ACADEMIC ACCESSIBILITY, AN IMMERGING CONCEPT

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                    Abstract

Inclusion of persons with disabilities and other marginalized section of human society in education is increasingly gaining importance in all part of globe.

Access to Academic program, Services and activities is Crucial part of inclusive education. Academic accessibility is one of the important concept of inclusive education which is needed to be understood by all the stakeholders of academics who are conducting research in the area of Inclusive Education and Accessibility of education system for persons with disabilities.

Need is being realized to study all the aspects of accessibility of education system that includes Accessibility of Academic web services, Accessibility of Academic built environment, Accessibility of Academic course content and Accessibility of course delivery mechanism.

This paper presents concept of Academic accessibility in detail. All the components of Academic accessibility are presented systematically   with its relevance on each other. It also covers Laws, Standards, guidelines and policies related to academic accessibility. The paper concludes with the presentation of institutional cases on academic accessibility and usability of the concept in Inclusive education.

Keywords: Academic accessibility, disability inclusion, Inclusive education, Web accessibility, Built environment accessibility, Accessible course content etc.

Background

The researcher while pursuing his doctoral study in the area of inclusive education at Savitribai Phule Pune University in 2017 has come across several concept that are directly or indirectly related to inclusive education. The concepts such as Web accessibility, Built environment accessibility, Course content accessibility Digital services accessibility was studied by him during completing his PhD course work in 2018. While relating these

concepts he has use Academic and accessibility words together for his convenience at many places in his research documents and He found that a new concept is emerge which he calls as Academic accessibility. He hardly found this concept in books and articles any where on web. While doing literature review he found some similar concepts such as access to education, Universal access to education etc. But he could not use these term comfortably in his research documentation as he used Academic accessibility.

Then Both the authors of this concept paper have defined this concept and explored all the aspects in the present literature related to Academic accessibility that is presented in this paper in systematic way.

1. Definition

It is the accessibility of academic programs, services and activities for every one especially for persons with disabilities. Academic environment has several barriers for persons with disabilities such as inaccessibility of built infrastructure for persons with motor disabilities, inaccessibility of course content, inaccessibility of web services, inaccessibility of course delivery mechanism for persons with visual impairment etc. That's the reason persons with disabilities have to struggle a lot for higher schooling during course selection, admission, classroom learning, exam preparation, writing exams, project and internship, research work, placement etc. academic accessibility involve all these issues.

2. Scope

Several national and international rules and regulations prohibit discrimination against individuals with physical disabilities.

Academic institutions such as colleges and University should make each of their programs, services, and activities accessible to and usable by qualified persons with disabilities. These regulations contain information about different types of disabilities, typical access problems, how to accommodate persons who have disabilities, and how to make campus programs and public areas of academic institution accessible. Many persons with disabilities find it difficult to participate in activities (work, recreational, Social/cultural, etc.) because of programmatic or physical barriers, and many are reluctant to "ask for help." Consequently, most people in the general community are unaware that individuals with disabilities exist in large numbers.

Visitors with disabilities must be accommodated when they come to the campus to interview for a job or to participate in campus sponsored activities and programs including Extension University, sports, recreation, and cultural events.

Program accessibility encompasses library services, computing services, student health services, career planning services, counseling and psychological services, campus stores, dining rooms, language laboratories, science laboratories, field trips, , athletic programs, student housing, admissions and examinations, graduation ceremonies, and co-curricular activities, off-campus programs and events, etc.

Areas where a major activity takes place may include reception areas, classrooms and other teaching facilities, conference rooms, faculty and teaching assistant offices, research labs, cafeterias, museums, counseling centers, gymnasiums and other recreational facilities, and libraries. All public areas in which program activities occur should be accessible. Persons with disabilities should also have access to drinking water, restrooms, telephones, and reasonably convenient parking.

3. Importance

A. Enrolment of persons with disabilities increases due toaccessible environment in academic institution.

B. Learning experience of persons with disabilities is improved due to academic accessibility.

C. Skilled and productive human resource with disabilities can be developed.

D. Compliance of accessibility regulation result in to less risk of non compliance.

4. Components of academic accessibility

There could be 4 important components of academic accessibility based on academic infrastructure and services: 4.1. built Environment accessibility, 4.2 web services accessibility 4.3. Course curriculum accessibility 4.4. Course delivery mechanism accessibility.

4.1. Built Environment accessibility

Academic institutions have large campuses. It comprises buildings of academic departments, complexes, administrative buildings, student and staff hostels, guest houses, common auditorium and seminar halls, cafeteria's, commercial complexes, gymnasiums, playground, gardens, footpaths, roads etc. Persons with disabilities have several hurdles while accessing built infrastructure of academic institutions. Wheel chair users cannot access class rooms, academic offices, auditoriums, hostel rooms and other recreational services. Persons with visual impairment often bump on protruding branches of trees, chairs and pots in corridors etc. persons with low vision cannot easily identify staircases, doors walls due to insufficient light and color contrast.

