra/>



barriers in higher education. It is essential to view peer support as a temporary solution and use it to identify obstacles and guide the implementation of permanent solutions.

In the course, students are encouraged to have a positive impact on their environment and work towards creating an inclusive atmosphere. They are introduced to the concept of universal design in its broadest sense, including space design, service design, and design for teaching. The goal is to maximize the independence of students with disabilities and enable them to fully participate in their academic pursuits.

For example, if a blind student requires support in reading assignments provided in print, the peer assistant is encouraged to facilitate communication between the student, the teacher, and the coordinator for students with disabilities at the faculty/university. The aim is to establish a system where the teacher sends the assignments to the blind student in advance and in a digital format, eliminating the need for ongoing assistance from the peer assistant.

It is crucial to highlight that peer support focuses on providing support rather than doing tasks on behalf of the person being helped. The emphasis is on supporting students with disabilities to ensure equal opportunities and enable them to fulfill their academic responsibilities as independently as possible.

The course aims to achieve the following learning outcomes:

- maintain quality social contact in the context of peer support,
- examine the social context and one's own attitudes/values toward people with disabilities,
- recognize ethical challenges in offering peer support,
- argue for the applicability of social policy in direct work with people with disabilities,
- develop work plans for the provision of peer support,
- provide peer support to a student with a disability in an academic setting.

Each enrolled student is obligated to attend the preparatory workshop, which consists of 15 hours of lectures and 30 hours of exercises. They are also required to provide 75 hours of peer support

in accordance with Individual Plans for the Provision of Peer Support Student. Additionally, students must attend supervision sessions, which involve 30 hours of systematic two-week supervision, and participate in the mandatory course evaluation.

Since students enrolled in the course come from different faculties and academies of the University of Zagreb, scheduling classes during the regular working week poses a challenge due to their varying curricula and other commitments. As a solution, classes are conducted over two weekends, specifically on Friday afternoon, Saturday, and Sunday. Typically, these weekends fall within the first two weeks of each semester to ensure that peer assistants are prepared to support their colleagues with disabilities as early as possible. The course itself is worth a total of 5 ECTS credits, with 2 ECTS credits allocated to the preparatory workshop and 3 ECTS credits dedicated to the implementation of peer support throughout the semester. Peer assistants are expected to provide 5 hours of peer support per week, amounting to a total of 75 hours of direct peer support, along with 15 hours of supervision over the course of a semester.

The preparatory workshop covers various topics, including:

- Peer support. This topic introduces the concept of peer support and explores its significance in assisting students with disabilities. Through the analysis of concrete examples, students with disabilities and their peer assistants work together to determine satisfactory and appropriate means of assistance.
- General characteristics of people with disabilities. Understanding the characteristics, opportunities, and needs of people with disabilities, particularly students with disabilities in the context of higher education, is essential to providing appropriate support. Students need to empathize and put themselves in the shoes of students with disabilities to better understand the type of assistance needed and to be able to participate in the design and implementation of support. The workshop covers the consequences of impairments, diseases, and disorders, as well as the barriers that students with disabilities face in accessing higher education (Kiš-Glavaš, 2012). Students are introduced to the definition of basic concepts related to disability, the classification of impairments/disabilities, measures

of active policy, and models of support. They also learn about the etiology and phenomenology of physical disabilities, as well as the abilities, limitations, and obstacles faced by students with physical disabilities in higher education, but also possibilities to overcome those obstacles. The workshop covers sight impairments (blindness and low vision), including the characteristics, abilities, and specific challenges faced by students with visual impairments in their everyday academic life, along with the importance and possibilities of support. Additionally, students gain an understanding of hearing impairments (deafness and hard-of-hearing), including language and speech acquisition, sign communication, needs related to higher education, and support systems. The workshop also explores the specificities, characteristics, abilities, and needs of individuals/students who are deaf-blind, as well as the support system in everyday academic activities. The aim is to cultivate sensitivity towards the needs of students with disabilities in academic settings.

- **Human rights.** Regarding the fundamental constitutional principle of equality, persons with disabilities have the right to exercise all civil, political, social, economic, and cultural rights just like other citizens. The topic of "Human Rights of Students with Disabilities" in this course aims to familiarize students with the basic features of the legal system for protecting students with disabilities in the Republic of Croatia. It also helps students understand the role and importance of law in regulating the most important areas of protecting the human rights of students with disabilities in Croatia today (Bačić, 2012). The workshop covers the significance of human rights, specifically the rights of individuals/students with disabilities. It explores international and regional instruments for the protection and promotion of the rights of individuals with disabilities, the national framework, and institutions for protecting the rights of individuals with disabilities, as well as advocacy for the rights of persons with disabilities.
- **Fundamentals of multiculturalism.** Multicultural competence refers to the ability to understand, appreciate, and interact with people from diverse cultures or belief systems (DeAngelis, 2015). By developing multicultural competencies, students can establish genuine connections and gain a deeper understanding of others by acknowledging and

appreciating cultural differences. These skills are crucial for providing quality peer support (Daniels et al., 2012). It is important to recognize that multicultural competence is an ongoing, lifelong process of growth, learning, and training. In this course, students are introduced to the theory of multiculturalism and the practice of multicultural education and counseling, as well as the tripartite model of multicultural competence. They also develop sensitivity in working with persons with disabilities.

- Attitudes towards people with disabilities. Awareness of one's attitudes is a crucial aspect of educating students to provide support. Attitudes have the power to shape our perceptions, thoughts, and behaviors, and can influence our interactions with others. Additionally, attitudes at the intergroup level can impact our inclination to cooperate or conflict with members of a particular group (Jhangiani and Tarry, 2022). Students who possess self-awareness regarding their attitudes toward people with disabilities are better equipped to fulfill their role of supporting students with disabilities. In this course, students learn about the definition of attitude and its components, the origins of attitude, the relationship between attitude and behavior, attitude change, and attitudes toward persons with disabilities. They also fill out the "Attitudes toward persons with disabilities questionnaire" and participate in discussions about the results.
- Ethics of peer support. The objective of this topic is to address the ethical aspects of relationships between students with disabilities and their peers, as well as to establish rules and methods of collaboration that protect the personal integrity and dignity of students with disabilities and their fellow students, peers, or assistants in an academic environment. A set of written and unwritten rules and principles provides an ethical framework within which relationships take place and evolve to facilitate living and performing tasks in the complex conditions of interpersonal relationships, both formally and practically (Vučijević and Luković, 2012). The following topics were covered: ethical principles governing the student peer – student with disabilities relationship and ethical questions and dilemmas in the student peer – student with disabilities relationship.

- Peer support skills. The course focuses on developing essential peer support skills, including empathy, assertiveness, and academic competence. Empathy is regarded as a crucial quality for individuals providing peer support and involves compassion and acceptance (Daniels et al., 2012). It allows for the understanding and sharing of experiences, needs, and desires between individuals, and it enables us to perceive the emotions of others, resonate with them emotionally and cognitively, take the perspective of others, and distinguish between our own emotions and those of others (Riess, 2017). Empathy also prevents judgmental reactions in many ways. Assertiveness is another important skill emphasized in peer support. It enables students to maintain good relationships with others in challenging situations that may arise in academic and social contexts, especially when roles and responsibilities are not clear (Osborn et al., 2022). Therefore, it is important that students who provide support develop assertiveness, which means being able to express and advocate for their thoughts and feelings and knowing how to set boundaries in relationships. Being assertive also means being aware of the rights of others and being willing to work to resolve conflicts (Malti and Perren, 2011). In addition, assertiveness supports authenticity, which is one of the desirable qualities of a person who provides peer support (Daniels et al., 2012). Academic competence is a multifaceted construct encompassing student's skills, attitudes, and behaviors that contribute to academic success. It includes the ability to study effectively, complete academic tasks, and achieve academic goals (Hitch et al., 2012). Students providing support are encouraged to understand their own learning styles and recognize the learning style of the student they are supporting to optimize the effectiveness of their support. They also develop proactive learning skills, organization abilities, and the capacity to transfer these skills to the students they assist (Jacobson, Trojanovski and Dewa, 2012). Throughout the course, students learn to recognize and understand their own emotions and those of others, express emotions appropriately, cultivate empathy, establish interpersonal boundaries, assert themselves, engage in responsible and assertive learning, practice team learning, develop time management and organizational skills, and reflect on their experiences within these topics.
- Accessibility of higher education. This topic is designed for both peer students and students with disabilities (optional), aiming to create a shared learning experience. It provides an

opportunity for all participants to become familiar with the rights afforded to students with disabilities within the higher education system in Croatia and beyond. Additionally, it serves as a platform for identifying system deficiencies and individual challenges, and for discussing strategies to bring about positive changes and engage in specific activities towards that goal. Students are presented with an overview of existing legal acts that promote equality for students with disabilities in higher education in the Republic of Croatia. They also explore the specific rights that students with disabilities possess and analyze the current accessibility status of higher education institutions in the country. Through practical examples, discussions focus on the specific needs of students with disabilities and the barriers they encounter in the academic setting. In addition, an overview of both institutional and individual forms of support available for students with disabilities is provided.

- Development of individual plans. Students with disabilities are actively engaged in this part of the course, and their participation is mandatory. Drawing upon the knowledge and skills they have acquired, each pair of students, with the guidance and supervision of the instructors, collaboratively develops an "Individual Plan of Support" for the upcoming semester. This plan outlines the agreed-upon forms and methods of support that will be provided by the peer assistant to the student with a disability.

According to the students' needs, additional topics and workshops could be introduced. Peer assistants sometimes feel the need to expand or deepen their knowledge of certain impairments, diseases, or disorders, or to discuss related disorders in students with disabilities, such as anxiety, or some controversial situations in which they have found themselves. In such cases, additional meetings are organized to address these specific needs and concerns.

Following the Preparatory workshop and based on individual plans, students are ready to start supporting their colleagues with disabilities. Peer support is realized through 75 hours of support per semester in agreement with the student with disabilities and with 15 hours of supervision.

Mandatory supervision meetings are held every two weeks, during which peer assistants provide bi-weekly reports on the support they have provided. They also report on any difficulties encountered in implementing peer support, additional activities implemented, and reasons for not implementing certain activities. Any questions and dilemmas are addressed during these meetings. Peer assistants receive advice when needed and collaborate with supervisors to find suitable solutions for specific situations. Additionally, participating in supervision allows peer assistants to learn not only from their own experiences but also from the experiences of other peer assistants. At least twice a semester, and more frequently if necessary, meetings are organized with students with disabilities to gather their feedback on peer support and address any questions they may have. The course teachers and associates are available 24/7 to assist with unforeseen situations, and all students, both peer assistants and students with disabilities, are encouraged to reach out in case of any problems. Student competencies are assessed based on the quality of their individual plan development and the quality of their peer support.

### **8.5 “Peer Support for Students with Disabilities” Course Evaluation**

The Course “Peer Support for Students with Disabilities” is evaluated at the end of each semester by reflecting on the achieved learning outcomes, the relevance of the topics covered, the effectiveness of the supervision provided, the benefit to both peer assistants and students with disabilities and the overall experience of providing and receiving support. Suggestions for improving the quality of the course are also discussed. The evaluation process involves the use of a questionnaire consisting of assessment scales and open-ended questions for peer assistants and focus groups involving peer assistants and students with disabilities.

The evaluation results of the course consistently demonstrate the positive impact and effectiveness of the course in various aspects, such as developing sensitivity towards students with disabilities, enhancing the ability to provide peer support, fostering readiness and confidence in advocating for the rights of students with disabilities, understanding the role of peer support within the academic and broader social environment, and more (Kiš-Glavaš et al., 2012; Ferić Šlehan, Kranželić and Kiš-Glavaš, 2013).

In 2021, a comprehensive evaluation of the course was conducted, marking a significant milestone as it coincided with the course's 10-year anniversary (Novak Žižić and Kiš-Glavaš, 2021). The evaluation involved the participation of 52 peer assistants, who took part in focus groups, and a subset of them (N=30) also completed a questionnaire. These peer assistants represented various faculties of the University of Zagreb, including the Faculty of Education and Rehabilitation Sciences, the Faculty of Humanities and Social Sciences, the Faculty of Organization and Informatics, the Faculty of Political Sciences, the Catholic Theology Faculty, the Music Academy, the Faculty of Science and Mathematics, the Faculty of Law, and the Faculty of Technology. Furthermore, 52 students with disabilities, experiencing visual, hearing, or motor disabilities, actively participated in the evaluation of the course.

Peer assistants were given the opportunity to self-assess their level of learning outcomes using a grading scale that ranged from the minimum grade (1) to the maximum grade (5) (Figure 8.5.1).

Learning outcomes	Mean (scale 1-5)
Maintain quality social contact in the context of peer support	4.68
Examine the social context and one's own attitudes/values toward people with disabilities	4.76
Recognize ethical challenges in offering peer support	4.64
Argue for the applicability of social policy in direct work with people with disabilities	4.11
Develop work plans for the provision of peer support	4.72
Provide peer support to a student with a disability in an academic setting	4.72

Table 8.5.1: Learning outcomes achieved (self-assessment)

Figure 8.5.1 clearly indicates that peer assistants have self-assessed the level of realization of the learning outcomes of the course with very high grades, all of which are above 4.1.

Based on Figure 8.5.2, it is evident that peer assistants evaluated the usefulness of certain course topics.



Course topics	Mean (scale 1-5)
Peer support	4.75
General characteristics of people with disabilities	4.75
Human rights	4.58
Fundamentals of multiculturalism	4.42
Attitudes towards people with disabilities	4.93
Ethics of peer support	4.41
Peer support skills	4.87
Accessibility of higher education	4.62
Development of Individual plans	4.39

Table 8.5.2: Assessment of course topics usefulness

The average ratings for the usefulness of each course topic are also very high, all above 4.3. In addition, peer assistants rated the usefulness of supervision at 4.49 and the experience of support at 4.68.

Looking back on the gains from the course and the experience of providing support, the peer assistants indicate that they gained a lot from the exercises and the implementation of support. They characterize the gains as varied, stating: (1) the development of general and specific skills, personal growth (assertiveness, empathy, academic skills), changes in attitudes, deepening and improvement of relationships, gaining new contacts and friendships, and strengthening self-esteem, (2) acquiring new knowledge about different types of impairments, access and rights of people with disabilities, issues and challenges in higher education, and the role of peers, (3) they became aware of the importance of relationships with people with disabilities, setting boundaries in relationships, and the difference between help and support. They emphasize that their expectations were met, and they found the overall gain from the course is higher than expected. The peer assistants express satisfaction with the relationships they developed with students with disabilities, the successful implementation of support, and the opportunity to engage in various activities. One student shares their personal experience: Before the course, I felt uncomfortable interacting with people with disabilities, afraid of offending them, and a sense of pity. But going

through it all, I gained insight into how people with disabilities function, learned a lot about appropriate communication and support, and realized that it's important not to discriminate.

Students who have taken the course also express their willingness to recommend it to their colleagues. Here are some quotes from the students: You do not need to think much about whether to enroll in this course or not. It is too easy and high quality to miss such an opportunity; Through the workshops and support you will learn a lot about yourself and improve your relationships with others.

The message from the students to teachers and supervisors is as follows: Continue to work tirelessly and teach new peer assistants, raising awareness among younger generations about the importance of solidarity and inclusion of people with disabilities; Thank you for doing this.

By the evaluation process, peer assistants provided suggestions for course improvement, such as extending the duration of the course to cover the entire academic year (not just one semester), better promotion of the course at the university, offering more workshops on communication skills, deepening work on prejudices, and including short exercises for learning the basics of sign language.

Students with disabilities emphasize the benefits of the course and the experience of receiving support, stating that peer support has greatly contributed to their greater independence in fulfilling their obligations, socialization, greater self-confidence, and overcoming certain fears: The support has helped me to increase my self-confidence because before I thought that I could not do some things on my own, but now I have realized that I can do more than I think; The course has helped me to be more independent and not feel bad because someone is supporting me.

Among the other benefits, they state: the rapprochement with peer assistants, the joint fulfilment of certain study obligations, many opportunities for informal social contact, and emotional support. They also emphasize mutual benefits ...but I also help her. If she misses the lecture, I give her important information. For them, it was also important that the support activities were defined and structured in advance, so there was no fear that they would not receive the support: The education

through the preparation workshop is very important, because colleagues who do not have disabilities often do not understand our needs and difficulties and are very often distant because they do not know how to approach us. They rate the peer support experience as very positive and useful in getting the support they need to successfully fulfil their commitments.

The proposals of students with disabilities, as well as their peer assistants, refer to the need for a longer course duration (throughout the entire academic year with the same student: ...we have just managed to get used to each other and the semester is over). They believe that the participation of students with disabilities in the preparatory workshop is not necessary, but some of them would like to take advantage of this opportunity. They also note that advertising for the course should be better, especially for first-year students. Students with disabilities find that the course is an excellent form of support in the academic settings, but also point out that the problem of personal support outside the university (e.g., in leisure activities) needs to be solved, as support in this area of their lives is limited.

