The Digital Divide: A case of Distance Education in Pakistan

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ABSTRACT

The digital divide refers to the difference between individuals, households, businesses, and geographic areas that have access to modern information and communication technologies (ICTs), and those that do not. This gap can include access to the internet, computers, and other digital devices, as well as the skills and resources needed to effectively use these technologies. The digital divide can have a significant impact on the effectiveness of distance education. For students and teachers who do not have access to reliable internet and appropriate digital devices, it can be difficult or impossible to participate in online classes and develop or access course materials. This article is an outcome of auto-ethnography conducted at an open distance education institution during 2016 to 2022. This article presents one part of a larger qualitative dataset. It highlights the issues and challenges faced by teachers, tutors and students during digital transformation of distance education; as well as provides the sets of strategies and recommendations brought out from the interviews and focus group discussions conducted in various regions of Pakistan.

Keywords: digital divide, distance education, information and communication technologies

BACKGROUND OF THE STUDY

Internet facilities in Pakistan have been expanding in recent years, with a growing number of people gaining access to the internet. However, there are still some challenges and disparities in internet access across the country. The coverage of internet infrastructure in Pakistan has been increasing, with more and more areas of the country gaining access to internet services. However, there are still some areas, particularly in rural and remote regions, where internet access is limited or non-existent. The average internet speed in Pakistan is relatively low compared to many other countries, with average speeds of around 10-15 Mbps ("Speedtest Global Index"). However, there are some areas, particularly in urban centers, where internet speeds are much faster. Internet access in Pakistan is relatively affordable compared to many other countries, with many internet service providers (ISPs) offering low-cost packages. However, the cost of internet access can still be a barrier for some people, particularly those in low-income households. The quality of internet service in Pakistan can be inconsistent, with users often experiencing slow speeds, frequent disconnections and other issues. This is partly due to lack of investment in internet infrastructure and poor maintenance of existing infrastructure. The Government of Pakistan has been taking steps to improve internet access and infrastructure in the country, such as the launch of the National Broadband Plan, which aims to increase the penetration of broadband internet in the country. Although internet facilities in Pakistan are available and expanding, but there are still challenges to be addressed such as coverage, speed, quality of service, and affordability to ensure that all Pakistanis can access to internet and the opportunities it provides (Ahmed, 2016).

Distance education in twenty first century largely depends upon connectivity and quality of ICT resources available to students, yet the disparities among rural and urban regions brings in the phenomenon of digital divide. Poor connectivity and low quality of resources can lead to a lack of engagement and poor performance. Additionally, students who do not have the necessary digital literacy skills may struggle to navigate online learning platforms and complete assignments, further exacerbating the divide. For students who have access to the technology and digital literacy skills, distance education can provide a flexible, convenient way to access educational opportunities and overcome barriers such as geographic distance or physical disabilities. Yet the digital divide can create a barrier to accessing quality education and can perpetuate social, economic, and educational disparities. Therefore, it is important to address the digital divide and ensure that all students have equal access to the technology and resources needed to participate in distance education (UNESCO, 2020).

Allama Iqbal Open University is amongst few of the one of the initial distance education institutions in Asia. Program offering was initiated back in 1974 mainly of conventional way of imparting Open Distance Learning (ODL). With the passage of time university advanced towards blended learning which is mix of online and open distance learning. AIOU historically had based its program design on the basis of UK Open University. It had multiple media content in the form of text, TV and radio. It had face to face tutorials fortnightly in the study centers. It also had one week face to face workshops in each course at post graduate level (Iqbal & Huma, 2007).

Overview of the programs depict that most of programs and courses at undergraduate level are tutorial based thereby falling under second category. Each three-credit hour course is comprising of a face-to-face meeting component called tutorials. It has been reported that tutorial meetings were not effective enough and students could not get benefit from these meetings. Quality of course content from university was up to the mark but submissions from students are such that neither students is satisfied from content nor tutors are satisfied with student work. Connection of course or program coordinator with student remained a missing link for a longer time. The gap was usually filled by the tutor (Iqbal & Huma, 2007). Substantial number of authors of varying studies have suggested that effective and efficient utilization of online audio-visual material will enhance the learning outcomes. It is an effort to bring quality for strengthening the system and enhancing the student learning through online tutorials and completing the course by applying a blended mode.