It is also essential to make entire built infrastructure accessibility compliant as per built accessibility standards through the installation of ramps, elevators, accessible toilets, repenting for maintaining color contrast for low vision, removing structural barriers and hurdles on building corridors, hall ways, footpaths, roads etc. Built infrastructure accessibility should be factored in the building project designing architects and builder considers accessibility while building any structure in academic complexes. Access audit of academic buildings and landscape should be conducted To identify accessibility barriers in built environment in the academic campuses. The access audit reveals accessibility barriers which can be rectified with the help of accessibility experts.

4.2. Academic web services accessibility

Academic institutions have huge interactive web portals that make its entire academic and administrative services online. The services include online admission notification, online course entrance, course admission, hostel admission, online examination application form, online examination system, course material, online transcript request, internet service request, recreational facility request, eligibility form, scholarship request form and many more. Online circulars, notifications, employee services request, research grant request etc. are also gone online.

These services are not usually accessibility compliant as per any web accessibility norms. Students, staff, faculties, researchers and visitors with disabilities face several difficulties while accessing these services. In order to make all these services accessible and usable for every one including persons with disabilities, need is realized to implement accessibility standards and regulations in user interfaces of the university web portal. The academic institutions have a team of web developers who should be trained and continuous accessibility evaluation has to be conducted through web accessibility expert. A dedicated web accessibility expert is required to ensure accessibility of university web portal and to coordinate accessibility matter between various departments and web development team of the university as web accessibility implementation and mentainance is continuous process.

4.3. Course content accessibility

University runs several hundred degree and diploma programs. The course content of these degree programs are not usually fully accessible and usable for persons with disabilities. Books in the library are hardly available in alternative formats, notes are also usually not available in accessible formats.

The course content of all the programs is essential to be made accessible and usable for all kinds of persons with disabilities such as making available the course content in alternative format like audio, electronic format, Braille and large print format, tactile graphics format as per requirement so that the academic programs will be made easy for persons with disabilities that will increase their enrolment in main stream degree programs of the university. A dedicated team of personnel is needed who can undertake course content accessibility projects and ensure accessibility of academic course content. Institutions can subscribe accessible libraries such as BookShare international, Sugamya pustakalaya etc to avail ready made accessible books and articles. Also institutes should have policy for publishers to produce books in accessible formats for the benefit of persons with disabilities.

4.4. Course delivery mechanism accessibility

Course delivery mechanism involves teaching and transmit ion of knowledge to course aspirants through various ways such as verbal, body language, interaction and activities etc. Teaching is done with the consideration that all the learners in class and laboratories are abled body persons which does not includes persons with visual, auditory and speech impairment. Persons with visual disabilities face several issues in understanding various visual concepts in class room and science laboratories. Persons with auditory and speech impairment cannot understand verbal interactions and audio visual material. They require sign language interpreter or body language from the teacher while teaching. Classroom teaching and laboratory experiments should be made accessible and understandable for persons with all kinds of disabilities in order to have pleasant learning experience to them. All the teachers and learning facilitators should be trained to teach inclusive class. Faculty development institutes should design courses on Academic accessibility with the focus on Accessible course delivery mechanism. Also such courses should be made mandatory for them.

5. Standards and regulations governing academic accessibility

Academic accessibility in campuses accessibility of built infrastructure, Accessibility of academic web services, course content accessibility and accessibility of course delivery mechanism. There are specific accessibility standards and regulations for specific components.

a. Laws governing on built infrastructure accessibility: Article 14 and 15 ensure accessibility of all the built infrastructure services for everyone. Persons with disabilities (equal opportunities and protection of rights and full participation) act 1995 also advocates accessibility of built infrastructure services for persons with disabilities in its

section 44, 45, 46. The act has made several provisions such as installation of ramps, elivaterssignage's in alternative formats etc. United Nations conventions on rights of persons with disabilities (UNCRPD) also emphasize on accessibility of built infrastructure. Writes of Persons with Disabilities Act 2016 is the replacement of PWD act 1995 which has more elaboration on accessibility of academic systems. Section 16, and Section 17 talks about academic accessibility and access to education for persons with disabilities.The international law has similar provisions but more effective way. Ministry of urban development also has issued Harmonized guidelines and space standards on barrier free built environment for persons with disabilities and elderly people. which have several comprehensive provisions beside the laws. It has given stress on color combinations of walls, floor, staircases etc. It has provisions like height of electric switches and other controls from floor for wheel chair users. USA has Americans with disabilities act (ADA) which also in line with the provisions discussed above. USA has rehabilitation act 1973 amended in 1998 which also talks about accessibility of built infrastructure services. Similar such laws are present in united kingdom Members states of European Union Australia and Canada. But the laws are little weak in Asian countries. Japan, UAE and coria are some exceptions. Built infrastructure of all the academic institutions also comes under these laws and regulations.