Throughout the evaluation process, students with disabilities also highlighted the desirable qualities of peer assistants, including not signing up for the course solely for the ECTS credits or to avoid obligations. They emphasized the importance of peer assistants possessing qualities such as reliability, responsibility, flexibility, education and awareness, patience, honesty, openness, empathy, understanding, a positive and healthy view of the world, optimism, relaxation, a sense of humor, and the absence of pity or fear when interacting with people with disabilities.

Generally, the results indicate that the implementation of peer support in the higher education system is effective and mutually beneficial in achieving equal opportunities for students with disabilities.

## **8.6 Modification of the Course "Peer Support for Students with Disabilities"**

There was significant interest in the course from students who were unable to find a student with a disability at their faculty who required peer support. Compared to the time when the original syllabus was planned, most of the students with disabilities were students with so-called visible

impairments (visual, hearing and motor impairments), while today the group of students with disabilities in Croatian higher education institutions consist mostly of students with so-called invisible impairments (chronic diseases, mental illnesses and disorders, Asperger's syndrome, ADHD, dyslexia, dysgraphia, dyscalculia). In addition to the above and based on the evaluation of the course by peer assistants and students with disabilities, there are suggestions to extend the course to an academic year, increase visibility of its impact among students, and provide greater flexibility in course enrollment. Taking these suggestions into account, the course will be modified and updated for the academic year 2023/2024.

	Model A	Model B	Model C
Conditions of enrolment	knowing the student with disability who needs peer support and agrees that the student enrolling in the course will be their peer assistant  “pair” from the same faculty	previously completed model A or C  knowing the student with disability who needs peer support and agrees that the student enrolling in the course will be their peer assistant  “pair” from the same faculty	no special requirement
Structure (total hours)	15 hours (lectures) 120 hours (exercises)	9 “ hours (exercises)	15 hours (lectures) 30 hours (exercise)
preparatory workshop	15 hours (lectures) 30 hours (exercise)	/	15 hours (lectures) 30 hours (exercise)
peer support	75 hours (exercises)	75 hours (exercises)	/
supervision	15 hours (exercises)	15 hours (exercises)	/

ECTS credits (in total)	5 ECTS	3 ETCS	2 ETCS
preparatory workshop	2 ECTS	/	2 ECTS
peer support	3 ECTS	3 ECTS	/
Exam	pass; without the grade	pass; without the grade	oral exam

Table 8.6.1: Models of the "Peer Support for Students with Disabilities" course delivery

The course has been redesigned to offer three different models (A, B, C) to accommodate a larger number of students and provide longer-term support for students with disabilities (Figure 8.6.1.)

The course lasts one semester, with the preparatory workshop taking place at the beginning of the semester over two weekends (Friday, Saturday, Sunday). Peer support and supervision activities are conducted throughout the semester based on individual agreements.

The course will retain its learning outcomes, with a particular focus on expanding the topic of "Basic Characteristics of Persons with Disabilities" to encompass students with chronic illnesses, specific learning disabilities (dyslexia, dysgraphia, and dyscalculia), ADHD, Asperger's Syndrome, and mental illnesses and disorders. This expanded content will complement the existing material related to the characteristics, abilities, functioning, and daily challenges faced by students with visual, hearing, and mobility impairments. To deliver this enhanced content, new university teachers who specialize in supporting people with specific difficulties will be involved in the course.

Students will continue to be informed about the course through the official web portals of the university and faculties, as well as through the addition of new channels such as social networks and verbal information in introductory meetings. These new activities aim to attract a larger number of students to enroll in the course.

The modifications and improvements made to the course "Peer Support for Students with Disabilities" are aimed at better meeting the current needs of students with disabilities in higher

education in the Republic of Croatia. It is expected that these changes will contribute to the development of much needed soft skills among a larger number of students.

## **8.7 Conclusion**

By providing support to students with disabilities, it is possible to ensure the full realization of their potential in higher education of the highest standards and quality, to which every student with disabilities has a full right. That is, the right to education is a fundamental human right, and data clearly show that higher levels of education can reduce many socioeconomic risks, such as poverty and social exclusion, for all people, and especially for people with disabilities.

Developing and implementing peer support activities can be an effective and sustainable strategy for ensuring inclusion in higher education. To ensure their effectiveness, it is important to have structured activities that involve education and ongoing supervision of peer assistants. Additionally, it is crucial to fully involve students with disabilities in the process of developing support plans and implementing them. Peer support can be organized through existing centers or offices for students with disabilities, or other organized forms of support if available at universities. For example, this can be facilitated through committees or other bodies established specifically for supporting students with disabilities. However, the successful implementation of these activities relies on the willingness of university management, teaching staff, and other personnel, as well as the availability of necessary resources, both human and financial.

On the other hand, developing and implementing peer support through courses offers various benefits. A well-designed course, based on the values of peer support and supported by research evidence, provides a structured framework for activities, expert teachers, and supervisors. This approach also ensures the sustainability of the support provided. It is important to allocate time and resources for regular comprehensive evaluations, considering the rapid changes in technology and society. Evaluating the course periodically ensures that the education of peer assistants and the methods of delivering support align with the evolving needs of students with disabilities in higher education and society at large.

Peer support is indeed an effective and sustainable strategy for fostering inclusion in higher education. It brings about numerous benefits for both students with disabilities and peer assistants. The positive impact of peer support on the academic achievements and social inclusion of students with disabilities also extends to shaping the attitudes of other students, faculty members, administrators, and other staff members in higher education toward students with disabilities. From this perspective, it becomes evident that peer support, as an inclusion strategy, holds significant potential for promoting diversity and fostering inclusion not only within higher education institutions but also within society.

## References

- Arainscow, M., Slee, R. and Best, M. (2019) “Editorial: The Salamanca statement: 25 years on,” *International Journal of Inclusive Education*, 23, pp. 671–676.
- Aziz, Z. et al. (2018) “Peer support to improve diabetes care: an implementation evaluation of the Australasian Peers for Progress Diabetes Program,” *BMC public health*, 18(1). doi: 10.1186/s12889-018-5148-8.
- Bačić, A. (2012) U: Kiš-Glavaš, L. (ur.), *Sveučilišni izborni kolegij Vršnjačka potpora studentima s invaliditetom: pripremna radionica, Priručnik za izvoditelje*, Interni materijal. Zagreb.
- Bartone, P. T. et al. (2018) “Exploration into best practices in peer support for bereaved survivors,” *Death studies*, 42(9), pp. 555–568. doi: 10.1080/07481187.2017.1414087.
- Bjørnerås, A. B. et al. (2022) “Identifying key concepts in ambassador interventions for students with disabilities in higher education: A scoping review,” *International journal of disability, development, and education*, pp. 1–17. doi: 10.1080/1034912x.2022.2095558.

- Blakeway, M. S. et al. (2007) Peer mediation standards committee: Leigh Jones-BaMMan, CoMMittee chair the governor's prevention partnership, Hartford, CT, CReducation.net. Available at: [https://www.creducation.net/resources/Recommended\\_Standards\\_Final\\_Formatted.pdf](https://www.creducation.net/resources/Recommended_Standards_Final_Formatted.pdf) (Accessed: June 10, 2023).
- Brock, M. E. and Huber, H. B. (2017) "Are peer support arrangements an evidence-based practice? A systematic review," *The journal of special education*, 51(3), pp. 150–163. doi: 10.1177/0022466917708184.
- Byrom, N. (2018) "An evaluation of a peer support intervention for student mental health," *Journal of mental health (Abingdon, England)*, 27(3), pp. 240–246. doi: 10.1080/09638237.2018.1437605.
- Daniels, A. S. et al. (2012) "Pillars of peer support: advancing the role of peer support specialists in promoting recovery," *The Journal of Mental Health Training Education and Practice*, 7(2), pp. 60–69. doi: 10.1108/17556221211236457.
- Deangelis, T. (2015) "In search of cultural competence," *In search of cultural competence. Monitoring on Psychology*, 46.
- Carter, E. W., Cushing, L. S. and Kennedy, C. H. (2009) *Peer support strategies for improving all students' social lives and learning*. Paul H. Brookes Publishing.
- Darrow, A.-A. (2009) "Barriers to effective inclusion and strategies to overcome them," *General music today*, 22(3), pp. 29–31. doi: 10.1177/1048371309333145.
- December, T. (2017) *And outcomes of undergraduates*, Nces.ed.gov. Available at: <https://nces.ed.gov/pubs2018/2018432.pdf> (Accessed: June 8, 2023).



- Disability (2023) Who.int. Available at: <https://www.who.int/news-room/fact-sheets/detail/disability-and-health> (Accessed: June 13, 2023).
- Eacea (2009) “Call for proposal, Tempus IV - Reform of higher education through international university cooperation,” Official Journal of the European Union. Available at: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:286:0003:0006:EN:PDF> (Accessed: June 10, 2023).
- European Disability Forum (2020). Education policy. European Disability Forum. Available at: <https://www.edf-feph.org/education-policy/> (Accessed: June 7, 2023)
- EUROSTAT (2022). Disability: higher risk of poverty or social exclusion. Eurostat. <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/DDN-20221214-2> (Accessed: June 10, 2023).
- Ferić Šlehan, M., Kranželić, V. and Kiš-Glavaš, L. (2013) “Vršnjačka potpora studentima s invaliditetom u visokom obrazovanju: Iskustva studenata“ (Peer support to students with disabilities in higher education: Students experience) Knjiga rezimea, VII. međunarodni naučni skup „Specijalna edukacija i rehabilitacija danas“ Univerzitet u Beogradu,” Fakultet za specijalnu edukaciju i rehabilitaciju, pp. 149–150.
- Franjkić, L., Kiš-Glavaš, L. and Novak Žižić, V. (2014) “Perception of the ability of students with disabilities to meet the requirements of study programs,” Hrvatska revija za rehabilitacijska istraživanja, 50(1), pp. 70–80.
- Hill, E. J. D., Shaewitz, D. and Queener, J. (2020) Ensuring Full Inclusion for Students with Disabilities. Available at: <https://files.eric.ed.gov/fulltext/ED615532.pdf> (Accessed: June 19, 2023).

- Hitch, D. et al. (2012) "Academic Skills and Beyond: A Resource Based Approach to Support Student Success in Higher Education," *Journal of Academic Language and Learning*, 6, pp. A29–A41.
- Houtenville, A. and Boege, S. (2018) "Annual Report on People with Disabilities in America: 2018," *Annual Report on People with Disabilities in America*.
- Jacobson, N., Trojanowski, L. and Dewa, C. S. (2012) "What do peer support workers do? A job description," *BMC health services research*, 12(1), p. 205. doi: 10.1186/1472-6963-12-205.
- Jhangiani, R. and Tarry, H. (2022). "Principles of social psychology - 1st international H5P edition". BCcampus. Available at: <https://opentextbc.ca/socialpsychology/> (Accessed: June 8, 2023).
- Johnsen, M., Teague, G. and Herr, E. (2005) *On our own together: Peer programs for people with mental illness*. Edited by S. Clay et al. Nashville, TN: Vanderbilt University Press.
- King, T. and Fazel, M. (2021) "Examining the mental health outcomes of school-based peer-led interventions on young people: A scoping review of range and a systematic review of effectiveness," *PloS one*, 16(4), p. e0249553. doi: 10.1371/journal.pone.0249553.
- Kiš-Glavaš (2012) *Opće smjernice, priručnik za nastavno, administrativno i stručno osoblje sveučilišta (General guidelines, manual for teaching, administrative and professional staff of universities)*. Edited by L. Kiš-Glavaš. Zagreb. University of Zagreb
- Kiš-Glavaš et al. (2012) *Evaluacija sveučilišnog predmeta Vršnjačka potpora studentima s invaliditetom - naučene lekcije iz pilot-izvedbe (Evaluation of the University Course Peer Support for Students with Disabilities - Experiences from the Pilot Project)*, 8. međunarodni znanstveni skup: Istraživanja u edukacijsko-rehabilitacijskim znanostima, Knjiga sažetaka, Edukacijsko-rehabilitacijski fakultet. Zagreb.

- Kiš-Glavaš, Ruškan, L. and Rudić, A. (2005) “Ured za studente s invaliditetom - osiguranje mogućnosti kvalitetnijeg pristupa visokom obrazovanju (Office for Students with Disabilities - Ensuring Opportunity for Greater Access to Higher Education),” *Političko obrazovanje*, pp. 229–240.
- Kranželić, V. and Ferić Šlehan, M. (2012) *Vršnjačka potpora (Peer support)* U: Kiš-Glavaš, L. (ur.), *Sveučilišni izborni kolegij Vršnjačka potpora studentima s invaliditetom: priprema radionica, Priručnik za izvoditelje, Interni materijal*. Zagreb.
- Leake, D. W. and Stodden, R. A. (2014) “Higher Education and Disability: Past and Future of Underrepresented Populations,” *Journal of Postsecondary Education and Disability*, 27(4), pp. 399–408.
- Leigers, K., Kleinert, H. L. and Carter, E. W. (2017) “‘I never truly thought about them having friends’: Equipping schools to foster peer relationships,” *Rural Special Education Quarterly*, 36(2), pp. 73–83.
- Magasi, S. and Papadimitriou, C. (2022) “Peer support interventions in physical medicine and rehabilitation: A framework to advance the field,” *Archives of physical medicine and rehabilitation*, 103(7S), pp. S222–S229. doi: 10.1016/j.apmr.2020.09.400.
- Malti, T. and Perren, S. (2011) “Social Competence,” in *Encyclopedia of Adolescence*. Elsevier, pp. 332–340.
- Marley, S. C. and Wilcox, M. J. (2022) “Do family and peer academic social supports predict academic motivations and achievement of first-year college students?,” *Journal of applied research in higher education*, 14(3), pp. 958–973. doi: 10.1108/jarhe-06-2020-0158.
- Mead, S. and Macneil, C. (2006) “Peer support: What makes it unique?,” *International Journal of Psychosocial Rehabilitation*, 10(2), pp. 29–37.

Mirbahaeddin, E. and Chreim, S. (2022) “A narrative review of factors influencing peer support role implementation in mental health systems: Implications for research, policy, and practice,” *Administration and Policy in Mental Health*, 49, pp. 596–612.

Novak Žižić, V. and Kiš-Glavaš, L. (2021) *Vršnjačka potpora studentima s invaliditetom - rezultati evaluacije (Peer support for students with disabilities - evaluation results)*, Znanstveno stručna konferencija „Odgojno-obrazovna, zdravstvena i socijalna infrastruktura za djecu s teškoćama u razvoju i osobe s invaliditetom“, Savez edukacijskih rehabilitatora Hrvatske, Edukacijsko-rehabilitacijski fakultet.

Odluka Vlade Republike Hrvatske o uvjetima, kriterijima i načinu subvencioniranja participacije redovitih studenata u troškovima studija i sufinanciranje materijalnih troškova javnim visokim učilištima u Republici Hrvatskoj u akademskim godinama 2015./2016., 2016./2017. i 2017./2018. (Decision of the Croatian Government on the conditions, criteria, and manner of subsidizing participation fees of studies of full-time students, and co-financing of material costs for public higher education institutions in the Republic of Croatia in the academic years 2015/2016, 2016/2017, and 2017/2018), Gov.hr. Available at:

<https://vlada.gov.hr/UserDocsImages/Sjednice/2015/238%20sjednica%20Vlade/238%20-%204.pdf> (Accessed: June 23, 2023).

Osborn, T. G. et al. (2022) *Implementing peer support in higher education: A feasibility study*. SSM - Mental Health.

Postsecondary national policy institute students with disabilities in higher education CENSUS OVERVIEW (2023) Pnpi.org. Available at: [https://pnpi.org/wp-content/uploads/2022/10/StudentswithDisabilities\\_October2022.pdf](https://pnpi.org/wp-content/uploads/2022/10/StudentswithDisabilities_October2022.pdf) (Accessed: June 23, 2023).

