



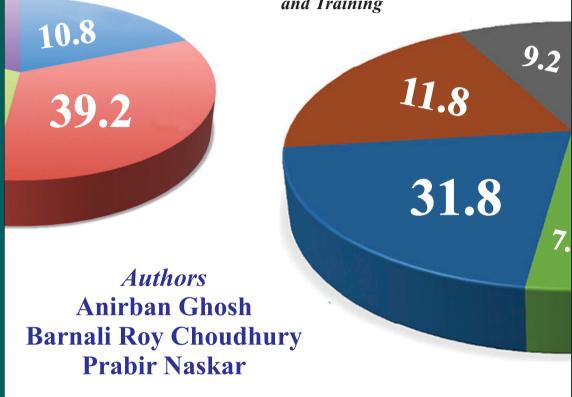
The base line study was conducted as a part of the ongoing project with the Commonwealth of Educational Media Centre for Asia. The project is based on "Increase access and Improve Institutional capacity for Sustainable Development through Vocational Education and Training". This publication reflects the attitude of the enrolled learners in Vocational Courses of Netaji Subhas Open University towards the ICT support, teaching-learning process etc. The rusult is based on the feedback received from learners through a structured questionnaire circulated among the learners online and offline mode.



Vocational Education and Training: A study of Netaji Subhas Open University

Under the CEMCA-NSOU Project:

Increase Access and Improve Institutional Capacity for Sustainable Development through Vocational Education and Training



Edited By
Manas Ranjan Panigrahi



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Authors
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This publication is a part of a joint Project "Increase Access and Improve Institutional Capacity for Sustainable Development through Vocational Education and Training" of Netaji Subhas Open University, Kolkata and Commonwealth Educational Media Centre for Asia, New Delhi.

Acknowledgement: The project is supported by the Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi.

The Commonwealth Educational Media Centre for Asia (CEMCA) is an international organization established by the Commonwealth of Learning (COL), Vancouver, Canada, to promote the meaningful, relevant and appropriate use of ICTs to serve the educational and training needs of Commonwealth member states of Asia. CEMCA receives diplomatic privileges and immunities in India under section 3 of the United Nations (privileges and immunities) Act, 1947.

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ISBN: 978-93-82112-65-5

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Printed and published by School of Vocational Studies, Netaji Subhas Open University (NSOU), DD 26, Salt Lake, Sector 1, Kolkata 700064



CEMCA-NSOU Project:

Increase Access and Improve Institutional Capacity for Sustainable Development through Vocational Education and Training



Objectives:

- 1. Development and delivery of online training programmes through MOOCs.
- 2. Increasing the women and first generation participation in training programmes through outreach programme.
- 3. Enhance Capacity of faculty members and trainers for development of quality learning materials (as OER) and online learning facilitation to learners.
- 4. Improvement of learner support system (online support through a dedicated web portal and toll free number etc.)
- 5. Development of a network of prospective employers and linking the learners to the prospective employers through web portal for sustainable development.

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Project Supported by:



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 ${\it Vocational\ Education\ and\ Training} \underline{-4}$

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From the Desk of the Vice-Chancellor

Greetings from Netaji Subhas Open University!

I am very glad to present this publication titled "Vocational Education and Training: A Study of Netaji Subhas Open University" from the School of Vocational Studies (SVS) of the University. This is the outcome of the Baseline Survey conducted among the students of vocational courses across the state of West Bengal. The baseline survey is a part of the ongoing joint project with the Commonwealth Educational Media Centre for Asia (CEMCA) titled "Increase Access and Improve Institutional Capacity for Sustainable Development through Vocational Education and Training".

The University launched vocational programmes in July 2003 session through its Department of Non-Conventional Courses. Subsequently, considering the importance and contribution of the vocational programmes, the Department was renamed as School of Vocational Studies in 2012. It is a matter of pleasure and great experience to be associated with CEMCA for different projects to fulfil NSOU's mission of 'reaching the unreached'. We have already completed three projects with the CEMCA, the objectives of which were to increase the access to our huge learner base comprising over 4.25 lakh students, using technological intervention. The important projects were introduction of M-learning, development of OER repository etc. With the active support of CEMCA, we have developed the NSOU - OER repository which is now in place to make the academic contents available to all under the open license "CC-BY-NC-SA".