The mission statement of AIOU for several years has been "education for all". This phrase carries multiple layers of educational equity, access to equal opportunities for all and inclusion of learners from all backgrounds, regions, age, race and gender. It is one of the mega universities which have more than one million students enrolled. The student population is enrolled from all over Pakistan and overseas. Allama Iqbal Open University is comprising of 40 offices in the region with 12 regional campuses, with which its presence is ensured in all parts of the country including- the southern regions of Sindh, Punjab, Baluchistan, to north including Azad Kashmir and Khayber Pakhtunkhawa,. Allama Iqbal Open University is offering more than one-hundred-degree programs that range from secondary school certificate to doctoral level. Credited and non-credited course are more than 2000 for which a full time faculty member is given the responsibility of coordination. From 2013 to 2016 Allam Iqbal Open University signed an agreement with San Jose University, USA. This was a collaborative effort to transform the traditional Open Distance Learning mechanisms to online and blended Open Distance Learning systems. Multiple teams of academic and non-academic officers went to visit SJSU and got professional training for digital

transformation of the university. The delegates of SJSU came to AIOU during 2016 in which the researcher was one of the focal persons for the brainstorming sessions where it was discussed and deliberated that how, why and where the programs and courses can be transformed into online distance education mode and where a blended approach can be utilized. It was also decided that a quality score card for online distance education will be adopted. Online discussions and review of the quality score card went on further six months. The researcher was first person to offer an M.Phil. course "Educational Research and Statistics-3706" in blended mode during year 2017. Students were provided online learning materials, multiple media content and were asked to submit typed assignments. After much resistance from the students and even from the faculty members it was slowly and gradually approved by all stake holders. Therefore, M Phil and Ph.D. programs were also transformed to blended mode where 2 components of these courses were left which was to be undertaken face-to-face as synchronous online learning was not yet feasible. The remaining programs which were being undertaken at university were mix of traditional and blended approach. The collaboration from San Jose University, USA had made it possible that many members of the university faculty to use tech-resources for academic activities. Although only M.Phil. and PhD courses were being offered in blended mode, yet the same faculty members also taught at Masters and undergrad level as well. This transformation was of great help during COVID-19 pandemic when all face-to-face activities were ceased as AIOU was prepared unlike other universities and has shifted all teaching and learning in on online ODL mode.

LITERATURE REVIEW

Distance education institutions in developing countries at the beginning of twenty first century had less use of electronic devices for delivering the course. These institutions largely relied on tutors available in various regions to facilitate student learning. Slowly and gradually the physical presence of tutors was replaced with online tutoring (Simonson, Smaldinao & Zvacek, 2014). Meanwhile, as per Berg & Simonson (2016), distance learning is also known as distance education, e-learning, or online learning, and it is a type of education in which teachers and students are kept separate physically during instruction and various technologies are used to facilitate student-teacher and student-student communication. Nontraditional students, such as military personnel, full-time jobs, and persons living in remote areas without access to classroom lectures, are among the target students of distance education system since long (Berg & Simonson, 2016). They pointed out, some important aspects of distance learning; they elaborated that instead of self-study in case of private institutions, distance institutions conduct distance education, it is not at all expected that the learner is left alone without any guidance and support of teachers and tutors. Physical isolation is an important aspect of distance education, which is mediated by technological tools of communication, such as email, and other means of communication are often used. The digital sources at both ends and competence of students and teachers has been investigated from several perspectives by researchers in media and communication, economics, sociology, education, and information technology (Pagani et al., 2014). Digital sources and connectivity is one of the basic needs of distance learners, while digital skills should now be considered as life skills to survive in the technological age. Teachers need to upgrade their digital literacy and students need to be aware of all available resources and tools; because teachers have to plan instruction and learning methods according to the new needs of the times and students have to meet the requirements of academia and industry. It is important to understand and appreciate the inclusive

practice of institutions and teachers to make the community of students more effective and bring them closer to the real digital world (Ndongfack, 2015). To provide successful online distance learning, universities should also have a clear strategy and goals in place, invest in the necessary technology and infrastructure, provide training and support for faculty and staff, and ensure that the curriculum and instruction are designed for an online environment. With the increase in technological adaptation in the 21st century, traditional digital literacy is no longer as important as it is now to provide digital resource to all teachers and learners in or outside the classrooms (Liu et al., 2020).