- Rebeiro Gruhl, K. L., LaCarte, S. and Calixte, S. (2016a) “Authentic peer support work: challenges and opportunities for an evolving occupation,” *Journal of mental health* (Abingdon, England), 25(1), pp. 78–86. doi: 10.3109/09638237.2015.1057322.
- Resnick, S. G. and Rosenheck, R. A. (2008) “Integrating peer-provided services: a quasi-experimental study of recovery orientation, confidence, and empowerment,” *Psychiatric services* (Washington, D.C.), 59(11), pp. 1307–1314. doi: 10.1176/ps.2008.59.11.1307.
- Richard, J. et al. (2022) “Scoping review to evaluate the effects of peer support on the mental health of young adults,” *BMJ open*, 12(8), p. e061336. doi: 10.1136/bmjopen-2022-061336.
- Riess, H. (2017) “The science of empathy,” *Journal of patient experience*, 4(2), pp. 74–77. doi: 10.1177/2374373517699267.
- Rooney, C. (2019) “Listening to other voices: Building inclusion of higher education students with disability from the ground up,” *ISWP*, 6(1), pp. 33–47.
- Seen, Counted, Included: Using data to shed light on the well-being of children with disabilities (2021) UNICEF DATA. Available at: <https://data.unicef.org/resources/children-with-disabilities-report-2021/> (Accessed: June 23, 2023).
- Sunderland, K. et al. (2013) „Guidelines for the Practice and Training of Peer Support. Calgary, AB: Mental Health Commission of Canada.| Mental Health Commission of Canada. Available at: <http://www.mentalhealthcommission.ca> (Accessed: June 23, 2023).
- Smith, S. A., Woodhead, E. and Chin-Newman, C. (2021) “Disclosing accommodation needs: exploring experiences of higher education students with disabilities,” *International journal of inclusive education*, 25(12), pp. 1358–1374. doi: 10.1080/13603116.2019.1610087.

- Swartz, T. H. et al. (2019) “The science and value of diversity: Closing the gaps in our understanding of inclusion and diversity,” *The journal of infectious diseases*, 220(220 Suppl 2), pp. S33–S41. doi: 10.1093/infdis/jiz174.
- Toutain, C. (2019) “Barriers to accommodations for students with disabilities in higher education: A literature review,” *Journal of Postsecondary Education and Disability*, 32(3), pp. 297–310.
- Vučijević, D. and Luković, T. (2012) *Etika vršnjačke potpore (Peer support ethics)* U: Kiš-Glavaš, L. (ur.), *Sveučilišni izborni kolegij Vršnjačka potpora studentima s invaliditetom: pripremna radionica, Priručnik za izvoditelje, Interni materijal*. Zagreb.
- White, S. et al. (2020) “Gillard The effectiveness of one-to-one peer support in mental health services: a systematic review and meta-analysis,” *BMC. Psychiatr.*
- World Health Organization (2011) *World Report on Disability 2011*. Genève, Switzerland: World Health Organization.

## CHAPTER 9

# Inclusive Communication Strategies: Interacting with Students with Disabilities

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### 9.1 Introduction

One of the most discriminated social categories is people with disabilities (Green et al., 2005, Molero et al., 2019). An evolving society is one that is biologically formed under the control of conscience and charity, the antithesis of the struggle for survival. Changing mentalities through precise rules, laws and regulations can bring about long-term changes in attitudes based on prejudices and stereotypes against any minority. Moreover, by analogy, we unconsciously reject what is not like us, what is outside the norm, as the axiom of communication that defines it as digital and analytical shows (Grossi, 2015). From this point of view, minorities tend to be excluded, and labels and communication blockages based on prejudice often lead to false, negative, and lack of empathy. Between the two - society and the individual - there is a constant communication influenced by various factors, both digital and analog (Abric, 2002, Nuță, 2004).

In most cases, it is not people with disabilities who are maladjusted in society, but the society that cannot guarantee an effective, participatory and optimal inclusion (Stoiber and Abromeit, 2006), due to the lack of regulations and procedures to remove any kind of barriers to an integrated social life for these people. And the most difficult barriers to remove are not physical or environmental barriers, but mental barriers. For example, a paralyzed person with polio, though physically disabled, is perceived as mentally disabled because of distorted facial expressions and slurred communication due to muscle rigidity. Social marginalization (Trainor et al., 2008) results from the unconscious elimination of individuals who are biologically maladjusted and therefore unfit for life. An evolved society does not marginalize its individuals but educates and adapts them.

Communication levers are difficult to build because of the particularities of each disadvantaged group or person affected, which must be included in regulations and strategies to be adopted by top-down structures. Thus, at the European level, the first strategy for people with disabilities was adopted on January 16, 2020, even though the European Union (Figure 1) is considered to have the highest rate of implementation of measures to improve accessibility (UN, 2020).

The European Disability Strategy 2010-2020 (European Commission, 2010, p. 2) states that "In the European Union (EU), one in six people has a mild to severe disability 1 and in total about 80 million people are often unable to participate fully in social and economic life because of physical and behavioral barriers. The poverty rate of people with disabilities is 70% higher than the recorded average, partly due to their limited access to employment. More than a third of people over the age of 75 have some form of disability that partially limits their opportunities, and more than 20% have some form of disability that severely limits their opportunities. Moreover, these figures are expected to increase as the EU population ages. The EU and its Member States have a strong mandate to improve the social and economic situation of people with disabilities".



Figure 9.1.1: Accessibility for people with disabilities in the world



Source: United Nations (2020). Retrieved from <https://www.un.org>

The strategy focuses on removing barriers and identifies "eight main areas for action: accessibility, participation, equality, employment, education and training, social protection, health and external action. For each area, key actions are defined together with the EU headline target" (European Commission, 2010, p. 3).

The statistics look worrying (Figure 9.1.1), which shows that social inclusion is a pressing global need. We cannot achieve results if these measures are not taken at the level of educational structures. Therefore, it is only through education that things can change significantly, as it works directly on mass mentalities and opinion formation.

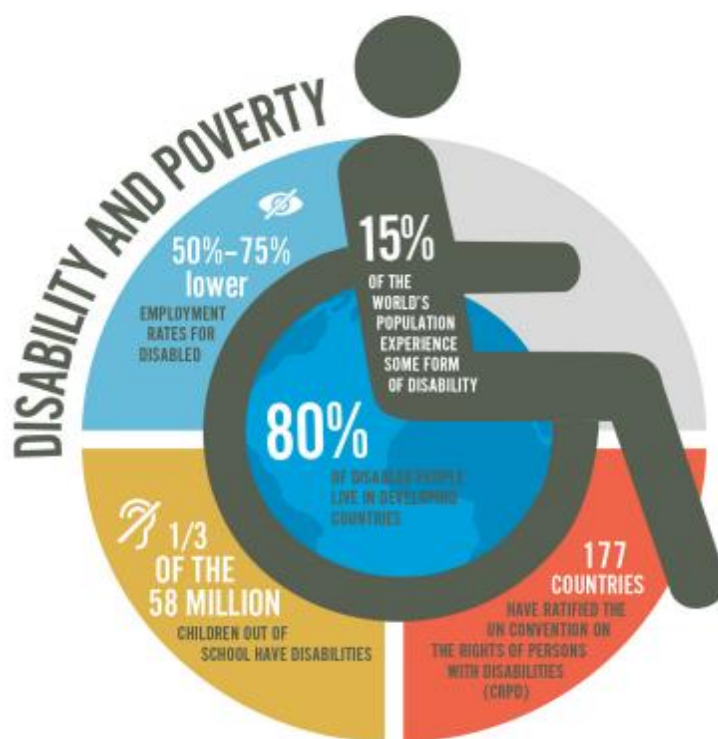


Figure 9.1.2: Share of people with disabilities in today's society

Source: World Bank (2018) Retrieved from <https://www.worldbank.org>

In Romania there is a Law on the Protection and Promotion of the Rights of Persons with Disabilities No 448, adopted in 2006 (Onica-Chipea, 2018, Onica-Chipea, 2019). Romanian society has not developed and promoted healthy civic mindsets and habits to support people with disabilities to the highest degree. It is a long process that has started and, under pressure from international forums, will have guidelines in the coming years.

Computer-mediated communication refers to the sending and receiving of messages using computers for the purpose of entering, processing, storing and sending data (Yao and Ling, 2020). With the explosion of the Internet (Reyna et al., 2018) and the advent of the global hypertext system, computers have rapidly infiltrated our lives. The Internet has become a new way of processing, presenting and communicating information (Li et al., 2015), enabling the implementation of new models and concepts previously unimaginable: from a new way of browsing written information using cross-references generated by hyperlinks, to multimedia presentations incorporating text, images, animations and sounds in the same entity; from social surveys and real-time statistics generated simultaneously with changing input data, to the presentation of information and its adaptation to users. Given that the computer screen offers more flexibility in arranging text than a typewriter, and even allows much more precise textual manipulation than hand-written letters, it is natural to consider criteria for evaluating e-mail messages. These must also be judged in terms of the use of certain text editors, the choice of fonts, the setting of line spacing and alignment modes, the inclusion of text in indents, etc. (Graur, 2001, p. 98).

Basically, all these new discoveries have increased the possibilities and mobility of these people in all aspects of their lives. New technologies are also revolutionizing education (Bonk, 2009, Duguleană et al., 2020, Aggarwal and Mehndroo, 2022, Sawant, 2023), which has recently been confronted with new educational choices and approaches. Implicitly, in communicating and relating directly with students with disabilities, new procedures have emerged which have adapted their content to these new interfaces used in the learning process. Terms such as trolling, online bullying, hater, rejection, etc. are considered in order to diminish and eradicate forms of abuse, or anti-social and bullying behaviors. A new, challenging and sometimes difficult approach to

education is needed, dedicated to those teachers who are not keeping up with the latest developments in the field or who are failing to adapt to new requirements (Fülöp et al., 2022).

In addition, if we want to reach people with disabilities and facilitate their access to different platforms, portals, libraries and applications, continuous professional training and investment in technology is necessary because, internationally, the use of information and communication technologies in education has led to the creation of adaptations for users with special needs. These unprecedented means, known as access technologies (Chen et al., 2022), compensate for the limitations imposed by disability and can reinforce or enhance performance in learning, communication, independence, mobility and control over the environment. For example, platforms that facilitate assistive reading or software that turns voice into documents or by using Braille system. There are also various organizations that provide IT support to students with disabilities (English Federation of Disability Sport, 2020). One thing is certain: traditional learning is far from what the future holds.

## **9.2 Definition of the field and basic concepts clarifications**

To become familiar with the subject matter discussed in this chapter and developed in Best Practices Guides, it is first necessary to understand a few important definitions:

- Disability - A physical, mental or psychological condition that limits a person in movement, activity, or perception; handicap (van der Veen et al., 2023).
- Handicap - a disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual (Jones, 2001, p. 377), but the definition differs depending on whether the focus is on incapacity or on difficulties in adapting to one's environment due to a pathology (Faure, 2022).

- Communication - is the set of processes through which information and meaning are exchanged between people in a particular situation (Abric, 2002, p. 14, Briciu, 2015).

This juxtaposition of definitions was chosen to observe the interpretation people can give when using two different terms to characterize the same person. Thus, a disabled person can be seen both as having an impairment and as a person who is given (by alteration of meaning) certain advantages (by society) and is inferior. Placement on a lower step (unconsciously communicated through the alteration of meaning) alters the receiver's perception of the labelled person. The coding of meaning of this term influenced by the education and vision of both the sender and the receiver of a simple exchange of information about a person with disabilities has proven so many times its negative effects in society.

The term "disability" does not define the person and cannot be altered so easily, which is why it is recommended in inclusive communication. At this point of the discussion, it would be useful to present some definitions of disability as formulated by different organizations.

The World Health Organization (2004) proposes the following definition of disability: "any restriction or lack (resulting from an impairment) of the capacity (ability) to perform an activity in the manner or at the level considered normal for a human being". The United Nations (UN), based on the Convention on the Rights of Persons with Disabilities (2006), uses the following definition: "Persons with disabilities include those who have enduring physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others". According to the International Organization of Persons with Disabilities, disability is defined as "the result of the interaction between a person who has a disability and the social and attitudinal barriers that he or she may encounter" (Bivol, 2012, p. 464). In the Law on the Protection and Promotion of the Rights of Persons with Disabilities no. 448/2006, the main law in Romania protecting the rights of this social category, the following definition is given "Persons with disabilities are those persons whose social environment, not adapted to their physical, sensory, mental, mental and/or associated impairments, totally prevents or limits their access with equal opportunities to the life of society, requiring

protective measures in support of social integration and inclusion" (Law no. 448 from 6 December 2006 (republished), 2008).

The key word to be mentioned here is barrier, in this case in opposition to the term social maladjustment. The sender himself should adapt to the situation, personality and way of life of the receiver, language needs to be adjusted to the differences between people and not the other way round. On the other hand, the message cannot be decoded by the receiver if certain physical obstacles make it difficult or even impossible to decode, such as hearing and sight impairments, or those caused by mental and emotional disabilities, such as autism, for example, or rigid facial features which alter the facial expressions of those who are partially immobilized. These disabilities are themselves barriers.

People with such problems simply play by the rules of the majority and try individually to adapt to the situation of the "normal" when, in fact, society through its individuals should go half the way towards a better understanding and the creation of a sense of belonging. Sign language or the Braille alphabet are examples to support this idea.

### **9.3 Inclusive communication, inclusive language and netiquette**

The quality of human relationships is directly influenced by the quality of communication (Putra and Ali, 2022). The best situation for communication is therefore one where no one feels judged, labelled, manipulated (Briciu et al., 2020) or harassed. It is important to learn to listen (intra- and interpersonal communication), to observe (ourselves), to analyze (ourselves), and only then to express (ourselves).

The term inclusive communication recognizes that people communicate differently and encourages the use of a variety of techniques (Solomon and Theiss, 2022). It incorporates all forms of communication, both verbal and non-verbal; non-verbal communication is often as important to meaning as what is said. By understanding and incorporating inclusive communication skills into everyday exchanges, the chances of positive and effective interactions with all people are increased. This applies to interactions with everyone (ADCET, 2020).

In fact, we need simple, common-sense rules: creating a respectful environment where everyone feels valued and respected. Inclusiveness means that all participants' perspectives and contributions are valued and members are empowered to be themselves (Khalil et al., 2023). As a result, a sense of belonging is generated, an important key in establishing rapport, without which communication cannot take place, as communication is not only content but also relationship (Nuță, 2004).

Inclusive language attaches particular importance to words and the impact they can have, because the human being "is an agent of social communication" (Lecomte, 2004) and any social reality is invested with meaning. Inclusive communication is free from stereotypes, limiting expectations or negative connotations and always adapts to the audience, providing empathy, empowerment and creating its own organizational culture if needed (Cordivano, 2019). Elements of the communication process can be disrupted for people with disabilities. Inclusive communication uses its own language to maximize the delivery and reception of the message and information. The guarantee of better inclusion is the chance to have access to education.

Online communication, whether oral or written, must follow certain rules of etiquette (Martinčević and Vidaček-Hainš, 2023), namely the way we communicate must be done in a professional manner. Communication is a fundamental feature of existence, so written language is one of the most important and revolutionary achievements acquired by people in the process of work and living in society (Makhmudov, 2022). It plays a special role in preserving and spreading knowledge and culture in the specification and realization of various social relations.

Netiquette is short for "internet etiquette" (Abduvaliyeva and Yusupova, 2022). Just as etiquette is a code of polite behavior in society, netiquette is a code of good behavior on the internet. It includes many aspects of the internet, such as email, social networking, online chat, web forums, comments on websites, multiplayer games and other types of online communication. Basically, it means "a set of rules and conventions to be observed in the use of the Internet in general and e-mail in particular. This set of rules reflects a certain experience of harmonious coexistence in the electronic environment and is intended to eliminate possible conflicts, misunderstandings or misinterpretations" (Graur, 2001, p. 100).

Although there is no official or regulated approach to netiquette rules or guidelines in Romania yet, the general idea is to respect others online. "The Internet offers a sense of anonymity because you often don't see or hear the people you communicate with online. But that's no excuse for having poor manners or posting inflammatory comments. While some users may feel they can hide behind their keyboard or smartphone when posting online, the truth is that they still publish content. Remember - if you post offensive comments online and the veil of anonymity is lifted, you will have to answer the comments you have made. In short, good netiquette benefits both you and others on the internet. Posting a positive comment, rather than a negative one, could make someone's day" (techterms.com, 2020).

Mannered behavior is nothing new to most people. We grew up with relatives who often told us to "behave ourselves". In a digital age where unwritten online 'rules' are constantly changing, proper netiquette can seem a little mystifying, however (Bromell, 2022). Suddenly adding a netiquette guide to the atmosphere of an online classroom, especially where we also have the inclusion of a disabled person, will not seem as easy as a simple "please" and "thank you".

#### **9.4 Assistive educational technology**

A few points about assistive technology (Kisanga and Kisanga, 2022) are worth mentioning because they underline the importance of our constant adaptation to new. If a university is always "up to date" and has qualified staff in the field of assistive technology or can afford such collaboration, the chances of other structures evolving and applying innovations are lower. If, however, IT specialists are lacking, regardless of the performance of teachers, they will succumb to a lack of technology, support and maintenance. At the same time, communication is becoming an increasingly sought-after field. The number of channels through which we want to be heard is exploding (Briciu and Briciu, 2021). Proof of this are the many new specializations that have appeared in this field, increasingly nuanced and particular.