Presently, the University provides various *student support services* through ICT to reach the learners directly. In this publication attempts have been made to depict the feed-back of our learners' towards the use of ICT as a component of NSOU's teaching-learning process. The study shows that learners are technology savvy but still, they are required to be made aware of the ICT-based *student support services* that are already on offer by the University free of cost.

I feel that this publication with lots of innovative ideas and research findings, will be helpful for the researchers and the students in the fields of technology mediated education system followed in Open Distance Learning (ODL) in general and vocational programmes, in particular.

I take this opportunity to extend sincere thank the Commonwealth Educational Media Centre for Asia, New Delhi for their generous support.

Finally, I would like to congratulate my colleagues Professor Anirban Ghosh, Mrs. Barnali Roy Choudhury, Asst. Professor and Mr. Prabir Naskar, Asst. Professor of NSOU for bringing out this publication on time despite their normal academic activities of the university.

Kolkata (S. S. Sarkar)

June, 2018 Vice-Chancellor

Executive Summary

Skills and knowledge are the driving force of economic growth and social development for any country. Potentially the target group for skill development comprises all those in the work force, including those entering the job market for the first time, those employed in the organized sector and those working in the unorganized sector. India has set a target of skilling 500 million people by 2022. One of the greatest advantages for the Indian economy is the sustained growth of the work force population. We have to convert the huge young population into demographic dividend. Harnessing the demographic dividend through appropriate skill development efforts would provide an opportunity to achieve inclusion and productivity within the country. The skill development initiatives help in employment generation, economic growth and social development. Skills mean employability and mobility. So a skilled person will have greater opportunity in the job market as well as his/her vertical or horizontal mobility will be easier.

At present skills base of the Indian economy is quite low as compared to other developed economies of the world. Many of the developed economies have 60 to 80% are skilled workers of the total work force. In case of India only 2% persons in the age group of 15-29 years have received formal vocational training and around 8% are reported to have received non-formal vocational training. So we have to enhance the skill development infrastructure in such a way that all persons who enter the work force acquire relevant skills before entering the job market. But in the short run it will not be possible to develop the adequate infrastructure to impart skill development programme. Another major problem is that the outgoing university graduates, entering the job market lack employability. The present scarcity of skilled labour can be addressed by open and distance learning system. The ODL system because of its inbuilt learner friendly feature and flexibility has the potential to enable the learners to deal with the challenging and difficult task of acquiring skills. Through ODL methodology and with the help of Information and Communication Technology (ICT), Virtual Laboratory, Virtual workshop greater number of persons can be trained with a specific skills. Apart from the electronic medium, different channels like a network of study centres, vocational centres and NGOs can be used for the vocational capacity building which in turn can help in social development. Public Private Partnership (PPP) may also be explored to impart vocational training. By open and distance learning system through inclusive education larger number of people can be trained. With proper planning the employability of the rural youth can be enhanced with region specific demand and modular based vocational training. This will definitely expand self-employment opportunity. The migration from rural area to urban area can also be minimized by providing proper vocational training through ICT meditated ODL system.

The present study intends to evaluate the present situation of vocational education and training of Netaji Subhas Open University in the State of West Bengal. The University conducts various types of skill development programmes through its study centres located at different districts specially in the rural areas. The students' feedback (306 in nos.) has been analyzed in respect of various aspects including the teaching-learning method of the vocational courses.

1 Introduction

The Open and Distance Learning system is a unique and challenging mode of education offered at the University level. This system provides ample opportunities for those who desire to have University education at their place of work or residence. It is perhaps the only way to meet the ever-increasing demand for Higher Education especially in a developing country like India. The Open and Distance Learning (ODL) system is perhaps the only system that has been planned in such a way that it is able to cater to all those who desire to seek Higher Education in spite of the fact that they are in a disadvantageous position due to social, economic and other reasons. Also to cater to the increasing demand for Higher Education, flexibilities in terms of age, qualification, location, time, etc., have been introduced to the maximum extent through the ODL system.

An open learning system is based upon the student's learning pattern. Although, they are enrolled in a system where they come across other learners in a partially competitive manner, an open learning system represents an alternative approach to the higher learning unlike attaching sole importance to the classroom teaching that is usually framed within a highly formal, institutionalized and centrally administered system of education. It epitomizes the principal of universality, flexibility and innovativeness. Therefore, its ideas, institutions, methods and procedures are framed accordingly. Conceptually, it can be viewed as a system which adopts the best elements of formal and non-formal system of education. The pioneer in the field of Distance Learning Dr. Desmond Keegan in his book, "Foundations of Distance Education" in its Second Edition (1990), primarily lists the main crux of Distance Education as follows: -

- Separation of a teacher and learner throughout the learning process.
- Separation of the learners from other learners or learning groups.
- Provision of means for a two-way communication so that the learners can benefit from or initiate dialogue.
- Utilization of electronic means of communication to carry the content of the course.