In the context of digitalization of all spheres of human activities. There is a dire need and demand for digitally enabled distance education systems in the 21st century. Thus, in a strict manner, distance education refers to students' distance learning and teachers' distance teaching. Institutions can provide online distance learning through a variety of methods (Simonson & Zvacek, 2024). A learning management system (LMS) can be used to deliver course content, such as videos, readings, and assignments, to students online. This can include synchronous (real-time) and asynchronous (not real-time) components, such as live online lectures and recorded video lectures, respectively. Virtual meeting platforms, such as Zoom or Google Meet, can provide virtual office hours and meeting spaces for students to meet with professors or tutors for additional support. The online tools, such as proctoring software or remote-invigilated exams, help to administer exams and assessments to students who are learning remotely. Institutions can use online tools, such as discussion boards or group chat, to facilitate collaboration and communication among students and between students and instructors (Taryn, 2022). The online student services and support, such as academic advising, counseling, and career services, are designed to ensure that students have access to the resources they need to succeed. On the one hand, this sounds quite promising, while on the other hand, it is a very complex process that poses many challenges for those who are not educated in this mode and for those who do not have the required tools, techniques, skills and resources (Millard, 2021). When digital transformation occurs in a landscape where most teachers, learners and education managers are using traditional methods of education, it raises many profound challenges and issues. Especially in a context where more than half of the student population is living rural areas including plane and mountainous far flung places.

There have been a number of studies conducted on the digital divide in developing countries, with a focus on understanding the barriers to access and use of technology, and the impact of the divide on individuals, communities, and economies. "Poverty, ICT and Economic Growth in SADC Region: A Panel Cointegration Evaluation" (Olamid et al. 2022). This study, presented at the MDPI, Basel, Switzerland found that access to information and communication technologies (ICTs) can have a positive impact on poverty reduction and economic development in developing countries. "ICTs and Rural Development: A Study of the Digital Divide in India" (Desai, 2013) This study, conducted by the Indian Institute of Technology, found that the digital divide in rural areas of India is a result of a lack of infrastructure, lack of awareness and education, and lack of affordable access to technology. "Digital Inclusion and the Digital Divide in Developing Countries: A Literature Review": This study, conducted by the United Nations Conference on Trade and Development (UNCTAD, 2021), reviewed literature on the digital divide in developing countries and found that the divide is influenced by a combination of factors, including socioeconomic status, education, gender, and geographic location. "The Digital Divide and its Impact on Quality of Education at Jordanian Private Universities Case Study: Al-Ahliyya Amman University" (Sweidan & Areiqat 2021); this study, found that the digital divide has a

significant impact on education in at university level, creating barriers to access to information and digital skills, and limiting the ability of students to participate in online learning. "The Digital Divide in Online Learning: A Case Study of University Students in Nepal (Baral, 2022). This study found that the digital divide in Nepal has a significant impact on access to distance education, particularly in rural areas, where students often lack access to reliable internet and digital devices. These studies highlight the need for a multidimensional approach to reduce the digital divide in developing countries, including investing in the necessary infrastructure, providing affordable access to technology, and promoting digital literacy and education. Many studies suggest that the digital divide has a significant impact on access to and participation in distance education in developing countries. Addressing the divide by increasing access to infrastructure, technology and digital skills are key points to providing equal opportunities to education for all.