According to one online reference (tehnologii\_asistive\_in\_educatie.blogspot.com, 2017) "assistive technologies typically refer to products, devices or equipment purchased as such or modified as needed that are used to maintain, increase or improve the functional capabilities of

individuals with disabilities." The purchase of Braille equipment, Braille printers that allow simple text and graphics to be printed from electronic to Braille format, modern Braille displays that include a Braille keyboard, various audible warning components for the blind that would facilitate learning for blind students, are all examples of assistive technologies (Hoskin et al., 2022). Audio-accessed text databases/audio decoding software, software that converts text into Braille alphabet etc. could also be used, that would keep up with all that is new and innovative in the field of educational assistance (educatpentruareusi.blogspot.com, 2017).

### **9.5 Inclusive education of young people with disabilities in higher education**

With specific reference to higher education, UN Convention 61/106 of 2006 (Romano, 2023) states that persons with disabilities "have access to general tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others".

On inclusive education of young people with disabilities in higher education, the valuable references proposed by Popovici and Diaconescu (2018, pp. 81-82) and Balan (2022) are worth noting: in higher education institutions, equal opportunities for all students, the principles of non-discrimination and equal treatment, the acceptance of diversity and the removal of barriers that prevent or limit participation under conditions of full equality must be promoted. Inclusive education implies regular educational programs that are close to the physical, curricular and social needs of all students, including those with various disabilities. However, young people with disabilities face situations where they are unable to continue their studies and are excluded from education, either through non-enrolment or dropping out. Various studies and statistical data have shown that even when young people with disabilities are enrolled in education, a significant proportion of them drop out (Dervis et al., 2022). The reasons for this can be varied and, although they are in fact barriers faced at earlier stages (primary, secondary, high school), at university level they can sometimes be much more difficult to overcome (Hâj and Țucă, 2022).

Among the factors that can directly or indirectly generate discrimination in educational environments are:



- lack of architectural facilities, buildings with inadequate access routes for people with physical disabilities.
- inability to ensure proper communication and interpretation of mime-gesture language.
- pedagogical maladjustment to specific needs with an inadequate curriculum.
- training courses, with activities to which a disabled person does not have access.
- difficulties in accrediting training (vocational, academic) (Popovici and Diaconescu, 2018).

Therefore, in view of these key points, it is necessary to create good practice guidelines in each educational structure to give equal opportunities to as many young people as possible who want to study. Even if all communication barriers are not completely removed and total accessibility is not created, young people with disabilities will still have a better chance of later access to the labor market and harmonious social integration.

## **9.6 Good practice guides on communicating with students with disabilities**

The following section of this chapter outlines two proposed good practice guides, first one focused on communicating with students with disabilities and second one focused on electronic communication (netiquette) with students with disabilities. Their aim is to provide specific guidance to all those who provide support and advocacy to students with disabilities, taking courses both online and physically, as part of the inclusive learning programs that the academic institution offers. These should not be seen as regulatory, but as indicative guides.

Furthermore, these guides are addressed to all those involved in direct contact with students with disabilities: teaching and administrative staff, auxiliary staff, parents, carers, specialist staff (psychologists, physiotherapists, pedagogues), other students.

The aim of the first guide is to achieve better planning, management, monitoring and evaluation of the work of students with disabilities through inter-relational communication. Better communication can facilitate a more effective, improved approach, which in the long run can generate advances in approach and guidelines for sets of principles and internal regulations.

Taking into consideration equal opportunities and treatment for all participants, this concept is based on the idea that all human beings are free to develop their personal capacities and choices without the limitations imposed by strict roles; that the different behaviors, aspirations and needs of women and men are equally considered, valued and favored means that women and men enjoy the same freedom to realize their aspirations. It refers to the absence of barriers to economic, political and social participation and equal treatment for all citizens irrespective of race, nationality, ethnicity, language, religion, social category, beliefs, gender, sexual orientation, age, disability, chronic non-communicable disease, HIV infection, membership of a disadvantaged group and any other criteria (Boghirnea, 2023).

All communication adjustments and guidelines proposed in this guide seek to be proactive in interacting with students and to remove or minimize communication barriers to increase accessibility to education. Note that by maintaining an honest and open dialogue, adjustments can be made based on free expression and decisions made on an individual level. The focus should be on increasing accessibility, not on the messages in the guide that may become standard due to lack of empathy. Parents and carers can be that bridge that, through cooperation and involvement, can increase the chances of integration. Individual circumstances will be discussed at the level of regularly organized committees, with optional access for parents/students with disabilities.

The educational establishment takes responsibility for the decisions taken, considering all legislative regulations in force. This guide will be accompanied by legislative and internal regulations when it is gone through, where the rights, obligations and roles of all those involved are stipulated.

Regarding ethical principles, if a person does not wish to have his/her disability disclosed, he/she will be treated as he/she wishes. Laws protect personal data and decisions made about a person's image and health. However, in certain circumstances, recommendations for disclosure may be made to ensure their protection and safety, but the decision will always rest with the individual concerned. If a student develops a disability, the educational establishment will make every effort to keep him/her among the students and ensure his/her reintegration.

**Guidance for parents/carers**

- Treat your son/daughter as a person of integrity.
- Allow independence in expressing emotions and decisions.
- Be open and collaborative; don't be afraid to be vulnerable.
- Decide with your son/daughter how much effort you will put into his/her development if the situation requires it.
- Communicate as descriptively as possible the situation and the specifics of your child's personality and disability if help is required.
- Report on anything that might influence progress in the learning process for the better.
- Any changes in attitude and behavior during the year should be reported.
- Seek specialist advice if you are unable to cope with current situations or progress.
- Keep informed about programs offering support and grants or scholarships.
- Be prepared and open to make inner rehabilitation efforts for the benefit of his/her development.

**Guidance for teachers**

- Always remember that a person with a disability is a person like everyone else. Treat adults like adults.
- Put the person first and not their disability.
- Look and speak directly to the person rather than communicating with them through their carer.
- When you meet a person with a visual impairment, identify yourself and those with you and inform the person with a visual impairment when you leave.
- Offer assistance only when your offer of help has been accepted.
- Use reflective listening skills: ask open-ended questions, summarize what the other person has said or asked to ensure a fair understanding.
- When communicating with a person with speech difficulties, be patient and give them time to complete their sentences.
- Always sit in front of the student to whom you are speaking.
- Turn off or mute background noise or music.
- Make sure only one person speaks during conversations or discussions.
- Repeat questions and comments to other students to make sure everyone has heard.

- Read aloud the visually presented material.
- Give oral and written instructions.
- Pace your speech flow.
- Use affirming language that shows you genuinely and respectfully support your students' personal qualities, efforts to change, and strengths.
- Use clear, brief, appropriate and open-ended questions that empower and support the ideas expressed by the student.
- Repeat information conveyed, if necessary, clearly and patiently.
- Communicate by writing if speaking does not help.
- When students have assistants, such as caregivers or interpreters, address questions and comments directly to the student.
- If necessary, allow short pauses to allow students with voice amplification systems and sign language interpreters to keep up.
- Be flexible - if one communication strategy doesn't work, try another.
- When talking to a person who uses a wheelchair or crutches, use a chair to position yourself at that student's eye level.
- Allow time and space for students who need breaks for various medical procedures.
- Adapt elements of nonverbal and paraverbal communication to each student (Adcet, 2020).

**Guidance for students with disabilities**

- Look for the most accessible sources of information you need.
- Identify the people responsible for helping you throughout the study.
- Be clear about what opportunities you want to take advantage of and/or what you would like to have access to.
- If you can't get along, don't give up, find a way that works for you.
- Be proactive and reach out to those who want to help or guide you by taking part in discussions and debates on decision-making regarding people with disabilities.
- Express clearly how you feel and don't be afraid to be vulnerable.

Table 9.6.1: Proposed Guide on Communicating with Students with Disabilities

As a general idea, all categories of people who carry out a communication process involving students with disabilities should undergo a special training program in which they acquire both general knowledge about disabilities and concrete forms and methods of communication.

The aim of the second guide is to promote ethical and moral principles in the online environment to better communicate with students with disabilities and show mutual respect. The electronic methods of communication chosen by teachers, whether they are online platforms provided by the university or widely used, are intended to facilitate access to information and education for students with disabilities. Before creating a study package for different categories of students, it is good to have a dedicated structure within the institution to provide them with the main sources of information and study together with a guide to use and good practice. In this way they can familiarize themselves with what they will have to do and know what to ask when they have questions.

An example of best practice for candidates wishing to apply to one of the degree programs offered by the university is promotion by inserting images of a person with a disability on the main page of the presentation website and creating a special application form with additional questions. If it is decided that a different assessment alternative will be considered for certain students with disabilities, such as those who are blind, then an alternative activity and assessment should be designed for these students (Cooper, 2006).

**General guidelines for teachers**

- Always introduce students to the difficulties that the disabled colleague, who has chosen to disclose their disability, is trying to overcome through work and effort. Make appreciative remarks, be positive and encourage empathy and support.
- Look for the best ways to communicate and propose solutions in case of technical shortcomings.
- Be flexible. If one communication strategy doesn't work, look for another. It may be the one agreed to by the student or his/her accompanying person. Find solutions by putting the person in the group with the greatest difficulty in understanding first.

- Good netiquette means conducting yourself in an online classroom with the same respect, politeness and professionalism that you would exhibit in a real-life classroom.
- Be present in your work, don't get distracted by other stimuli in your environment.
- Use a consistent and clear tone of voice and intonation. This attitude will convey calmness and confidence (Chelcea et al., 2005, p. 13).
- If there are interpreters using sign language for people with disabilities, make sure you allow enough time for the message to get through.
- Some people may feel safer online, this can be helpful for people with disabilities who may sometimes feel apprehensive in the real social environment. But for others it can become a screen from which to launch rudeness. The netiquette is that which immediately signals inappropriate behavior.
- Strive to increase the cohesion of student groups. Highly cohesive groups engage more energetically in group activities (Pânișoară, 2004, p.273).
- Make sure students have received the files sent and understand the method of working.
- If you are speaking verbally, use as few inappropriate inflections of voice or gestures as possible. Do not raise your voice. Metalanguage and non-verbal language can be difficult for some people with disabilities to interpret. Explain clearly, simply and directly without being ridiculous. Address adults.
- Respect the privacy of others by not sharing personal information, photos or videos that another person does not want published online.
- Make sure you are well lit and your image is clear in the web room if you have students with low vision.
- Create a relaxing environment without disturbances and background noise.
- If the psycho-physiological attributes of the student with a disability confuse you and make it difficult for you to understand, ask for support and consult with those in a position to do so.

**General guidelines for students**

- Agree with your teachers about which ways of communicating and accessing information are best for you.
- If you are more comfortable working online or within a certain timeframe, please communicate this in advance.

- It's good netiquette to use words like please, thank you, or cordial forms of greeting.
- Always use correctly spelled words without abbreviations. Strive to use grammatically correct spelling as much as possible to make it easier to understand. Avoid inserting words in another language if it is not the one officially adopted in class. Otherwise, it leads to frustration or extra effort in understanding.
- Avoid sarcasm. It is difficult to interpret and can lead to confusion in interpretation and can be decoded as offensive. Approach with a polite and direct attitude.
- As a student, pay attention to the instructions regarding online assessment or transfer of materials and take responsibility for any failure based on carelessness.
- Before launching into an online dialogue, think, read carefully and then write.
- It is very important to know that cyberspace is not a private environment, nor is it safe in terms of data protection, which is why it is best to limit any discussions to the chosen sphere of activity and to understand that this online environment is considered a public one. Imagine what you are broadcasting in front of an audience and if you are okay with how you feel about it, you can post it.
- DON'T YELL - typing capital letters can be annoying and most of us may interpret it as yelling. Avoid it. There are times when the use of capital letters can express amazement, excitement, when accompanying good news, but it is preferable to use it in non-formal discussions. If there are reading problems it is preferable to adjust the size of the text rather than appear angry (Brooks, 2019).
- Use chatbot effectively without abusing it, as it can be a useful source but also a distraction. Try to find your own answers before you start asking questions.
- Avoid potentially offensive comments and trolling on various forums that may cause you harm.
- Be succinct and don't send large amounts of junk mail.
- Do not respond to offensive comments.
- If someone asks a question and you know the answer, offer your help.
- If you don't understand something, don't give up. Report it immediately.
- Don't get discouraged, ask for help.
- Constantly communicate with your mentors to let them know how you have been feeling and what has made it easier for you to make progress.

### **Other general recommendations for email etiquette**

- Try to keep your message short and to the point. Except for personal messages, it can be assumed that you are sending an email to busy people. It's not uncommon for someone to receive 50-100 messages a day.
- We need to make sure that the message in the Subject: field describes the content of the message as briefly as possible. Many people decide whether or not to read a message based on its subject.
- Dividing a message into paragraphs is welcome. Messages that are not divided into paragraphs are very hard to read on the computer screen. Also, replying (Reply to) a message not divided into paragraphs is difficult (Coman, 2010, pp. 281-282).

Table 9.6.2: Proposed Guide on Electronic Communication (netiquette) with Students with Disabilities

## **9.7 Conclusions**

It is not easy to create accessibility and inclusion for all members of society. Many organizations and structures are making efforts to facilitate a fulfilling life for the less privileged. Ongoing mentoring and education can substantially bridge the gap, with a focus on good communication. The new paradigm also involves identifying individual strengths and skills that need to be developed. It is no longer the individual who should adapt to the environment, but the environment must see people with all their different needs and treat them as equal members of the community.

People with disabilities feel safer and more protected online. They can overcome shyness while being with their family in familiar surroundings. Compulsion will generate increased motivation and performance (Abrić, 2002). While the SARS-CoV-2 pandemic in 2020 has brought a lot of individual and societal shortcomings, a great achievement is that almost all educational institutions have had to make a paradigm shift and adapt their courses online to a level which was not foreseen before.

This psychological barrier, once overcome, can lead to changes in the structure and organization of courses, enabling the most disadvantaged to have access to information and education and to



many resources, increasing their learning potential. Having the option to 'study at their own pace' is a major factor in the success of students with disabilities. Having that freedom to plan their own schedule removes the unnecessary pressure that most students struggle with in courses that require physical attendance.

Technology will certainly bring major changes to the learning paradigm in the coming years. If the key word for people with disabilities is accessibility to the educational environment, the new key word will be adaptability.

## References

- Abduvaliyeva, R. and Yusupova, S. (2022) “The importance of politeness in online communication”, *Asian Journal of Research in Social Sciences and Humanities*, 12(4), pp. 122-126.
- Abric, J.-C. (2002) *Psihologia comunicării. Teorii și metode (Communication psychology. Theories and methods)*. Bucharest: Polirom Publishing House.
- ADCET (2020) *Inclusive Communication - General Good Practice*. Available at: <https://www.adcet.edu.au/inclusive-teaching/working-with-students/communication-tips/> (Accessed: August 20, 2023).
- Aggarwal, M. V. and Mehndroo, M. (2022) “Digital Transformation in Education”, *Specialusis Ugdymas*, 1(43), pp. 9723-9732.
- Balan, A. (2022) “Educația incluzivă a persoanelor cu dizabilități în instituțiile de învățământ superior din Republica Moldova” (Inclusive education of people with disabilities in higher education institutions in the Republic of Moldova), *Dezvoltarea economico-socială durabilă a euroregiunilor și a zonelor transfrontaliere (Sustainable economic and social development of Euroregions and cross-border areas)*, 43, pp. 133-138.

- Bivol, V. (2012) “Abordări conceptuale ale dizabilității (revista literaturii)” (Conceptual approaches to disability (literature review), *Analele Științifice ale USMF „N. Testemițanu”* (Scientific Proceedings of USMF “N. Testemitanu”), 2(13), pp. 463-471.
- Boghirnea, I. (2023) “Legislative Mechanisms of the European Union and of Transposition into the Romanian Legislation concerning the Problem of Work-Life Balance for Parents and Caregivers-Sociological Aspects”, *Athens Journal of Law*, 9(3), pp. 477-492.
- Bonk, C. J. (2009) “The world is open: How web technology is revolutionizing education”, *Association for the Advancement of Computing in Education (AACE)*, pp. 3371-3380.
- Briciu, V. A. and Briciu, A. (2021) “Social media and organizational communication”, In *Encyclopedia of Organizational Knowledge, Administration, and Technology* (pp. 2609-2624). IGI Global.
- Briciu, V. A., Mircea, I. A. and Briciu, A. (2020) “Communication and Entrepreneurship in Romania: Dissimulation of First Impression in 30 Seconds”, In *Entrepreneurial Development and Innovation in Family Businesses and SMEs* (pp. 22-38). IGI Global.
- Briciu, V. A. (2015) *Incursiuni teoretico-metodologice în comunicare și relații publice* (Theoretical and methodological incursions in communication and public relations). Brasov: Transilvania University of Brasov Publishing House.
- Bromell, D. (2022) “Challenges in Regulating Online Content”, In *Regulating Free Speech in a Digital Age: Hate, Harm and the Limits of Censorship* (pp. 29-53). Cham: Springer International Publishing.
- Brooks, A. (2019) 10 Netiquette Guidelines Online Students Need to Know. Available at: <https://www.rasmussen.edu/student-experience/college-life/netiquette-guidelines-every-online-student-needs-to-know/> (Accessed: August 20, 2023).