b. Laws governing on web services: Indian laws do not cover accessibility of digital services accessibility as the laws are older. Whereas international laws like UNCRPD addresses web services accessibility. Section 508 of US rehabilitation act is one of the strongest regulations that makes web services accessibility compulsory. It also has penalties for non compliance. Disability discrimination act of UK and Australia also covers web services accessibility similar to US act. Several developed countries like Germany, Switzerland, Japan, Korea, Singapore etc has their laws on web services accessibility. World Wide Web consortium W3c has given Web content accessibility guidelines (WCAG) especially for web accessibility which is widely used in more than 100 countries. These guidelines are specific and comprehensive for web services. Government of India has also issued guidelines for web accessibility (GIGW) similar to WCAG. Also Section 40 to 47 of Writes of Persons with Disabilities act 2016 of government of India talks about accessibility of digital environment for persons with disabilities. Several developed countries also have parallel guidelines. Several corporate organizations like Microsoft, Oracle, Adobe Corporation, Google Corporation, Hewlett-Packard (HP) has their own

accessibility standards for their products and services. Almost all these regulations are applicable for academic web services accessibility.

c.   Accessibility of academic course content: Web and digital accessibility regulations are also applicable to course content accessibility. However accessibility of physical course content such as tactile graphics 3d models, training equipments, Laboratory equipments, special assistive gadgets etc. are not covered in any of the laws and regulations. Also best practices documents are not available. Teachers and learning facilities are providing course content in their own ways which some time difficult for students with disabilities. Need is realized to have regulation for course content accessibility.

6. Implementation and assurance of academic accessibility

Several laws, standards, guidelines, policies, mandates and directives are available which ensures accessibility of academic services in India. But the implementation is negligible at ground level in academic institutions. Faculties, staff, students and researchers with disabilities face lot of challenges due to inaccessible academic services right from kindergarten to tertiary education. Mumbai high court also ordered through a judgment in November 2014 to all educational institutions in India to make their programs, services and activities accessible and barrier free for all including persons with disabilities up to end of the year 2015. But academic organizations are ignoring such orders as it has no penalties. Persons with disabilities are not united to create pressure group and push accessibility in academic institutions. Several academic institutions are really wish to make their premises accessible for every one including persons with disabilities but they are unaware about the laws and regulations and the accessibility provisions. Inline to the persons with disabilities act, UGC introduced schemes for development of facilities for persons with disabilities in colleges and universities from 1998 in IX 5 year education plan. This provision is being continued in XII plan also. But its actual implementation in academic institutions is not clearly known. Several schemes such as teacher preparation for special education (TPSE), access to infra-structure, etc. are not yet implemented in any of the universities in India. The main reason is number of schemes and number of accessibility standards and regulations for different services.none of the Indian academic institution has implemented any of these guidelines in their campuses due to variety of reasons such as lack of awareness, lack of proper method for its implementation and difficulty in addressing multiple compliance for specific type of infrastructure and services etc.

[Judgment of Mumbai high court dated on 15/11/2014]

6.1. Resource centre for persons with disabilities

UGC Has introduced scheme higher education persons with special need which makes organizations mandatory to set up resource centre for persons with disabilities which acts as disability support service to the students and staff with disabilities of the academic institutions. The unit addresses all the accessibility related matters of the academic institutions. The unit provides consultation about every disability related matters of the institution and guide academic administrators, faculties, staffs, students and persons with disabilities. The unit also spread awareness about how persons with disabilities learn, read and write, complete their academic assignments etc. All research and development related activities are also carried out under the disability support unit. The unit provides assistive technologies and special gadgets to students with disabilities and its training. Thus the unit is responsible for implementation of accessibility in the academic institutions. Such units are available in some large academic institutions in India. And it is available in almost all the academic institutions in developed countries with train human resource.

6.2 Institutional policies for academic accessibility

large academic institutions have policy for all the matters related to persons with disabilities are addressed in the policy document of the institution. The institution commit to provide accessible and barrier free environment to the students, researchers, staff and faculties with disabilities. Such policies are present in the academic institutions in the developed countries that state all the norms and procedures about disability support service and assurance of barrier free environment in the academic campus.

6.3 Case studies of accessibility implementation in academic institutions in world

Delhi university (DU) has support service unit and clear policy for persons with disabilities however it lack procedures for provision of accessible academics to the students with disabilities. Some universities like JNU, SPPU, Mumbai University, IIM Bangalore, TISS etc has functional disability support service units in their campuses. But none of Indian universities provide barrier free education to the students with disabilities. North Maharashtra University has its built infrastructure accessible for some type of students with disabilities. They have ramps and elevators installed in their campuses. Pune university disability support service unit and Xavier's resource centre for visually challenged are the best amongst all that conduct research in the area of accessibility of academic services. University of California Sandi ago University of Texas at Olsten, University of Illinois Urbana Champaign, UTA state university, Purdue university, Indiana university at Bloomington USA, university of leads

UK has very good disability support service. They provide barrier free schooling to their students with disabilities. All these institutions have excellent policy document with clear procedure for accessibility practices.

Conclusion

It has been found that Academic accessibility is an immerging concept parallel to Access to education, Universal access to education like terminologies that can be used in the context of Inclusive education and accessibility for persons with disabilities.

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