The larger autoethnography of working at AIOU was conducted and documented over many years. While working at the main campus of AIOU in Islamabad the researcher had made notes of time and task analysis for the work hours, work load and job descriptions changing during digital transformation especially for the university teachers. The advancement in technology and its acceptance and adoption models were kept in mind while analyzing as to how teaching as well as non-teaching staff of the university interpreted, responded, recognized, accepted and used the latest resources and modes of operations in digital transformations. The paper at hand elaborates more on how the teachers, tutors and students went through the digital transformation at AIOU in various parts of the country.

Purpose

The purpose of the study at hand was to identify the issues and challenges faced by the teachers, tutors and students in various regions of Pakistan; during digital transformation of open distance learning at AIOU.

METHODOLOGY

This study was conducted in the form of an ethnographic research. The researcher herself has been a participant observer and kept maintaining the qualitative data records for analysis during 2016-2022. During this period the researcher travelled to ten far flung regions of AIOU for experiencing the on ground realities. The regions visited by the researcher included Mithi, Hyderabad, Quetta, Ziarat, Bahawalpur, Lahore, Sawat, Mardan, Abbottabad, while Islamabad was permanent placement.

Data Collection and Analysis

The visit of the regions spanned over five years in which the data was collected through the participant observation as a teacher, informal conversations with community members, interviews with tutors, and focus group discussions with students. Internet was used with landline networks, mobile networks and wifi devices to see how it works in different parts of the country. The collected data was coded, categorized and analyzed under the emerging themes. Three stage thematic analysis helped in interpreting the data meaningfully.

FINDINGS

Qualitative data analysis opened up many dimensions of the digital transformation at AIOU, as reported below:

General Issues of Education in Remote areas

There are a number of challenges facing education in the far-flung areas of Pakistan, which can make it difficult for children in these areas to access quality education. In many far-flung areas of Pakistan, there are few or no schools, making it difficult for children to access education. This is often due to a lack of government investment in education infrastructure in these areas. The quality of education is poor due to a lack of qualified teachers and inadequate facilities. This can make it difficult for children to learn and make progress in their education. High dropout rates are a major problem in many far-flung areas of Pakistan. Children often drop out of school due to poverty, cultural and social factors and lack of facilities. Schools in rural areas often lack basic resources such as books, equipment and teaching materials, which can make it difficult for children to learn. In some parts of Pakistan, especially in extreme south and extreme north there are cultural and linguistic barriers that can make it difficult for children to access education. Many children in these areas speak languages other than Urdu, i.e. the official language of Pakistan, which can make it difficult for them to understand the curriculum and communicate with teachers. In some of the regions of Pakistan, insecurity and armed conflicts have disrupted education and made it difficult for children to attend school in recent past. In remote areas, there is a lack of digital infrastructure and internet access, making it difficult for children to access online education and resources. People again and again mention that they are facing a number of challenges, including a lack of access to schools, poor quality of education, high dropout rates, limited resources, cultural and linguistic barriers, insecurity and armed conflicts, and lack of digital infrastructure. These challenges need to be addressed in order to ensure that all children in Pakistan have access to quality education.

Internet speed

The internet speed in rural areas of Pakistan is generally slower than in urban areas. This is due to lack of infrastructure in these regions. In many rural areas of Pakistan, there is a lack of internet infrastructure, such as fiber-optic cables, which can make it difficult to provide fast internet speeds. Institutions in rural areas are often located far from urban centers, which can make it difficult to provide fast internet speeds due to the distance that signals need to travel. There is often less investment in internet infrastructure in rural areas compared to urban areas, which can make it difficult to provide fast internet speeds. Institutions located in mountainous and remote regions, can make it difficult to install internet infrastructure due to the terrain. Power availability is also limited in rural areas, which can make it difficult to maintain internet infrastructure and provide fast internet speeds. There is often limited competition among internet service providers in rural areas, which can result in slower internet speeds as providers have less incentive to invest in infrastructure and improve service. It is evident that internet access is expanding in rural areas of Pakistan, the internet speeds tend to be slower than in urban areas due to a lack of infrastructure, distance from urban centers, limited investment, natural barriers, power availability and limited competition among service providers. Addressing these issues is crucial to improve internet speeds and increase access to digital education and opportunities in rural areas.