- Chelcea, S., Ivan, L. and Chelcea, A. (2005) Comunicarea nonverbală. Gesturile și postura (Nonverbal communication. Gestures and posture). Bucharest: Comunicare.ro Publishing House.
- Chen, X., Gatsis, K., Hassani, H. and Bidokhti, S. S. (2022) “Age of information in random access channels”, IEEE Transactions on Information Theory, 68(10), pp. 6548-6568.
- Coman, C. (2010) Informatică aplicată în științele sociale și ale comunicării (Applied computer science in social and communication sciences), Brașov: Transilvania University of Brasov Publishing House.
- Cooper, M. (2006) “Making online learning accessible to disabled students: an institutional case study”, Research in Learning Technology, 14(1), pp. 103-115.
- Cordivano, S. (2019) Inclusive Communication: Three Principles. Available at: <https://medium.com/@sarah.cordivano/inclusive-communication-three-principles-cb8dbb6361cd> (Accessed: August 20, 2023).
- Dervis, O. A., Trifan, E. and Jitaru, G. (2022) “The Socio-Economic Challenges in Access to Romanian Higher Education. Student Perception and Funding Policy Directions”, In Higher Education in Romania: Overcoming Challenges and Embracing Opportunities (pp. 71-92). Cham: Springer International Publishing.
- Duguleană, M., Briciu, V. A., Duduman, I. A. and Machidon, O. M. (2020) “A virtual assistant for natural interactions in museums”, Sustainability, 12(17), 6958.
- educatpentruareusi.blogspot.com (2017) Educația prin tehnologia asistivă (Education through assistive technology). Available at: <http://educatpentruareusi.blogspot.com/2017/04/educatia-prin-tehnologia-asistiva.html> (Accessed: August 20, 2023).

English Federation of Disability Sport (2020) Access for all: Inclusive communications. Available at:[http://www.activityalliance.org.uk/assets/000/000/020/EFDS\\_Inclusive\\_comms\\_guide\\_accessible\\_PDF\\_APRIL\\_2014\\_FINAL%281%29\\_original.pdf?1456915910](http://www.activityalliance.org.uk/assets/000/000/020/EFDS_Inclusive_comms_guide_accessible_PDF_APRIL_2014_FINAL%281%29_original.pdf?1456915910) (Accessed: August 20, 2023).

European Commission (2010) Strategia europeană 2010-2020 pentru persoanele cu handicap: un angajament reînnoit pentru o Europă fără bariere (European Disability Strategy 2010-2020: a renewed commitment to a barrier-free Europe). Available at: <https://eur-lex.europa.eu/legal-content/RO/TXT/PDF/?uri=CELEX:52010DC0636&from=EN> (Accessed: August 20, 2023).

Faure, N. (2022). “Reconnaître le handicap invisible” (Recognizing invisible disabilities), *L'Aide-Soignante*, 36(240), pp. 10-11.

Fülöp, M. T., Breaz, T. O., He, X., Ionescu, C. A., Cordoș, G. S. and Stanescu, S. G. (2022) “The role of universities' sustainability, teachers' wellbeing, and attitudes toward e-learning during COVID-19”, *Frontiers in Public Health*, 10, 981593.

Graur, E. (2001) *Tehnici de comunicare (Communication techniques)*, Cluj-Napoca: Mediamira Publishing House.

Green, S., Davis, C., Karshmer, E., Marsh, P. and Straight, B. (2005) “Living stigma: The impact of labeling, stereotyping, separation, status loss, and discrimination in the lives of individuals with disabilities and their families”, *Sociological inquiry*, 75(2), pp. 197-215.

Grossi, F. C. (2015) “The “AUAF” Model of Communication”, *Ricostruire*, 1, pp. 1-11.

Hâj, C.M. and Țucă, P.L. (2022) “Access to Higher Education: Losing Precious Human Resources Before the Start Line”, In *Higher Education in Romania: Overcoming Challenges and Embracing Opportunities* (pp. 35-51). Cham: Springer International Publishing.

- Hoskin, E. R., Coyne, M. K., White, M. J., Dobri, S. C., Davies, T. C. and Pinder, S. D. (2022) “Effectiveness of technology for braille literacy education for children: a systematic review”, *Disability and Rehabilitation: Assistive Technology*, pp. 1-11.
- Jones, R. B. (2001) “Impairment, disability and handicap—old fashioned concepts?”, *Journal of medical ethics*, 27(6), pp. 377-379.
- Khalil, M., Slade, S. and Prinsloo, P. (2023) “Learning analytics in support of inclusiveness and disabled students: a systematic review”, *Journal of Computing in Higher Education*, pp. 1-18.
- Kisanga, S. E. and Kisanga, D. H. (2022). “The role of assistive technology devices in fostering the participation and learning of students with visual impairment in higher education institutions in Tanzania”, *Disability and Rehabilitation: Assistive Technology*, 17(7), pp. 791-800.
- Law no. 448 from 6 December 2006 (republished) (2008) *Legea privind protecția și promovarea drepturilor persoanelor cu dizabilități (Law on the Protection and Promotion of the Rights of Persons with Disabilities)*. Available at: <http://legislatie.just.ro/Public/DetaliiDocument/77815> (Accessed: August 20, 2023).
- Lecomte, P. (2004) *Comunicare, televiziune și democrație (Communication, television and democracy)*, Bucharest: Tritonic Publishing House.
- Li, S., Xu, L. D. and Zhao, S. (2015) “The internet of things: a survey”, *Information systems frontiers*, 17, pp. 243-259.
- Makhmudov, K. (2022) “The Role, Competences and Methods of a Teacher in Learner's Forming Intercultural Communication”, *International Journal of Innovative Research in Science, Engineering and Technology*, 11(3), pp. 2688-2691.

- Martinčević, E. and Vidaček-Hainš, V. (2023) “Face-to-Face and Online Communication and Etiquette in Secondary Education”, In 2023 46th MIPRO ICT and Electronics Convention (MIPRO) (pp. 734-738). IEEE.
- Molero, F., Recio, P., García-Ael, C. and Pérez-Garín, D. (2019) “Consequences of perceived personal and group discrimination against people with physical disabilities”, *Rehabilitation psychology*, 64(2), pp. 212-220.
- Nuță, A. (2004) *Abilități de comunicare (Communication skills)*. Bucharest: SPER Publishing House.
- Onica-Chipea L. (2018) “Câteva considerații privind efectele teoretice și practice ale modificărilor aduse legii nr. 448/2006 privind protecția și promovarea drepturilor persoanelor cu handicap prin O.U.G. nr. 60/2017” (Some considerations regarding the theoretical and practical effects of the amendments brought to law no. 448/2006 regarding the protection and promotion of the rights of persons with disabilities through O.U.G no. 60/2017), *Revista Facultății de Drept Oradea (Oradea Law Faculty Magazine)*, 1, pp. 184-192.
- Onica-Chipea, L. (2019) “Theoretical And Practical Aspects Of The Amendments To Law No. 448/2006 On The Protection And Promotion Of The Rights Of Persons With Disabilities By Emergency Ordinance No. 69/2018”, *Fiat Iustitia*, 13(2), pp. 107-113.
- Pânișoară, I.-O. (2004) *Comunicarea eficientă (Effective communication)*. Bucharest: Polirom.
- Popovici, D. V. and Diaconescu, L. V. (2018) “Educația incluzivă a tinerilor cu dizabilități” (Inclusive education for disabled young people), *Journal of Psychology. Special Pedagogy. Social Work*, 51(2), pp. 80-88.
- Putra, R. and Ali, H. (2022) “Organizational behavior determination and decision making: analysis of skills, motivation and communication (literature review of human resource

- management)", *Dinasti International Journal of Digital Business Management*, 3(3), pp. 420-431.
- Reyna, J., Hanham, J. and Meier, P. (2018) "The Internet explosion, digital media principles and implications to communicate effectively in the digital space", *E-learning and Digital Media*, 15(1), pp. 36-52.
- Romano, L. (2023) "Fundamentos teórico-conceptuales de la Convención sobre los Derechos de las Personas con Discapacidad de la Organización de las Naciones Unidas: la teoría de los derechos humanos y el modelo social de la discapacidad" (Theoretical and conceptual foundations of the United Nations Convention on the Rights of Persons with Disabilities: human rights theory and the social model of disability.), *Anuario Mexicano de Derecho Internacional (Mexican Yearbook of International Law)*, 23, pp. 391-424.
- Sawant, R. (2023) "Revolutionizing education sector by leveraging blockchain technology: State of art", In *AIP Conference Proceedings (Vol. 2690, No. 1)*. AIP Publishing.
- Solomon, D. and Theiss, J. (2022) *Interpersonal communication: Putting theory into practice*. Routledge.
- Stoiber, M. and Abromeit, H. (2006) "A new measurement of democracy: The inclusion of the context", *Midwest Political Science Association*.
- techterms.com (2020) Netiquette. Available at: <https://techterms.com/definition/netiquette> (Accessed: August 20, 2023).
- tehnologii\_asistive\_in\_educatie.blogspot.com (2017) Utilizarea tehnologiilor asistive (Use of assistive technologies). Available at: <https://tehnologii-asistive-in-educatie.blogspot.com/2017/04/studiu-de-caz-privind-utilizarea.html> (Accessed: August 20, 2023).

Trainor, A. A., Lindstrom, L., Simon-Burroughs, M., Martin, J. E. and Sorrells, A. M. (2008) “From marginalized to maximized opportunities for diverse youths with disabilities: A position paper of the Division on Career Development and Transition”, *Career Development for Exceptional Individuals*, 31(1), pp. 56-64.

United Nations (UN) (2006) Convention on the Rights of Persons with Disabilities (CRPD). Available at: <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html> (Accessed: August 20, 2023).

United Nations (UN) (2020) Accesibilitatea persoanelor cu dizabilități în lume (Accessibility for people with disabilities in the world). Available at: <https://www.un.org/development/desa/disabilities/wp-content/uploads/sites/15/2019/09/Accessibility-infographic.jpg> (Accessed: August 20, 2023).

van der Veen, S., Evans, N., Huisman, M., Welch Saleeby, P. and Widdershoven, G. (2023) “Toward a paradigm shift in healthcare: Using the International Classification of Functioning, Disability and Health (ICF) and the capability approach (CA) jointly in theory and practice”, *Disability and rehabilitation*, 45(14), pp. 2382-2389.

World Bank (2018) World Bank Group Commitments on Disability-Inclusive Development. Available at: <https://www.worldbank.org/en/topic/socialdevelopment/brief/world-bank-group-commitments-on-disability-inclusion-development> (Accessed: August 20, 2023).

World Health Organization (2004) Clasificarea internațională a funcționării, dizabilității și sănătății: CIF (International Classification of Functioning, Disability and Health: CIF). Bucharest: MarLink.

Yao, M. Z. and Ling, R. (2020) ““What is computer-mediated communication?”—An introduction to the special issue”, *Journal of Computer-Mediated Communication*, 25(1), pp. 4-8.



## CHAPTER 10

# Aesthetic Practice for The Protection of Human Rights of The Peoples with Disabilities

*Leena Seneheweera*

### 10.1 Introduction

The study analyses how human rights of Persons with Disabilities (PWDs) could protect through art and aesthetic practices in the university and other premises. The protection of human rights of the PWDs is a basic context of an inclusive society. Generally, the inclusive society always finds the solution for diversity and segregation for the protection of human rights of PWDs. For the protection of their rights could be taken, decisions as an individual or group through the conventions, recommendations, acts and regulations so on in the local and international level. Susan J Peters mentioned the three common ways of thinking of disability culture as:

1. Historical,
2. Social and political and
3. Personal and aesthetic (Peters, 2023).

The third point is related to this study and its value includes in the personal and aesthetical way of positive sense. Those positive sense of aesthetic practice bridges between human rights and aesthetic expression/emotion of PWDs through literature, music, dance, theatre, poetry, song etc., and painting, sculpture, architecture and drawing etc., in the visual art genres. However, the PWDs face many challenges with their health and discrimination inquiries in front of the mainstream community. Those challenges and discrimination inquiries could be expressed through art and aesthetic thoughts, sense, feeling, emotion and mood. Hence, their physical appearance and mental

condition they are facing some issues such as inaccessible to the intellectual dialogue, transportation and cultural barriers.

In addition, the PWDs' lack of knowledge of their rights in relation to education, health, artistic and non-artistic expression, etc., they do not aware of them. Also, the mainstream society does not aware of enough knowledge for the protection on PWDs rights, responsibilities and needs. Therefore, the PWDs are harassed by peers, teachers, colleagues, sometimes parents, siblings and relatives. Consequently, it can be emerged the imbalanced context in the society or family, diversity, disinterested, unhappiness, violence, unsatisfied and non-victorious environment in their life. In order to reduce these feelings of unhappiness and unsatisfied living condition as well as the way of protect the human rights of PWDs, the study wishes to aware the situation through aesthetic practices.

The elements of aesthetic practices represent thorough aesthetic appreciation, practice of taste or sentiment of the oriental aesthetic theories, aesthetic experience, attitude, judgment, receptiveness disinterested and interested etc. Normally, the observation of higher education and school education system in Sri Lanka the student with disabilities (SWDs), disabled workers (academics and non-academics) are facing the discriminations due to their disability type. Employers do not possess the critical thinking, lack of appropriate sense, moods, not willing to share positive values, do not know receptive to their rights, lack of perseverance etc., as they engage with their prescribed hours in their workplace. However, the study identified that those gaps as discrimination of the human rights of PWDs and the gap could be fulfilled through using arts- based activities in the higher education and mainstream society as well.

## **10.2 Strategies for the protection of human rights of PWDs**

The international and local level acts, conventions, recommendations, etc., prepared and has been preparing for protection of human rights of PWDs. Most of states agree to sign for these and mainstream community as well as PWDs accept the content of those documents, regulations and declarations.

Under the *Inclusion in Education-2023*, the UNESCO publication refer “how does inclusion relate to the right to education? In this view, that a disabled child should not be separate from mainstream

students and each child's needs are unique. According to their interests, abilities, and learning needs, all students should be learnt together. In this way shows the protection of disabled child's educational rights in accordance with inclusion and equity approach. However, the UNESCO statistics proves before COVID 19 pandemic 20% children and youth faced the exclusion of their daily basis education. In order to fill this gap, the UNESCO orients the inclusivity of the whole education system than remove the barriers or transforming the existing system (Inclusion in Education-2023).

During the COVID 19 pandemic, the people broadly excluded from the meeting face to face, the day-to-day activities and the creative work also flowed on virtually and promoted the artistic activities as in-home based. This context, severely impacted to the physical and mental wellbeing of the PWDs and violated their aesthetic and non-aesthetic practices as well. The current study concerns this argument and identified using aesthetic practices for protection their life style. The *UN Convention on the Rights of Persons with Disabilities -2006* (CRPD), expresses the PWDs are entitled to the full human rights with freedom without discrimination and argues the significances of the value of diversity, equity and inclusion. Sri Lanka also ratifies in this convention and the point 'b' and 'c' on preamble mentions the International Covenants of Human Rights, proclaimed and agreed the entitlement of everyone's rights and freedoms<sup>1</sup>. Furthermore, point 'c' explains the all human rights and fundamental freedoms and needs should be guaranteed for their enjoyment without discrimination<sup>2</sup>. In the article 2, Definitions; mention the purpose of the convention. Under this point refers the concept of communication of PWDs. It has mentioned the various communication systems of PWDs including language.

Most of PWDs communicate various language modes in accordance with their disability. Among of them, they use verbal and non-verbal cues, gesture, etc. Particularly, those two terms could be

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<sup>1</sup> (b) Recognizing that the United Nations, in the Universal Declaration of Human Rights and in the International Covenants on Human Rights, has proclaimed and agreed that everyone is entitled to all the rights and freedoms set forth therein, without distinction of any kind (*UN Convention on the Rights of Persons with Disabilities -2006, Preamble*).

<sup>2</sup> c) Reaffirming the universality, indivisibility, interdependence and interrelatedness of all human rights and fundamental freedoms and the need for persons with disabilities to be guaranteed their full enjoyment without discrimination *UN Convention on the Rights of Persons with Disabilities -2006, Preamble*).

dealt with different kinds of medium of art. The example music can be treated as non-verbal mode as the sophisticated communication system. Especially, music therapy communicates the creative relationship, and it is important to maintain interpersonal contact, creation and intimacy (Aldridge, 1999, p.22). Furthermore, art therapy represents through images, and its creative process respect to client's responses of development, personalities and conflict etc., (Malchiodi, 2007, p.2). In addition, the other arts genres contribute for verbal as well as non-verbal communication techniques through its own medium to express inner feelings of body and mind. Into these facts clearly examine that not only PWDs but also the members of mainstream community would be expressed their rights through any art form and response on aesthetic judgment and enjoyment as protect their rights.