2 Netaji Subhas Open University

2.1. About the University

Netaji Subhas Open University, being the first Open University in West Bengal, is the premier State Open University in India. Founded in the 1997 (Birth Centenary of Netaji Subhas Chandra Bose), the University has been contributing substantially towards the building up of quality human resource base of the State and collaborating with other open universities of the National and State levels towards the improvement of the quality of Distance Education. It also aims towards promotion and appropriation of technology to create the distance education scenario of the international standards in our country. The basic purpose of establishing the Open University in the State is to educate the disadvantaged groups of the society. By disadvantaged section, we mean women, rural people, scheduled castes, scheduled tribes, physically challenged, minority etc.

Given the nature of necessities of the large hinterland, the University caters to spread higher education in different parts of the state and to cooperate with other universities to provide access to higher education and to different skill enhancing educational programs. This reach-out policy has dual objectives-viz spreading of higher education to the remotest corner of the state and providing viable career alternatives and vocational courses at an affordable price. It mainly aims at democratization of education at the grass-root level with the idea of providing an equal opportunity for all. The University being committed to social justice, by targeting varied forms of employments for learners and cutting across all conventional modes of classification and discrimination, directly accomplishes the mission of operating Study Centre for inmate students at the Alipore Central Correctional Home.

To sum up, the University is trying to: -

- Provide quality education in a flexible mode to serve the aim of establishing an equitable knowledge society within the state, provide higher education through distance learning through the language of the state i.e., Bengali.
- Make education affordable to the disadvantaged.
- Provide facility for lifelong education to intending students.
- Strive for up gradation of technology without compromising the basic values of the society.

• Contribute to the development of the state and nation and to motivate students to strive for secular, scientific and democratic education.

2.2 The unique features of the University

Flexibility- Students can learn and study at the same time. Flexibility is the biggest advantage of the distance learning. This also stands true in case of a working professional. Not everyone has a luxury of taking their own time to finish their studies. For those who have to take a break from studies to start working, these courses are a boon and thus provide an opportunity to pursue higher education.

Saves Time and Energy- Students spend a lot of time and energy on commuting between long distances. Hence, students can visit their nearest Study Centre for collecting their Self- learning materials and could stay at home and enhance their knowledge. In this way, the rural-urban divide can also be reduced to some extent.

Study at one's own pace- Not everyone has the same pace of learning. Some students learn quickly while others need few more time to grasp. Students can thus learn according to their own comfortable pace. The university represents such an ideal and thus framed its examination pattern accordingly.

Saves Money- These courses are always cheaper compared to their on-campus counterparts. Thus, it can easily reach widely cutting across discriminatory boundaries.

Convenient- If a student is little comfortable with the basic computer knowledge, then the system of ICT by the University is a boon for them. With a click of a button, they can do every thing from the beginning to the end. Even they can complete their assignments through the ICT.

Student Centric-The University allows its learners to complete a particular course within a stipulated period. One learner can complete the Bachelor Degree program within a minimum period of 3 years. But the registration remains valid up to 5 years. In case of the 2-year Post Graduate degree program, one can complete the course within 4 years from his registration. This flexibility helps the learners in completing the course at their own pace. There is another advantage of the NSOU program is that one student may clear his/ her backlog paper of any semester with the papers of current semester. By this provision, the learners can save their year/ time also.

Teaching Methods

- 1. Self-Instructional Materials (SIM)
- 2. Audio-Video lecture
- 3. Personal Contact Program (PCP)
- 4. ICT support

The NSOU's student centric approach is based on 3Es

Engage- Updated Syllabus, job oriented course curricula, SLM,

A/V lecture, Virtual class

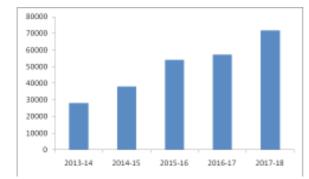
Empower- Counselling, PCP, SLP, Workshop, Lab counselling

Excel- placement, promotion

After the preliminary developmental phase for a certain span of time, the students' volume of the University can be traced evidently from the year 2013-14 onwards in the form of comparative parameters over last five years. A stage-wise comparative statement of Admission Data is provided so that we could get a clear picture of the students' enrollment over these years and could trace the fast growth of the university in all these years.