General Perception regarding AIOU

Allama Iqbal Open University (AIOU) is generally well-regarded by people in Pakistan. It is considered one of the most reputable distance education institutions in the country, and is known for providing accessible and affordable education to students from all backgrounds. People in almost all over Pakistan appreciate that AIOU has a wide reach across Pakistan, and is able to serve students in remote and rural areas where access to traditional higher education is limited. AIOU is known for providing affordable education to students, which makes it accessible to people from all backgrounds. The university offers flexible study options, which allows students to study at their own pace and on their own schedule. This is particularly beneficial for working adults and people with family responsibilities. It is considered to have a high-quality education, and is known for its experienced and well-qualified faculty. AIOU has made great strides to improve its digital platforms and digital education. The university is now providing online library, digital content, online exams, and online help, making it easy for students to access the resources and materials. However, the perception of AIOU may vary among different groups of people. Some people may have negative perceptions of distance education in general, and may not consider it to be as valuable as traditional, on-campus education. Additionally, some people may have had negative experiences with AIOU, such as difficulty in getting admission, delays in receiving study materials, or difficulty in getting in touch with their tutors.

Issues faced by Students during digital transformation:

No prior information provided

Current online ODL policies and processes adopted by AIOU do not satisfy the students' needs in less developed and far flung areas of Pakistan. The students cannot understand the effectiveness and significance of the online meetings and many students cannot attend due to weak internet connections in rural areas. Although the students showed readiness for using technology but they did not know how to use the Learning Management System and tools of online learning effectively; and they were not provided with any tutorial for online study and were not given enough time to navigate the process. Students are not provided clear guidelines for online application, fee submission, and enrolment process.

Students trying to navigate the system with old practices

In the new system once they are enrolled they keep waiting for a study pack as it used to arrive at their door in the old system. The new student has no idea that assignment questions are uploaded somewhere on the main website where they must enter their course codes and only then they will reach to the correct assignment paper. Sometimes they reached archives and they attempted older assignments instead of the recent ones. The instructions given on the assignment question papers were old therefore they made handwritten assignments then scanned them and uploaded on the portal. In the first two semesters of transition the tutors received half of the assignments in hard copies and half were uploaded.

Increased fee and no books

On the one hand university increased tuition fees twice during past three years; and on the other hand they have stopped sending hardcopy materials to students, which caused big unrest among students. Now e-books are at another link at the main website and students need to navigate by themselves to reach that link. Meanwhile people have copied/translated the materials and

selling in markets from where the students buy unauthorized copied or translated versions. With the online materials it is reported by the students themselves that their reading habits are badly affected as they only copy online text to put in the assignments. Student wants teachers to give some more reference materials but teachers do not provide that.

The students wanted to get study materials in hard form before they meet online but all they have is an online course guide which is not enough to prepare assignments, then they start copy pasting from net. Many tutors who are marking assignments do not check similarity but the faculty members of AIOU; if they are checking assignments they check similarity and give poor grades. This is not at all a justified system that some of the students get through using all negative means while others fail due to a strict teacher marking their papers and assignments. Students receive the log in details a few days before the due date of assignment and sometimes they do not get intimation of online classes until the day of the class. Even then they are not given specified dates for each code that they enrolled, rather they are sent dates of all workshops in a text message that ranges for four to six weeks. They open the portal on Monday each week to check if their class is scheduled or not. Nothing appears beforehand.

Communication gap

Once the students get stuck in the system and cannot reach the relevant course coordinator or do not find an appropriate guidance at the regional office, this opens up the way for others to intervene. private vendors are intervening and providing multiple services on payment -making assignments, uploading assignments and even attending classes in place of the students. I have seen banners on shops where nobody even considers this as unethical or unlawful business. In such circumstances the online meetings/classes lose effectiveness and importance. Teachers are of two categories – the faculty members and the resource persons. Faculty members are course coordinators and only they know the whole design. Other teachers are part time tutors so they themselves are not aware of the whole system. They also perceive it as a short activity of six days only and do not take it seriously. Thus the problem of communication gap between coordinators and tutors and between tutors and students reduces the internal and external efficiency of the online tutorials and classes.