The seven points of on the article 3: General Principles, in CRPD ensure respect of their choices, difference and acceptance of PWDs as part of humanity, non-discrimination, etc., in order to protection of their rights. Furthermore, article 8; raising awareness, 9; accessibility, 19; living independently and being included in the community, 21; freedom of expression and opinion, and access to information, 24; education, 25; health, 30; participation in cultural life, recreation, leisure and sport and article 32; international cooperation etc., describing the rights of PWDs under the various categories.

Pramod K. Nayar who refers Human Rights and Literature; he argues the cultural discourses and its text tells the stories of what the meaning of human and denied of humanity through many media forms (Nayar,2016, Introduction, xi). According to the emphasis of this argument, various kinds of art forms could be used as a creative tool for expression of humanity.

In the Sri Lankan context, the supreme court is the judicial body to appear for protecting of the fundamental human rights of the people (Sri Lanka: The State of Human Rights, 2018, p.52). However, the international treaty body system monitoring the implementation of international human rights, including the rights of PWDs (Sri Lanka: State of Human Rights, 2018, pp.142,143). The above legal declarations reveal the role of the values in the protection of human rights of PWDs. Furthermore, these international and national declarations involve to protect of PWDs' rights in the strait line.

In the Sri Lankan context, the government considered about the Act No. 28 of 1996 on the *Protection of Rights of Persons with Disabilities* <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/47403/96809/F888786967/LKA47403.pdf>.

The Act Considered the compulsory and free education for all and 1997 established the *Compulsory Education Ordinance*. In the 2006 the Sri Lankan government issued an extraordinary gazette on the *Protection of the Rights of the Persons with Disabilities Act, No.28 of 1996* <https://arts.cmb.ac.lk/sociology/cdrep/disabled-persons-accessibility-regulations-no-1-of-2006/>.

In this Gazette refers the term ‘protection’, is very important because the government considered not only the rights of PWDs but also the way of protection of the rights of PWDs. Actually, the term is the most related to the current study because the discussion is built up the way of protection of the rights of PWDs particularly university students with disabilities (SWDs) on the current evidence of the University of Peradeniya, Sri Lanka.

### **10.3 The ways of Protection of SWDs’ rights through design curriculum on the basis of discipline**

The University SWDs are facing some challenges when they are raising questions about the discrimination of the adaptation and accommodation on the academic programme and other activities such as collaboration, financial, attitude, alternative learning materials and teaching methods and legal issues. Among of them, collaboration and alternative learning materials and teaching methods could be developed in a formal or informal ways. The example, the collaborative academic and cultural activities could be developed through group work with peers. The way of protection of the rights of PWDs/ students with disability (SWDs), Department of Fine Arts (DOFA), added a new course as ‘Art and Disability’ in 2001.

Actually, The Greek Philosopher Aristotle concerning the importance of the education of youth and when this does not happen it destroys the constitutions, governments and administration in his work *Politics*. To build up a democratic character of the human education is very important and he ensured the government should get this responsibility. Aristotle was interested to explain

how emotional dispositions in the right way and the importance of its leading for a good life through the tragedy (Landazuri, 2013). When we examine deeply for this philosophy, actually, at the time of Aristotle, introduced the inclusive education to the world because his statements were included all elements of inclusiveness of the education and the society.

The Department of Fine Arts got this kind of responsibility to promote inclusive aesthetic practices through teaching art and aesthetic to youth in the University system for understanding the any rights of PWDs/SWDs. We paid the attention to teach common arts-based discipline by practicing and training. In the 2001, we introduced the 3 credits core-course for the final year degree programme as FNA 402: Art and Disability. The content of the course is:

*This course is intended to teach the aspects of interrelationship between the different genres of arts with the differently able members of the society. The topics will include: Art as means of expression and subject of appreciation for the disabled. Therapeutic and personality building aspects of art in regard to mentally and physically disabled individuals.* (Taken from the council approved curriculum,

(Source: Department of Fine Arts, University of Peradeniya, Sri Lanka).

Under the curriculum revision at the Faculty of Arts in 2018 we introduced this course as “Expressive Arts Therapy and Disability”. This is the core course of Fine Arts special degree programme and most of the students who attach to the Department of Psychology are taking this course. In this course we are teaching the human rights of PWDs through international and national acts, conventions and legal documents<sup>3</sup>. Most of the non-disabled students learning the human rights of PWDs through the course. Teaching the human rights of PWDs is the first lesson and in accordance with the regulations, rules and recommendation we are planning other lessons and field visit through expressive arts therapy principles. Furthermore, this type of courses can be promoted peer support, mutual understanding, practical support etc., in the inclusive classroom and the university environment. The following table presents the effort to introduce disability rights

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<sup>3</sup> The acts and conventions that we are teaching in the course: Declaration of Human rights, 1948, The UN Convention on the Rights of Persons with Disabilities -2006, Universal Design 20..., Protection of the Rights of the Persons with Disabilities Act, No.28 of 1996

through expressive arts and how include this kind of teaching and learning methods to promote disability rights to peers in the higher education sector in Sri Lanka.

**Course Code:** FNA 3025

**Title:** Expressive Arts Therapy and Disability

**Credits:** 3

**Compulsory /Optional:** Compulsory for Honors Students

**Aims:**

1. Provide different kinds of therapeutic methods of expressive arts for personal development.
2. Introduced the knowledge and skills to work with persons with disabilities.
3. Produce a graduate with strong commitment for social inclusion.

**Intended Learning Outcomes:**

Upon successful completion of this course students will be able to:

1. Identify expressive arts therapy as a stimulant for social inclusion
2. Incorporate therapeutic methods in their creative works
3. Familiarized themselves national and international policies and regulations related to art and disabilities

**Time Allocation: Lecturers 30, Practical 30**

**Course Description/content:**

The course explores the therapeutic and personality building aspects of expressive arts and interrelationship between the different genres of arts and the differently abled person of the society. The topics include: introduction to foundational concepts and issues in expressive therapy and disability, expressive arts in education, rehabilitation and therapy as an inclusive model of expression and subject of appreciation for the disabled, analysis of the current state of inclusive education and expressive arts therapy in Sri Lanka, selected scientific researches, current laws, conventions, regulations, and acts for persons with disabilities in the national and international level.

(The council approved syllabus of the University of Peradeniya, Sri Lanka)

Table 10.3.1: Course Overview of Expressive Arts Therapy and Disability

#### 10.4 Design a lesson plan to cover human rights of PWDs including art and aesthetic value

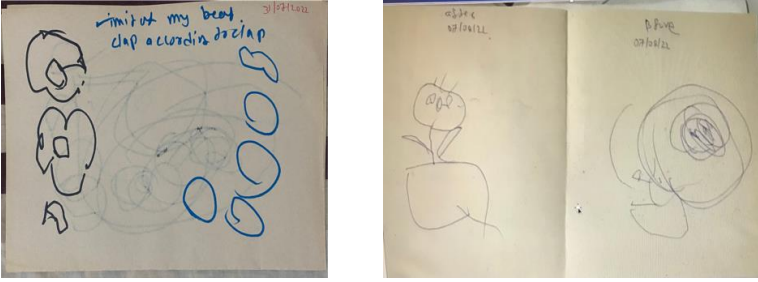
According to the course content, it should be introduced international regulations and local acts, conventions or regulations for social harmony/ inclusion for PWDs.

If select to teach the human rights for education through Universal Design (UD), my experience of the lesson plan can be shown as follows: I have designed this lesson plan in accordance with the experience of a case study and follow the basic lesson plan as; Introduction, Core Activities and Closure.

<b>Lesson Section One: Introduction</b>	
<p>Demonstration of the definition of the Universal Design (UD)</p>	<ul style="list-style-type: none"> <li>• This section of the lesson includes the definition of the Universal Design (UD) of teaching and learning and its main principles;               <ul style="list-style-type: none"> <li>- Engagement,</li> <li>- Representation and</li> <li>- Action and Expression.</li> </ul> </li>   <li>• Explaining how do include these principles to Autistic/Downs syndrome people to express any point of activity for the daily rooting as their communicative rights.</li> <li>• The lesson plan prepared for an autistic student who is a boy of fifteen years old (I met him when he was thirteen years old).</li> <li>• Selecting basic beat 2/2 as a communication tool to express the order, arrangement, organization of the daily activities through practicing proper beat repeatedly.</li> </ul>



<b>Lesson Section Two: Core Activities</b>	
This section includes acquisition of three principles of UD of teaching and learning and performs new concepts	
Acquisition of the three principles	<ul style="list-style-type: none"> <li>In this section could be acquired the basic principles of UD through using music as the communication tool of the autistic student</li> </ul>
<b>Principle one: Engagement</b>	<ul style="list-style-type: none"> <li>How do motivate student learning? It could be understood, the student's straightness and weakness for learning.</li> <li>When we teach him music, should give one by one instruction and activities slowly with short explanation.</li> </ul> <p><u>Step 1:</u> The beat 2/2 is simple, at first could be explained it, with imitating the teacher's clapping.</p> <p><u>Step 2.</u> Adding a very simple percussion instrument (e.g., hand drum) with imitating the teacher's performance.</p>
<b>Principle two: Representation</b>	<ul style="list-style-type: none"> <li>Representation with a new concept; using drawings for express order in accordance with music beat.</li> <li>Instructions are focused on aural and visual activities. The students represent the practical understanding of order and organization through drawings.</li> </ul> <p>Figure 1&amp; 2: visual representation through drawings</p> <p><b>Figure 1:</b> Represents order animal figure. according to teacher's on the right side, clapping music session and clear created the</p> <p><b>Figure 2:</b> Represents unclear structure before the structure on the left side,</p>

	<p style="text-align: right;">end of the session</p>  <p>The next example represents his improvement after one and half years. He requests his needs of parents, teachers and peers via exchanging the drawings and currently he practices speech with me through picture exchange communication system (now he is sixteen years old).</p>
<p><b>Principle 3: Action and Expression</b></p>	<ul style="list-style-type: none"> <li>Action and expression show with artistic and aesthetic experiences. Parents said that he spent his leisure time with listening music, playing music, if he needs to express calm feelings, he listens Sinhala Buddhist songs those are practicing in my music sessions, preparing few curries and rice for his meals and offers to the parents.</li> <li>Actually, this normal life necessities are being practiced due to the rhythmic music experiences. At the first, when I met him, he couldn't recognize any tools, objects etc., in a proper manner. After three years he achieved most of communication rights through music sessions. The best examples prove in the following images.</li> </ul> <p><b>Figure 3:</b> Expression of the clear sky direction through drawings by using common object (an eggplant).</p> <p><b>Figure 4:</b> Expression of the clear sky with clouds, moon and sun.</p>

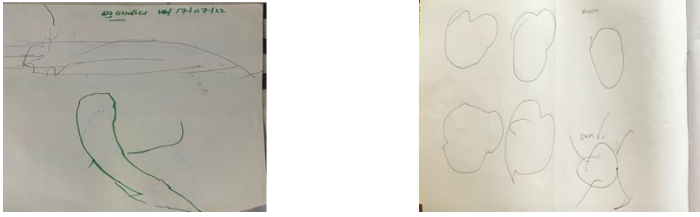
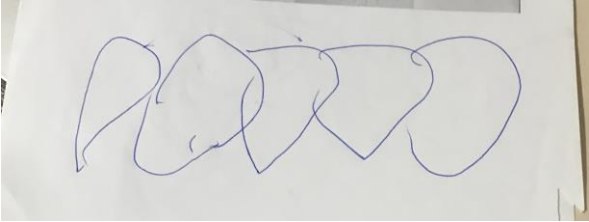
	<div style="display: flex; justify-content: space-around; align-items: center;">  </div> <p><b>Figure 5:</b> Imitating order/arrangement through the white keys on the keyboard</p> <div style="text-align: center;">  </div> <ul style="list-style-type: none"> <li>• Those images represent his artistic communication system and the lesson plan prepared to show the teaching and learning through art and the aesthetic expressions highly effect to engage the daily activities.</li> </ul>
<b>Closure</b>	
Review and summary	<ul style="list-style-type: none"> <li>• Review the outcome of the lesson</li> <li>• Review the applicability of UD for protecting human rights of PWDs/SWDs</li> <li>• Review the link between music and drawing for autistic students as using communication tool.</li> <li>• The teacher should perform the next lesson for teaching another convention or act as proclaimed.</li> </ul>

Table 10.4.1: Lesson plan in accordance with the selected topic of the course

However, the study attempt to show from the above lesson plan the protection of human rights of PWDs/SWDs is not so difficult in the higher education system. According to related disciplines (not for all disciplines) particularly, the disciplines of the humanities and some social sciences disciplines can be applied in a proper manner for protecting PWDs' and SWDs' physical and mental wellbeing on the curriculum. The Greek philosopher Aristotle's perspective on the educational value of the imitative arts relates to the catharsis (purgation), and it is related to the nature and value of pleasure and it relates to the human's happy life. The Aristotle's definition of this very important to the current study because the above course content prepared on the basis to protect the rights of the freedom of communication, emotional expression, contribution as an artist and mutual understanding between peers and PWDs.

### **10.5 Assessment process that we are following the course**

Under the assessment of the course, offer 60% from the end of semester examination and 40% for assignments. We plan to visit special schools, Special units of the mainstream schools, orphanage, centers, units etc. in the city and rural areas (Seneheweera & Edirisinghe, 2022). We offer 10 marks for this and write a report about one student from the Special Needs Resource Center SNRC) and he/she should support to selected SWD's academic activities in the whole semester. In addition, offer 10 marks for this, altogether they could earn 20 marks and should do a research paper relate to PWDs for another 20 marks.

The purpose of all these strategies cerates for protecting the rights of PWDs and give this message to the university youth in the mainstream community. The role of SNRC, university of Peradeniya support to promote the service for the SWDs' accommodation and adaption of their academic programme and other necessities. Most of the peers are coming and conducting research (number), and complete some hours to fulfil their internship (this year a student from the Department of Psychology completed his service as 100 hours). Actually, he said that he came to our classes, he realized the equal rights of SWDs and he decided to support them and after the duration of the internship he continues his service at SNRC.

However, the SNRC provides this kind of service to the university community and conducting training programmes for university academics and non-academic staff members as well as school teachers to promote inclusive education concept in Sri Lankan higher education and school education system.

## **10.6 Peers Contribution to protect human rights of SWDs through aesthetic practice**

Furthermore, the Students from Fine Arts support to the SWDs to organize concerts, create street drama and virtual dance composition with SWDs to improve their extra-curricular activities. For the study gathered data from feedback and participatory observation. The best example could be forwarded as follows:

### **10.6.1 Aesthetic practice 1**

During the COVID 19 pandemic period, for the protection of their rights of aesthetic practices and expressions, the Department of Fine Arts and Abilities Dance in Boston, USA created a virtual dance performance, including with low vision, wheelchair users, typical artists, students teachers and the final performance held on 30<sup>th</sup> January 2021, <https://youtu.be/CtgcKUAzQBQ>.

Once a week we met and practiced through online mode and music composed by teachers from both sides. Actually, I composed music as my part by mixing Sri Lankan traditional percussion in Kandy (*getabera*) to represent the multi-cultural aspect of both music and dance cultures. The creative work was represented to show the protection of the aesthetic rights of all humanity in the world. However, we ensured the.2 aesthetic practice by diverse cultural dance movements and music spectrum through the social media as ensure the access to the performance via using new social media. In addition, the participants came from the Department of Fine Arts, Psychology, a low vision student from Pali and Buddhist Studies, Classical Languages, English. Very important point in this performance was given for free of charge for artists, students and any who need a free ticket.

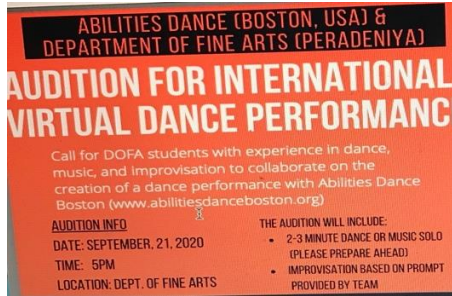


Figure 10.6.1.1: Flyer for Audition as a any Collaborative artistic work

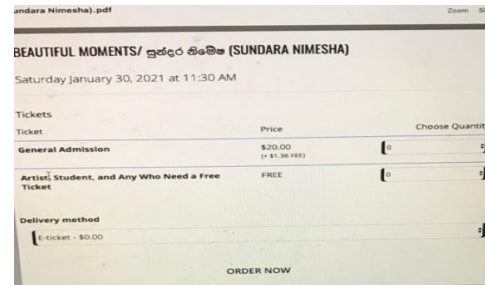


Figure 10.6.1.2: Tickets for free of charge for artist, students and any who need a free

The peer support of Fine arts and the Economics and Statistic Department, Faculty of Arts, University of Peradeniya very recently organized an exhibition raising awareness in the university premises in October, 2023.