From the tabular and graphical representation of the growth indicators given below, it can be deduced that the University has recorded an amazingly phenomenal and impressive growth enrollment of students from all cross-sections of society who have enrolled in higher education. As of 2017-18, 71,000 students (approx) are admitted at 116 study centers (came up till 2017) across the state of West Bengal. This is indeed a remarkably steep rise from 28,115 students in 2013-14 (within the span of 5 years).

Table-1

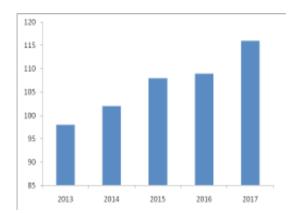


Year	No. of students enrolled
2013-14	28,155
2014-15	38,025
2015-16	53,942
2016-17	57,280
2017-18	71,567

Fig. 1:No. of students admitted in each year during 2013-14 to 2017-18

The university started its journey in 1998 with 35 Study Centers only. As of now, i.e., 2017, the number has increased to 116, registering an average annual growth rate of 234.28% throughout the long span of two decades of its activities. Some more study centers are coming up within a few months.

Table 2



Year	No. Of study centres (BDP+PG)
	(===:==)
2013	98
2014	102
2015	108
2016	109
2010	10)
2017	116

Fig 2. No. of study centres increased over the period since 2013

In the year of its inception (1997-98), eight courses were offered for under graduate programme. Subsequently, the number of courses increased over the years to cater to the needs of the societal demands. Courses under post graduate degree programme and vocational programme were also introduced during 2003-04. During 2005-2015, lot of new and innovative courses/ programmes were launched to accommodate the prospective learners of higher education and to provide skilled workforce. Here it may be mentioned that under the erstwhile Distance Education Council (DEC), the Open Universities were the power to launch/ offer new courses. But after the shifting from DEC to Distance Education Bureau (DEB), the UGC imposes restrictions over the open universities in various areas including launching of new courses/ programmes. In 2016, the number of courses came down to 64 and in 2017 it was 56. Due to UGC's strict direction, the University cannot start a new course/ programme without approval of UGC. UGC is now giving the programme wise approval to each open university in India.

Table-3

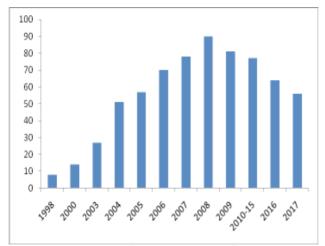


Fig	3.	No.	of a	course	s ii	ıcreased	over
	the	per	iod	since	its	inception	n

Year	Courses
1998	08
2000	14
2003	27
2004	51
2005	57
2006	70
2007	78
2008	90
2009	81
2010-15	77
2016	64
2017	56

2.3 School of Vocational Studies

Open and Distance Learning is increasingly becoming popular because of its flexibility and learner friendly approach, particularly to those who could not get access to the formal education system. Netaji Subhas Open University is not only imparting education as an alternative to the formal system of education i.e. conventional courses, but also in areas such as vocational and non-conventional courses. This is the area where the distance education can be used extensively to provide education that can prepare skilled workforce for the society. The University is providing vocational and non-conventional courses so that the learners can engage themselves in income-generating livelihood. It is not possible for formal education system alone to provide desired number of skilled workers. In such a situation, the School is giving the opportunity to upgrade the skill of existing work force as well as of the fresh graduates by providing seamless vocational education and platter of pioneering courses of non-conventional in nature.

The school offers 19 vocational courses through 42 study centres located throughout the state of West Bengal. All the courses are duly recognized by the University Grants Commission-Distance Education Bureau (UGC-DEB). The annual intake of the vocational courses is around 2000 learners. The School has already developed blended materials of two courses viz. i) Tailoring and Dress Designing and ii) Pre-Primary Teachers' Education Montessori with support of COL-CEMCA. The students of these two programmes are given the printed SLMs and A/V lectures. All the SLMs and the A/V lectures are also available on NSOU OER Repository with the appropriate CC licenses which has been developed with the help of COL-CEMCA.