Digital divide and discrimination

The far flung areas of north and south of Pakistan where there is almost no access to internet and where AIOU had been the only hope for students to study further, many students especially the females are now again being deprived and discriminated. The communities where there is no communication sources available and where girls could not study further if AIOU had not bring education to their doorstep as it used to. But now the study centers with internet are needed to attend classes and again the girls are restricted not to reach those centers. I visited the villages of Sindh and KP where the travelers only walk from one place to another because one region is all deserts and the other is all mountains. One needs to leave home early in the morning to attend a class of 8.30 am in the study center located far from home. Similarly the last class ends at 10.30 pm and they need to walk back home. In these conditions boys and men somehow manage to walk to and from study center but the females cannot. In some of the regions local community members have given a room or a shop as study center where the internet service provider charges each student separately and this is an additional expense for the students.

Strategies for improving distance education in rural areas students

Rural area students in Pakistan may face challenges in attending online classes due to a lack of access to technology and internet connectivity. Many rural area students in Pakistan may have access to mobile phone data, even if they do not have access to a reliable internet connection at home. They may be able to attend online classes using their mobile phone data. Some rural area students are able to attend online classes using community resources such as internet cafes, libraries, or community centers. These locations may have reliable internet connections that students can use to attend online classes. Some rural area students may share resources such as devices, internet connections, or electricity with their classmates or neighbors in order to attend online classes. Rural area students can adapt to the new ways of learning, if they are provided with effective tutorials they may have to learn how to manage their time and resources effectively. They may have to be more self-motivated and disciplined to continue their education.

The government of Pakistan has launched various initiatives to bridge the digital divide and provide students in rural areas with access to technology and internet. Some rural area students may be able to attend online classes through these initiatives. Some rural areas in Pakistan may be able to access the internet through satellite technology, which can provide a high-speed internet connection in remote areas. It's important to note that the challenges faced by rural area students in Pakistan may vary depending on the specific location and the resources available. Overall, rural area students in Pakistan may have to be resourceful and adaptable in order to attend online classes.

Issues faced by teachers and tutors during digital transformation:

Blurred job description and increased workload

The situation was worrisome as the regional chain of AIOU offices and campuses which were working to help the students of remote and scattered areas, but during the transition mode they were not being able to extend the help and support which was required to in the digital transformation from distance learning. One major aspect of the digital transformation was the training and support for faculty members, support staff and the personnel in the regional offices of AIOU. During the Spring Semester of 2020 everything closed suddenly and the system was shifted to online tutoring. The faculty members who had already gone through the training and were coordinating M.Phil or PhD level programs were familiar with the use of LMS and the only addition was Big-blue-button through which they were to conduct classes. The part time tutors had never used LMS and did not know at all how to use the system. IT team of university on the one hand was preparing the portals, course shells, and schedules of classes; while on the other hand they needed to provide tutorials, training, continuous guidance, and support to the teachers on campus and off campus. It was noted that the new workload was neither notified for the teaching faculty nor for the IT team. For the year 2020 everyone worked on volunteer basis. Work hours spread from 8 hours to 18 hours. Tutors were not getting any response from regional offices and they were always contacting teacher, while teachers were asking IT coordinators for help. Any early morning a message would be circulated through whatsapp and one would realize that another task has been added to their job description. In the beginning of 2021 it had become a huge issue for the faculty members, IT team and personnel in the regional offices to clearly define who is responsible for what.

Low job satisfaction and unrest

The level of job satisfaction among teachers of distance education was varying depending on various factors such as the specific courses, number of students enrolled, the resources available, and the support provided by the university. Distance education teachers felt less connected to their students, colleagues, and the institution as a whole due to the lack of face-to-face interaction especially during COVID. The teachers were feeling isolated as they do not have the opportunity to interact with their colleagues and peers.