## 9.6.2 Aesthetic practice 2

The Fine Arts students performed a street drama to discuss how do change attitudes from mainstream community to protect the human rights of PWDs. They selected few characters from the traditional folk drama (*Kolam*)<sup>4</sup> in Sri Lanka which represent visual impairment, hearing impairment, the foot disorder etc. They asked a question; “why do we harass this type of people in the society”? And said that those characters of the drama represent as comedies with dialogues and wearing masks and express humor of the characters and the audience as well. For representing the visual impairment, the eyes of the masks colored with white, blue and red it cannot be seen as functioning. Hearing impairment features represents through a mask which creates very small ears. The speech disorder mask represents by including very big mouth. The ambiguity of the masks express humor to the audience. They performed the drama near the main library and main two students’ cafeteria.

Therefore, they continued this argument through dialogues and removing masks and gave a message to stop the discrimination in these kinds of people and the people who are coming from the mainstream should support, protect and rehabilitate their rights for well-being in the life.

<sup>4</sup> Kolam is a masked folk theatre in Sri Lanka.



Figure 10.6.2.1: Discussing about the Discrimination with the Character of Speech Disorder



Figure10.6.2.1: Removed the Masks and Ensured Protection of PWDs' Rights



Figure 10.6.2.3: Mask of Blindness Performed near the Cafeteria in Addition

According to the records of the Department of Fine Arts the students contribute to do research to complete their final year dissertations. Research collection provides 23 dissertations which discuss to support and protect the rights of PWDs through art and aesthetic in various fields for different types of disabilities. The selected topics are presented in the following table:

<b>Serial No</b>	<b>Academic year</b>	<b>Topic</b>
1	2001/2002	The aesthetic view for visual and hearing-impaired students
2	2008/2009	The contribution of rhythm in order to socialized of hearing impierced children
3	2012/2013	Theatrical teaching and learning methods for Autistic child (Special reference to ten students from Blue Rose Special School, Kandy)
4	2012/2013	Create a music audio device for learning musical instruments
5	2013/2014	The contribution of aesthetic activities on developmental skills of hearing-impaired children in age 3-6 (with special reference to education training center for hearing impaired children in Dalugama, Kelaniya)
6	2014/2015	The mechanical system of the acts for Special Needs Students in Sri Lanka
7	2017/2018	The importance of using stories as teaching learning strategy for learning disability students: Ten students from grade three at Sivali Maha Vidyalaya in Kandy District
8	2017/2018	Using theatrical practices for mental disability students in order to develop educational skills: ten students of autistic and downs syndrome from Blu Rose Special School, Kandy
9	2018/2019	Create a documentary film in order to develop speech skills of hearing-impaired students
10	2018/2019	The techniques to create an orchestra with hearing impaired students: eleven students from Deaf Blind School from Dodamwala, Kandy

Table 10.6.2.1: Research Topics from the Final Year Fine Arts Students



The information on the table proves contribution to develop research this field and engagement of the mainstream peers in the university level. According to our field visit of the special centers, and schools etc., the students aware of the disability studies, and PWDs' behavior and to build up intimacy with PWDs. Consequently, the students find research gap of this fields. They covered most of disability fields and to create orchestra, films, theatre etc., as a strategy of protecting the rights of PWDs. There is other evidence on the table; can be seen a gap on the research field for the academic year 2002 to 2008. The reason was the lack of academics, those who have the knowledge of the disability study field in the department (as I was not in the country) to supervise students. Therefore, we attempt to train our young staff members to teach this course under senior academic staff members' guidance.

### **10.7 Conclusion**

The current study argues that the human rights of PWDs could promote through some disciplines in the higher education sector in Sri Lanka. And it is in the process of the engagement with the forms of art and aesthetic practices, strategies to develop educational, communication and emotional levels of PWDs as protect their rights of successful life style.

In the international level collaboration, the professional artists from Boston and Sri Lanka facilitated appropriate measures for inclusion the intersection of disability culture in both countries. The study proved the positive impact of the intersectional equity of the aesthetic practices between PWDs and mainstream artists. And the creative strategy for understanding the human rights of PWDs and the form of artistic process to promote their abilities, skills, talents, creativity and merits. It proved the art and aesthetic practices bridge to protect and appreciate of the expression of emotional rights of PWDs as well.

In this regard, the PWDs fully receptive to art and aesthetic practices and that they completely immerse themselves to discard their disinteresting, unhappiness, unsatisfaction and negative emotion in their life. In addition, it can be supported through the curriculum development, raising awareness programme, developing collaborative artistic work in the local and international level artist, educators, teachers and peers.

## References

*Skills & Employability Asia Pacific Skills & Employability Network Ilo Regional Office for Asia and the Pacific*. Protection of the Rights of Persons with Disabilities Act, No. 28 of 1996 - Skills and Employability Network. (n.d.). <https://www.apskills.ilo.org/resources/protection-of-the-rights-of-persons-with-disabilities-act-no.-28-of-1996>.

(open access) music therapy in Palliative Care : New Voices (1999): David Aldridge: 52 citations (1999) SciSpace - Paper. Available at: <https://typeset.io/papers/music-therapy-in-palliative-care-new-voices-564zo3mjt1> (Accessed: 22 November 2023).

Jessica Kingsley Publishers. (1999, January 1). *(open access) music therapy in Palliative Care : New Voices (1999): David Aldridge: 52 citations*. SciSpace - Paper. <https://typeset.io/papers/music-therapy-in-palliative-care-new-voices-564zo3mjt1>.

Convention on the rights of persons with disabilities and optional protocol. (n.d.). <https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>.

Manuel Mar&iacute;a Cruz Ortiz de Land&aacute;zuri. (2016, April 28). *Aristotle and the pedagogic function of aesthetic pleasure, comprendre 2013*. Academia.edu. [https://www.academia.edu/20401103/Aristotle\\_and\\_the\\_pedagogic\\_function\\_of\\_aesthetic\\_pleasure\\_Comprendre\\_2013](https://www.academia.edu/20401103/Aristotle_and_the_pedagogic_function_of_aesthetic_pleasure_Comprendre_2013).

*Kolam, Masked Folk Theatre*. Asian Traditional Theatre Dance. (n.d.). <https://disco.teak.fi/asia/kolam-masked-folk-theatre/>.

Academic.oup.com. (n.d.). <https://academic.oup.com/bjsw/article/35/8/1428/1659048>

*Universal design: Process, principles, and applications*. Universal Design: Process, Principles, and Applications | DO-IT. (n.d.). <https://www.washington.edu/doit/universal-design-process-principles-and-applications>.

Peters, S.J, (2023, September 28). *Disability Culture*, Encyclopedia Britannica; Encyclopædia Britannica, inc. (n.d.). *Disability culture*. Encyclopædia Britannica. <https://www.britannica.com/topic/disability-culture>.

Embedding sustainability in learning and teaching: Communication ... (n.d.-b). [https://www.researchgate.net/publication/373272165\\_Embedding\\_Sustainability\\_in\\_Learning\\_and\\_Teaching\\_Communication\\_Barriers\\_to\\_Learners\\_with\\_Special\\_Needs](https://www.researchgate.net/publication/373272165_Embedding_Sustainability_in_Learning_and_Teaching_Communication_Barriers_to_Learners_with_Special_Needs).

Sri Lanka - LST. (n.d.-c). [https://www.lstlanka.org/wp-content/uploads/2022/02/SHR\\_new.pdf](https://www.lstlanka.org/wp-content/uploads/2022/02/SHR_new.pdf).

# CHAPTER 11

## How to support Student Success – stories from Sweden

*Cecilia Edin, Ibrahim Mehdi*

### 11.1 Introduction

Throughout this chapter we will give you some stories and insights from Sweden. This will provide you with a view of, and hopefully give you inspiration from, the work with SWD at Uppsala University.

It is important to note that the conditions surrounding SWD in Sweden differ significantly not only from those in Sri Lanka but also from those in other European countries. Thus, in order to establish a contextual framework for this chapter, we will outline some of these distinctive conditions.

Furthermore, we will introduce two individual case studies featuring students who availed themselves of targeted study support during their studies at Uppsala University. These students will provide valuable insights into the crucial factors that have influenced their academic journeys. One recurring theme is the significance of being seen and understood in light of their specific circumstances, while also recognizing and leveraging their individual strengths.

Finally, in the latter part of this chapter, we will outline the statistical landscape at Uppsala University pertaining to support services. This section will shed light on the number of students benefiting from targeted study support, the prevalent types of disabilities among them, and the most commonly provided forms of support.

## 11.2 Student Success

Student Success is sometimes used as a term for the combined lessons a student takes away from their studies. It is about much more than just teaching. It can be things students learn in meeting with others, through involvement in student unions and student associations, or other things that affect their personal growth and maturity. For example, as Gibbe describes in the interview below, he got to know himself better through his period of illness and his struggle to get back on track afterwards. Student Success is not counted in the number of students with a completed degree. It is only the students themselves who can determine what Student Success is for them. Dropping out, therefore, can also mean Student Success, if the person was not mature enough to study at the time or if the choice of subject was wrong. Through our work with targeted study support, we aspire to contribute to as many students as possible feeling that their study time led to Student Success, and that they learned important lessons that they can benefit from throughout their lives.

## 11.3 The state and the individual

In Sweden, the relationship between the state and the individual is important. The state has a strong position and influences society through legislation, but also through recommendations to citizens. During the covid-19 pandemic, many countries were surprised by Sweden's stance with very little prohibitions and a great deal of recommendations. In this way, the infection could be contained without the impact on people's daily lives being too great.

In Sweden, citizens are expected to take responsibility for themselves as well as for society in a whole. To make it easier for the individual, the state provides various opportunities. An example is that it should be possible for everyone, regardless of the family's financial circumstances, to study at higher education. The studies are therefore free and the students receive financial support. It is also possible to take a loan with favourable terms to cover living expenses such as food, accommodations, and course literature during the study period.

Furthermore, the state endeavours to establish favourable conditions that enable active participation of all individuals in society. Consequently, legislation stipulates that public buildings

must be accessible to individuals with diverse disabilities. This requirement ensures, for example, that all university buildings are designed to accommodate wheelchair access, with the inclusion of elevators and accessible toilets. To assist visually impaired individuals, essential signage is provided in braille. Teaching facilities are equipped with hearing loops and other aids, enhancing accessibility for individuals with hearing impairments.

#### **11.4 The Discrimination Act**

The Discrimination Act, which can be accessed at <https://www.do.se/choose-language/english/discrimination-act-2008567> , was implemented in 2009 and serves as the foundation for the university's implementation of targeted study support. The law aims to ensure that all people have equal rights and are not subject to discrimination. The concept of discrimination includes direct discrimination (someone is disadvantaged or treated worse than someone else), indirect discrimination, lack of accessibility (measures have not been taken to put a person with disability in a comparable situation to a person without this disability), harassment (which offends someone's dignity), sexual harassment, or instructions to discriminate.

In addition to disability, the grounds for discrimination outlined in the act include gender, gender identity, ethnicity, sexual orientation, and age.

The work with targeted study support at the university is done with the aim of giving students with disabilities a comparable situation to those who do not have the same disabilities. Since the university buildings are generally accessible to students with physical disabilities, there is a relatively lower demand for targeted study support among this group. The most prevalent disabilities among students who require targeted study support are dyslexia and neuropsychiatric disabilities.

## **11.5 Higher education and targeted support**

All students apply to university on the same terms. What is required to get a place in a course or program is that the person meets the eligibility requirements for the course. In cases where the number of applications exceeds the available spots, admission is granted to applicants with the highest qualification points. Popular programs, such as medical education, law education, and psychology, typically require exceptionally high qualification points. SWD follow the same application process as other students and are granted admission if they meet the required qualification points. To assist students who are uncertain about their choices, study and career counsellors offer support, including helping them identify their strengths and motivations.

Once admitted to a course, students can apply for targeted study support. In Sweden, all universities operate in a uniform manner regarding support for SWD. Students who receive specific forms of support at one university should be able to receive equivalent support at another. This is facilitated through long-term cooperation among Swedish universities and a network in which coordinators for targeted study support collaborate, discussing challenges and assessments. This network plays a crucial role, particularly for smaller universities with limited coordinators addressing these issues.

In addition to targeted study support, there are many different support functions at the university that can support SWD. For example, the library, the language workshop, the student health service, and the study and career counsellors.

## **11.6 I love making a change**

Malin Wahlgren found herself in need of support and adjustments when she began her studies at Uppsala University. However, she quickly discovered effective strategies that helped her overcome these challenges. Consequently, she became a mentor to other students requiring support and study strategies. Subsequently, she successfully completed her studies and currently serves as a registrar and archive coordinator for Uppsala Municipality.



There was no tradition of higher education in Malin Wahlgren's family. It was a high school teacher who introduced the possibility of studying history at a university level and sparked her interest in the subject. This same teacher also recognized Malin's needs and provided support throughout her studies. During high school, Malin faced difficulties in maintaining concentration, compounded by the effects of prescribed medication. At times, she was given the opportunity to work in a smaller room to facilitate her ability to concentrate.

- When I started at the university, I was worried about how it would go. I moved from another city, did not know much about what it would be like to study, and I had no one in the family to ask, says Malin.

She researched the support offered by the university and, after consulting with a coordinator for targeted study support, she was assigned a mentor. This arrangement provided her with the opportunity to take classroom exams in a smaller room and receive extended time for examinations.



However, none of the available supports proved to be the perfect solution for Malin. Although her mentor was a student who had progressed further in their education, they lacked specialized knowledge of disabilities and study techniques. Consequently, the mentor was unable to offer the precise support that Malin required. Moreover, she did not feel comfortable in the adapted examination hall, as it often appeared disorganized and unclear to her.

Nevertheless, Malin managed to discover strategies that unexpectedly improved her studies, resulting in positive academic outcomes. While her conversations with the mentor were valuable, they fell short of meeting Malin's expectations. As a result, she had to draw her own conclusions and find her own path to success.

- For me, it worked to create a clear structure for my studies, says Malin. I timed my study sessions, remembered to take breaks and drink water, and got an analog calendar to have a better overview. Then, it was just a matter of finding the right place to study. The library worked well for me as it was quiet, and I felt a sense of connection with everyone else who sat there and worked. It didn't make me feel isolated or strange.

The feeling of not truly being understood affected Malin, and it was also pivotal in her decision to become a mentor for other students. The professor in the course encouraged her to express interest in becoming a mentor. She got her first student and soon she was asked to take on more. Malin found great satisfaction in her role and ended up mentoring a total of more than ten students.

- I wanted to draw attention to those who were like me. I felt that no one really understood me, and I wanted to be the one who understands and supports others who have similar difficulties. My own diagnosis and the experience of also having a sibling with a disability helped me. Many students were so happy that I understood how they were thinking, and I loved making a difference. That's why I continued being a mentor for so long, says Malin.

Being a mentor to others also had a positive impact on Malin's studies. It served as a constant reminder for her to adhere to her strategies and reflect on their effectiveness. Additionally, it was crucial for her to serve as a good role model. Through this experience, she discovered the existence

of numerous study strategies, potentially as diverse as the number of individuals. The key lies in identifying the strategies that suit each individual best.

Malin successfully completed her studies in 2022 and currently holds the position of registrar and archive coordinator for Uppsala municipality. When asked about the advice she would like to offer to individuals working with SWD, she responds:

- Remember, everyone is an individual; everyone is different. Don't get lost in terminology, but see people as they are. I wish that more people at the university had knowledge about disabilities and the ability to show understanding, as well as provide good treatment based on each individual's needs.

#### Malin Wahlgren

Education: Bachelor's degree in history and master's degree in archives, libraries and museums with focus on archives.

Support: Mentor, smaller examination hall and extended examination time. Was a mentor 2018-2022.

Doing today: Works as a registrar and archive coordinator at Uppsala municipality.

#### Mentor support

The mentor support system at Uppsala University has changed since Malin had her mentor assigned. The mentors are now employees of Uppsala University with knowledge of various disabilities, study techniques, planning, and much more. This has made the mentor support more effective and individualized. The mentors assist each student with their specific needs and do not apply a general template to all students. They work collaboratively with the students to help them become more self-sufficient and acquire the tools necessary for planning and organizing their studies.

### 11.7 Understanding and flexibility helped him achieve better results

Gibbe Bergkvist has been studying at Uppsala University since 2016. At times the studies have not worked well for him, but the last few years have gone very well. A lot of it comes from Gibbes psychological well-being. He has now gotten to know himself and knows what he needs to make

things work. The support he has received has also been a significant factor. The teachers' attitude has also been crucial, when they have been flexible to his needs, Gibbe has had very good results in his studies.