2.4 Students' Enrollment on the basis of Demographic Distribution

The distribution of the students who are enrolled in Netaji Subhas Open University during the last five years, on the basis of Gender and Caste are described below: - (in percentage)

GENDER DISTRIBUTION OF THE STUDENTS' ENROLLED ON THE BASIS OF THE COURSES TAKEN IN NETAJI SUBHAS OPEN UNIVERSITY: -

The details of the students' actual status on the basis of the courses they are enrolled in, are stated below: -

	BDP MALE FEMALE		PC	Ţ	VOCATIONAL		
			MALE FEMALE MALE FEMALE .		MALE	FEMALE	
2013	63.9%	36.11%	52%	48%	53.4%	46.7%	
2014	64.63%	35.38%	56.3%	43.7%	50.8%	49.2%	
2015	65.33%	34.68%	56.7%	43.2%	45.88%	54.12%	
2016	47.99%	52.01%	51.73%	48.27%	43.24	56.76%	
2017	65.92%	34.08%	52.01%	47.99%	42.12%	57.88%	

Table-4

In the above table, it can be analyzed that the male students are higher in number than the female students in most of the courses except in the year 2016 especially for academic courses. The reason is mainly due to the societal inclination towards educating the male members of a family. However, a little rise in the number of female students in case of the vocational courses may be seen. Though the female participation in ODL programs is less than male participation, the ratio is being increased in vocational courses.

CASTE DISTRIBUTION OF THE STUDENTS' ENROLLED ON THE BASIS OF THE COURSES TAKEN IN NETAJI SUBHAS OPEN UNIVERSITY: -

In this section, the caste distribution of the students of the university on the basis of their programme is stated below: -

This table, unlike the previous one, of gender distribution is continuous and do not have change of parameters within the comparing categories. It represents the increase in ratio in SC's and ST's every year. The lesser representation of certain groups of learners, is again due to the societal inequality that has aroused due to the lack of consciousness created mainly from the dearth of opportunity.

Table-5

	BDP SC ST		PG		VOCATIONAL		
			SC ST		SC	ST	
2013	22.14%	5.1%	19.02%	2.87%	15.13%	5.28%	
2014	22.66%	5.0%	21.98%	3.93%	17.59%	4.93%	
2015	23.64%	3.5%	22.81%	3.93%	17.42%	2.97%	
2016	23.98%	2.88%	23.11%	2.63%	19.69%	7.61%	
2017	22.50%	3.55%	23.98%	2.88%	18.52%	11.86%	

2.5 Role of NSOU in Women Empowerment

Women constitute almost half of the population in the world but the hegemonic masculine ideology made them suffer a lot as they were denied equal opportunities in different parts of the world. The rise of feminist ideas has led to the improvement in women's condition throughout the world, in recent times. In India too, women education and empowerment has been the major preoccupation of both the Government and the Civil Society as it plays a very important role in the development of the country by helping in the development of half of the human resources, but in improving the quality of life at home and outside. An educated woman helps education of their children and can provide a better guidance to them. Educated women can also help in the reduction of infant mortality rate.

The major obstacle lies in the fact that gender discrimination still persists in India and lot more needs to be done in the field of women education in India. The gap in the Male-Female literacy rate is just the simple indicator. According to 2001 Census, the male literacy is more than 75% and the female literacy is just 54.16%. However, according to 2011 Census, with the decadal growth of 9.8%, the male literacy rate rose to 82.14% and female literacy rate to 65.46%.

According to the Country Report of the Government of India, "Empowerment means moving from a weak position to execute power." Women becomes empowered through collective reflections and decision-making. The parameters of empowerment are:

- Building positive image and self-confidence
- Developing ability to think critically
- Building up group cohesion and fostering decision-making and action
- Ensuring equal participation in the process of bringing about social change
- Encouraging group action in order to bring about change in the society
- Providing the means for economic independence

Distance Education has a tremendous impact in women's education and empowerment. Many studies were conducted to find out the factors that limit women's

access to education. It is seen that women's access to education is limited by many factors like social, economic, cultural and geographical factors. Culture, customs and traditions come in the way of access to education for women in many under-developed and developing countries. Even today in the villages and in some orthodox families, people strongly assert that women's place is only at home. Social taboos like safety for girls, abuse, violence etc. prevent women from education. Increasing cost of education during admission to school and colleges prevent parents from sending girls to colleges. In case of remote areas, proper access to schools and colleges are not available too. As girls are not allowed to travel in those areas, they were not given education. Distance Education works like a miracle in promoting education to them. Women tend to join Distance Education system mainly due to the following reasons:

- Flexibility of the system
- Earning while learning
- Early marriage
- Better marriage prospects
- Low fee structure
- Learning at home

The impacts of distance education on women are mainly due to the following five factors: -

- Improved social status
- Enhanced self image
- Gained self confidence
- Earning while learning
- Promotion in jobs

Distance Education is revolution of its kind in the field of education. Breaking the conventional norms and reaching out to the masses for which higher education is a mirage. The distance mode of learning has indeed brought a perceptible change in the lives of millions of students across the globe unlike the earlier times when education was limited only to a few sections of society.

If we look up at the scenario of our own state of West Bengal we will see that the Male-Female Literacy Rate [according to 2011 Census] were 81.69% for males and 66.57% for females with the overall growth of 76.26%. Netaji Subhas Open University, being the sole state-funded Open University, striving for the mission 'To Reach the Unreached' is naturally take the responsibility to educate the women population of the state who do not have proper access to education otherwise. If we see the students' enrolment in terms of female students, we find that Netaji Subhas Open University's contribution is very significant. The female student enrolment is 44.8% which is higher than that of the under graduate degree colleges and conventional universities. The percentage of students in vocational courses from women is also very encouraging because the vocational training gives them an opportunity for self-

employment by which they become economically independent and contribute to their family.

Table 6. Women enrollment in 14500						
	BDP	PG	VOCATIONAL			
2013	36.11%	48%	46.7%			
2014	35.38%	43.7%	49.2%			
2015	34.68%	43.2%	54.12%			
2016	52.01%	48.27%	56.76%			
2017	34.08%	47.99%	57.88%			

Table-6: Women enrolment in NSOU

So, it may be inferred that the establishment of open university like Netaji Subhas Open University helps the women to continue their further studies like Bachelors' Degree Program, PG or Vocational courses. Therefore, the Open University system is giving the opportunity of higher education to the people residing in remote areas and has increased the access of the disadvantaged groups like females.

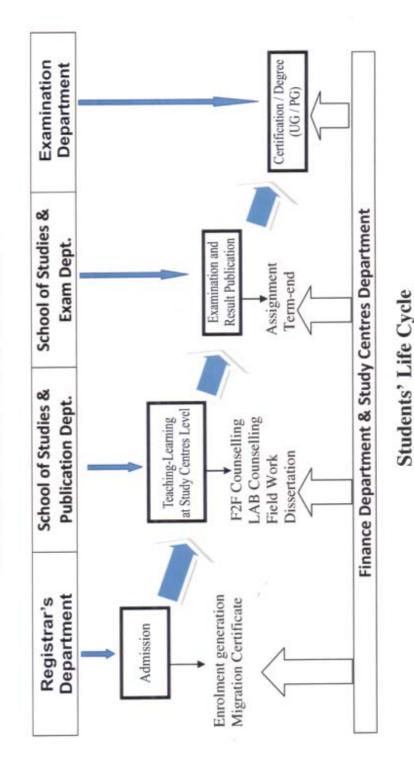
Table-7: Student's Enrollment and No. of Graduates of NSOU (Outcome)

Year	Year-Wise Enrollment	Pass out (Certificate issued)	Cumulative Enrollment
1998-99	236	XX	XX
1999-2000	640	XX	876
2000-01	1,019	XX	1,895
2001-02	1,400	XX	3,295
2002-03	3,482	564	6,213
2003-04	16,619	1005	21,827
2004-05	22,801	2215	42,413
2005-06	39,716	3188	78,941
2006-07	39,883	6307	1,12,517
2007-08	39,885	7605	1,44,797
2008-09	66,881	6658	2,05,020
2009-10	65,048	8364	2,61,704
2010-11	34,775	56647	2,39,832
2011-12	1,612	35737	2,05,707
2012-13	20,683	5372	2,21,018
2013-14	29,383	7296	2,43,105
2014-15	40,203	7533	2,75,775
2015-16	53,942	13091	3,16,626
2016-17	57,280	12,093	3,61813
2017-18	71596	NA	
Total certificat	e issued-1,61,582	XX	

2.6 Students' Life Cycle

The model of the students' life cycle has been developed to understand the flow of activities of the students from admission to certification. If a student faces any problem, he/she may contact the respective department of the university to resolve the problem. The departmental activities have been identified as the specific service to be provided to the students for their satisfaction. The role of finance department and study centre departments are supportive in nature who help other departments to carry out their activities smoothly.