Teachers faced extraordinarily heavy workload due to the need to create and maintain online materials, manage online communication and feedback, and deal with technological challenges. The teachers mentioned that they were unsupported by their institution in terms of technology, resources and professional development. They were appointing tutors for larger enrolment courses and had limited interaction with their students, which made it harder to build a rapport. Limited opportunities for professional development were negatively affecting their job satisfaction. They had limited opportunities for collaboration. Teachers mentioned that it is important for institutions to provide support, professional development, and resources to distance education teachers in order to improve their job satisfaction.

Coping strategies of teachers

Overburdened teachers in distance education were responding to the situation in a variety of ways, depending on their individual circumstances and the specific challenges they were facing in various programs. Some teachers prioritized their workload by focusing on the most important tasks and allocating less time to less important tasks. This helped them to manage their workload more effectively. Some of them were seeking help from colleagues, IT or other experts in order to manage their workload more effectively. This included seeking guidance on best practices for teaching in a distance education setting, or seeking assistance with specific tasks such as online lessons or assessment.

Teachers looked for trainings and support in adopting new technologies such as learning management systems, digital content, or online collaboration tools in order to streamline their workload and making it more manageable. They slowly improved their time management skills over the years to make the most of their time and to be more efficient with their workload. This included setting goals, creating a schedule, keeping work assistants, and breaking down large tasks into smaller, more manageable tasks.

Teachers found new ways to communicate with students, and tutors to explain the situation and to seek their understanding and support. They also communicate and sometimes confront with their administration and seek their support in resolving the issues. Teachers needed to prioritize their well-being and self-care, in order to maintain their energy and motivation. This required taking breaks, exercising, meditating, and spending time with friends and family. It's important for educators to find the best way to balance their workload and maintain the quality of life.

CONCLUSIONS

The analysis done by the researcher figured out the changes and challenges being faced by academic as well as non-academic staff in smooth functioning of the university and the students. The student population of the university is a mix of both urban as well as rural areas of the country; they are located in remote areas where the problems and challenges are diverse in nature. The unique problems of equity and access emerged during digital transformation. It has been five years

or more since the university began this journey and there are yet considerable number of pending issues with management as well as faculty. There are considerable number of students who made a journey to the university for the first time for the reason that there was nobody in the regions making them understand the transformation and getting best out of it. Due to the confusing state of affairs at university's end the students were also suffering because many of them missed the online classes, many of them did not submit assignments online and many of them could not enroll in the next semester.

Hence, the issues depict that despite passage of more than four decades after the university was established, it is now encountering new problems in both academic as well non-academic avenues due to the change of mode of ODL. The digital divide within the country has shown a huge impact on the largest distance education network. University increased its fees twice during past five years and stopped sending printed books. Online sources and information is not being disseminated, communication gaps and an unrest among employees has made it more challenging for the mega university. All these challenges have made this system lose its original goal of "education at the doorstep"; while we have uncalculated learning losses and unaddressed dropout rates in the past five years.

RECOMMENDATIONS

It's important to note that reducing the digital divide is a complex and multifaceted challenge, and addressing it will require a combination of different approaches and sustained effort over time. There are a number of ways to reduce the digital divide by providing affordable internet access, especially in low-income and rural areas, more individuals and households will have access to the internet and the opportunities it provides. By providing low-cost or free digital devices, such as computers or tablets, to students and tutors who cannot afford them, more people will have the tools they need to access the internet and participate in online learning and other digital opportunities. Establishing community technology centers, where individuals can access the internet and receive training, can provide a bridge to the digital divide. AIOU's regional offices and study centers can be the best choice for this.

Offering digital literacy training and education can help individuals develop the skills they need to navigate the internet, use digital devices, and effectively participate in the digital economy. Providing professional development opportunities and ensuring enabling work environment for teachers is the most urgent need of teachers and responsibility of the institution. AIOU and private companies can work together to provide digital infrastructure, devices, and training to disadvantaged communities. Government policies and regulations can also play a role in addressing the digital divide, such as by promoting competition in the telecommunications industry, providing funding for digital infrastructure and access programs, and requiring that internet service providers serve all residents in a given area, regardless of income or location.

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