Throughout his life, Gibbe Bergkvist has experienced periods of severe illness. These health challenges prevented him from completing high school, requiring him to pursue additional education once his health improved. It became clear to him that he aspired to pursue university studies. Initially, he enrolled in several courses, primarily focused on linguistics, but unfortunately, this endeavor proved unsuccessful.

- I listened to what everyone else thought instead of listening to myself," he says. "If I had listened to myself, I would have chosen something else, something more creative. The teachers didn't understand me and what I needed. We didn't understand each other at all, and then it turned out the way it turned out.

Gibbe saw no other way out than to drop out of the language studies. After another period of illness, he wanted to make another study attempt and chose to study musicology. Since Gibbe had access to various support in the past but did not manage to achieve sufficient study results, it was not obvious that he would be able to receive continued support. The coordinator who handles support decisions made the assessment that Gibbe's conditions for studying were now much better and he received a new mentor, note-taking support and adjusted examinations which would give him more time and the opportunity to take exams in a smaller examination hall.

This time, his experience proved much more positive. Gibbe and the mentor got on well and started working on finding the right study strategies for Gibbe. They tried several different strategies before finding the right one.

- I had also come to know myself better, and as a result, the collaboration was completely different from what I had experienced with other mentors before.

With the right strategies, Gibbe has gradually been able to take on greater responsibility for his planning, and now the mentor's role is primarily to confirm that he is on the right track.

Note-taking support is also crucial for him. A fellow student who is enrolled in the same course can share their notes with Gibbe, who has been granted note-taking assistance.

- It can be very different depending on who is sharing notes. Someone was very messy, and I had difficulty interpreting the notes. Then I received no help from them, says Gibbe. But there are several who have been absolutely fantastic and have also listened to me when I have described what I need. When note-taking support works well, I always appreciate and acknowledge the student who is taking notes because it makes such a difference for me.

The interaction with teachers and their flexibility regarding examination formats have also played a crucial role in Gibbe's academic performance. When teachers exhibit passion for their subject and teaching, it becomes evident and holds significant value. On certain occasions, Gibbe has been given the chance to complete exams orally or submit assignments from home instead of

participating in written classroom examinations, which has made it easier for him. Moreover, Gibbe requires a separate room during examinations to enhance his concentration. The availability of adapted examination halls with individual rooms has proven to be highly beneficial for him.

- I appreciate the rooms on Klostergatan very much, he says. They are smaller, and everyone who is there receives support. I don't have to feel singled out. I have been able to type on the computer, rest in an armchair when I get tired, and drink some water occasionally. Sitting in a large hall with a lot of other students stresses me out tremendously, and then I can't concentrate enough to write.

Gibbe was already a student when the adapted examination hall was built, and he had the opportunity to be part of a reference group that provided advice on the design to ensure its effectiveness for SWD. He had some points to highlight, and he felt that they were well-received. In the upcoming semester, Gibbe hopes to pursue a part-time job while continuing his studies. In the future, he aspires to work in the field of music, either in radio or writing music reviews. When asked about valuable advice he would like to offer to individuals working with SWD, he responds:

- For me, it was crucial to get another chance with support in my studies, even though I didn't succeed the first time. We may need help sorting out what works and what doesn't. I dare to make a new assessment and try again, especially when the conditions are different. It is also important to have good people as mentors. I feel that I can be completely honest with my mentor. He doesn't judge me if I fail to meet my goals some weeks. He sees me, advises me, and supports me based on who I am, and that's how it should be

Gibbe Bergkvist

Education: Studying musicology with a minor in Kurdish.

Support: Mentor, note-taking support, smaller examination hall and extra time on examinations.

Doing today: Taking a summer course in linguistics, Norwegian, and a course in theology about the apocalypse.

### The adapted examination hall at Klostergatan

The smaller examination hall at Klostergatan has been of great significance to students with concentration difficulties, as well as those facing other challenges. Unlike the larger examination halls, the main hall at Klostergatan accommodates fewer seats. All the desks are adjustable and there is enough room for students to be able to move around a bit if they are restless. The main area is surrounded by smaller rooms such as the one Gibbe mentioned in his interview.

Similar to the main room, these smaller rooms are furnished with adjustable desks. However, some of these rooms are equipped with armchairs, providing students with a comfortable space to rest. Additionally, other rooms feature smaller cots, offering students the opportunity to lie down if necessary. The image below depicts a room with an armchair similar to the one that Gibbe might have utilized.



## 11.8 Targeted study support at Uppsala University

A student at Uppsala University can get targeted study support if they have a long-term disability that affects their studies. The aim is for all students to study on equal terms and the support offered is therefore planned together with the student and is based on the individual's needs to facilitate the studies. A long-term disability can manifest in many different ways and might be mental disorders, reading or writing difficulties/dyslexia, hearing impairments, visual impairments,

neuropsychiatric disorders, chronic illnesses, or physical disorders. The decisions for targeted study support are based on the regulations in the Discrimination Act, together with university regulations. If a student sustains a temporary injury or falls temporarily ill, they can contact their department for temporary support.

To apply for support at Uppsala University, a student must first obtain a certificate issued by a licensed healthcare professional. Once obtained, the student can submit an application through an online system. Subsequently, the coordinator responsible for the case will reach out to the student to schedule a consultation appointment. Following the appointment, the student will receive a decision of approval or rejection. It is important to note that the decision is only valid if the student is registered at the university. Upon completion of this process, the student will be provided with information regarding the appropriate contact person in their department, typically a study and career counselor or a study administrator.

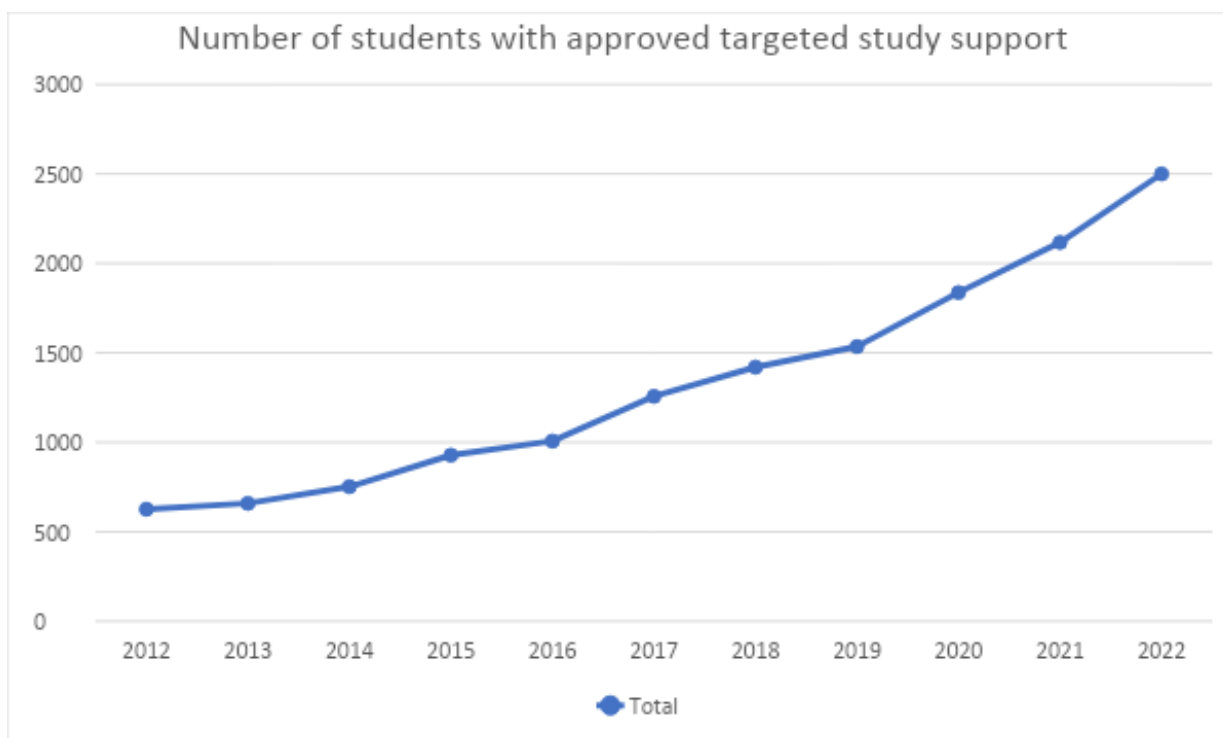


Figure 11.8.1: The graph shows the increase in number of students with approved applications for targeted study support at Uppsala University over a period of 10 years

Some of the support is offered through the targeted support unit, for which the coordinators make decisions, while others are provided by the department, for which the coordinators make recommendations. This means that each individual department has the authority to determine the type of support they can offer to students, ensuring equal opportunities for their studies. However, it is essential to maintain the core content of the courses and meet the study goals. The study goals cannot be changed or overlooked and must be followed.

One type of recommendation is related to examination adjustments, which are made to accommodate the needs of the student. Usually, this involves granting extended time for written examinations, but in certain cases, it may also involve modifying the format. The decision to adapt the examination lies with the department. If the course goals explicitly specify a particular type of examination, it cannot be adjusted. However, for students who are granted examination adjustments, Uppsala University offers a specialized examination centre with smaller halls and individual examination rooms. These facilities provide a controlled environment with fewer distractions for students during their examinations.

If a student's disability hinders them from studying at a 100% rate, they can contact their department to discuss their options and create an individualized study plan that aligns with their capabilities and needs. Similar to examination adjustments, the final decision regarding such accommodations is made by the department.



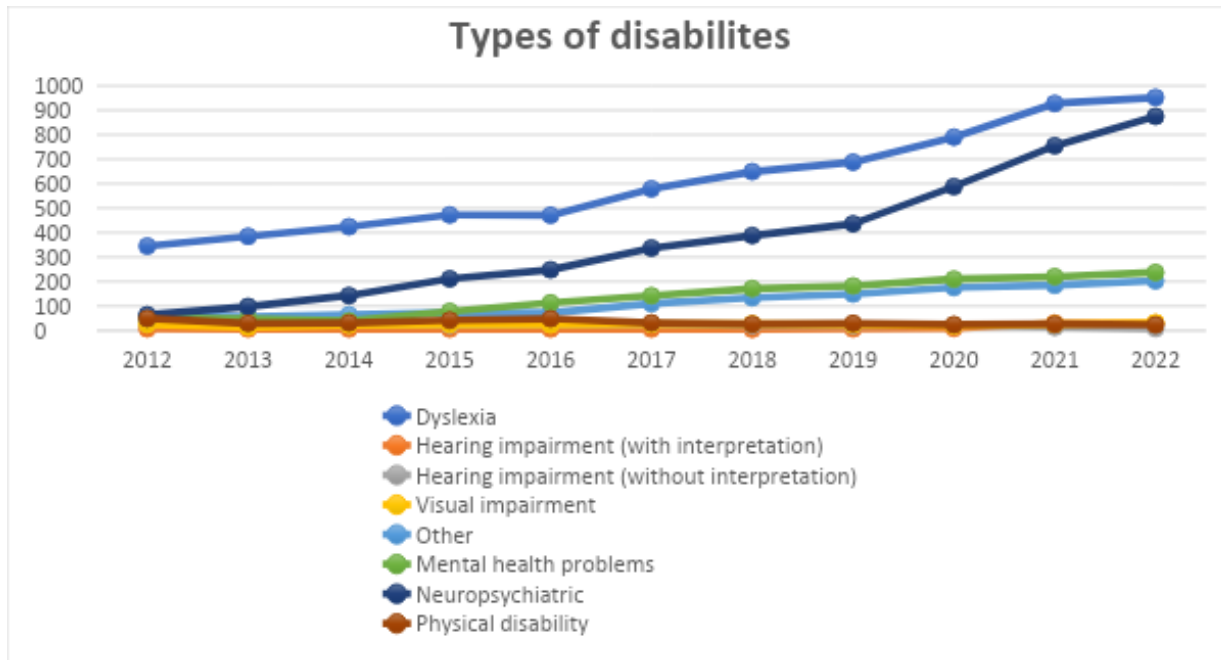


Figure 11.8.2: The graph shows the number of documented students with different categories of disabilities at Uppsala University over a period of 10 years.

The coordinators can make decisions regarding mentor support and note-taking support. Mentors are full-time employees at the university who work with students in the targeted study support system. They assist students with planning and structuring their studies, provide guidance in study situations, and offer tips on study techniques. The primary goal is to help students become self-sufficient by developing their own study plans and structures, rather than completing tasks on behalf of the students. This prepares students for life after university by equipping them with the necessary tools to effectively plan their activities. Since each student has unique needs, mentors employ various methods to assist them in achieving their goals.

Note-taking support is available for students who, due to a disability, are unable to take notes during lectures or other university lessons. A note-taker is a classmate who voluntarily shares their notes with the affected student. It is important to note that note-taking support is not a substitute for attending lectures; students must still attend the lectures in order to receive the shared notes.

Students who are deaf, deaf-blind, or have other hearing impairments can receive sign language interpretation or written interpretation in all types of teaching, including lectures, seminars,

lessons, excursions, group work, and more. For students with visual impairments, there is also the possibility of having a fellow student guide them around campus areas, lecture halls, and libraries to help them navigate their way.

Uppsala University also offers a wide range of software to support students. This includes spelling software, text-to-speech software, and dictation tools. Additionally, the university provides students with access to a library of talking books for those who require it.

#### Types of targeted support at Uppsala University

- **Mentor support:** A mentor helps the student with planning and organizing their studies. The mentor also provides tips on study techniques.
- **Note-taking support:** A fellow student helps by sharing their notes from lectures. Attendance to the lecture is required in order to receive notes.
- **Adjusted examination:** Extra time, smaller examination halls and small rooms are given to students who need them. The separate and smaller examination halls make it easier for the students to focus and not feel singled out.
- **Support for students with hearing impairments:** Interpretation both in sign language and in writing are available. Students can also receive hearing loops.
- **Support for students with visual impairments:** A fellow student can act as a guide to help the affected student find their way around campus areas.
- **Adjustment of study situation:** Students can receive presentations beforehand, record presentation or have adjusted course materials.

## 11.9 Conclusion

In this chapter, we have explained that the conditions for working with SWD can differ greatly between Sweden and Sri Lanka, as well as between Sweden and other European countries. In Sweden, the Discrimination Act forms the basis for working with SWD. It ensures comparable conditions for all individuals, regardless of disability, and it is the responsibility of higher education institutions to strive for this equality. Universities employ targeted study support in a uniform manner, allowing students to receive the same type of support regardless of the university they attend. This approach also enables universities to establish collaborative networks among

coordinators who can support each other in their work. This kind of collaboration is viewed as a strength, not limited to the Swedish context.

You have had the opportunity to learn about Malin's and Gibbe's experiences as students in need of support, with Malin also being involved in providing support to others. Their valuable advice, relevant beyond their specific contexts, emphasizes that individuals with disabilities seldom wish to stand out or feel singled out. Consequently, it is crucial to treat them based on their unique qualities rather than their disabilities. Simultaneously, they should have the opportunity to adapt their studies and receive the necessary support that enables their academic success.

Finally, we describe the work with targeted study support at Uppsala University. We describe how it works, how many students receive support, and which disabilities are the most common among those who receive support. The number of students benefiting from targeted study support has exponentially increased over the past decade. Contributing factors include improved societal awareness of various neuropsychiatric disabilities, resulting in increased diagnoses. Additionally, educators have become more proficient in providing relevant support to individuals with disabilities during their primary and secondary education. As a result, more students graduate with satisfactory or excellent results, which qualifies them for university education. Contrastingly, these students were often considered less talented and unsuitable for higher education 20-30 years ago.

While we strive to find suitable solutions for each student, not all of them are satisfied with the support they receive. Sometimes, the support provided may not be sufficient. A university degree is a marker of quality, indicating that a student possesses the ability to independently pursue studies at a certain level. Consequently, it is not solely our responsibility to ensure that all students pass their studies; the student must also assume accountability. However, we are obligated to offer support that places SWD in a comparable position to individuals without disabilities. Making the appropriate assessment can sometimes be a challenging balancing act.

The increasing number of students also presents financial challenges for universities. We continuously work on developing streamlined processes with shorter turnaround times to effectively handle all students and provide them with individualized support. Technological

advancements in the field can significantly impact our work with targeted study support going forward. New solutions may emerge that render some of our current support obsolete. We eagerly anticipate continued progress and hope that this chapter serves as inspiration for others engaged in supporting SWD.

## References

Diskrimineringsombudsmannen (2023), Discrimination Act, 2008:267, Available at:

<https://www.do.se/choose-language/english/discrimination-act-2008567> (Accessed: 30 June 2023).

Bergkvist, G. (2023), Understanding and flexibility helped him achieve better results. Cecilia Edin och Ibrahim Mehdi, 30 June.

Wahlgren, M. (2023), I love making a change. Cecilia Edin och Catrin Schulze, 27 June.

Uppsala University (2023), Internal statistics document, Unpublished internal university document.

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