NETAJI SUBHAS OPEN UNIVERSITY



3 Collaborative Project of NSOU-CEMCA

3.1 Impact of CEMCA's contribution

Learners from different parts of West Bengal & other state/countries are able to access Learning Management System (LMS) of the university through NSOU app which is available on play store. Apart from that they can access contents in offline mode by using Micro SD card to access high quality academic content in a technology enabled environment. Using the platform, students from even remote and rural areas of the state will be able to learn online for their diplomas on their smart phones. The students get access to their virtual classroom through their unique login ID and Password within the Student Portal. The entire student portal is also available on a mobile platform.

The table clearly shows that since 2013, the enrolment in both the courses has been increased significantly. It also shows that both the courses are popular among the females than the male students. Since, these are workshop/practical based courses, the intake capacity per centre is fixed. But due to intervention of COL-CEMCA towards the ICT adoption, the enrolment has been increased steadily. During 2014-15, lot of initiatives like upgradation of syllabus, development of e-content, development mobile app had been taken which increased the enrolment in the said two courses. So the joint projects with COL-CEMCA has influenced the student accessibility in the vocational courses.

Courses/ year of admission	2016		5 2015		2014		2013	
	M	F	M	F	M	F	M	F
Diploma in Pre-primary Teachers'								
Education- Montessori	124	456	108	431	142	360	171	390
Tailoring and Dress Designing	233	260	101	243	197	266	108	139

Table-8

Male

■ Female

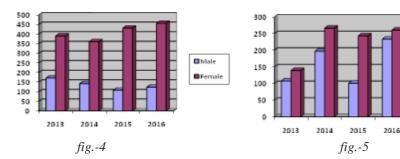


fig.-4: Pre-Primary Teachers' Edn.

fig.-5: Tailoring & Dress Designing

Mobile learning (M-learning) through mobile phones can make use of the learning management system that is already available through internet. Where the internet accessibility is limited, mobile phones can also facilitate the learning process in off line mode through micro SD card. Without restrictions in the hands, the students can now access the learning resources any where in the world where the internet is available. The University launched the M-learning project on pilot basis for its vocational teachers training programme namely Diploma in Pre-Primary Teachers' Education (DPTTE-M) and Advanced Diploma in tailoring and dress designing courses. Since 2013 the enrolment has been steadily increased in the above two courses.

The study shows that almost all the students enrolled in this particular course use mobile phones and majority of these mobile phone have numerous features like pictures, video, games, instant messaging and internet. Even some low-end mobile phones have these features that enable them to be used in education, research, reading etc.

The School of Education (SOE) has also developed the blended materials (SLMs and A/V lectures) on Inclusive Education with the support of COL-CEMCA. The SOE has already launched a certificate course on Inclusive Education.

So far, Netaji Subhas Open University successfully completed the following projects with the Commonwelth Educational Media Centre for Asia, New Delhi.

- (i) Development of Course Materials for Flexible Skill Development (2014-15)
- (ii) OER Initiatives for ICT enabled Programmes of NSOU (2016-17)
- (iii) Vocational Education & Training courses through Mobile Learning: An innovative ODL Approach (2017-18)

To reach-out to more learners with more learner friendly packages, the School undertakes the following activities during the next three year (2017-20) for successful implementation of COL-CEMCA integrated higher education model with the support of CEMCA.

3.2 Objective of the Project (Increase Access and Improve Institutional Capacity for Sustainable Development)

To objectives of the project is to up-skill trainees to get into job market and make them employable with job-ready-skills.

The accomplish this objectives the following activities have been identified.

- 1. Development and delivery of online training programmes through MOOCs.
- 2. Increasing the women and first generation participation in training programmes through outreach programme.
- 3. Enhance capacity of faculty members and trainers for development of quality learning materials (as OER) and online learning facilitation to learners.
- 4. Improvement of learner support system (online support through a dedicated web portal and toll free number etc.)
- 5. Development of a network of prospective employers and linking the learners to the prospective employers through web portal for sustainable development

3.3 Objectives of the Baseline Survey

This study is entirely based on primary data collection. Primary data are raw data which are collected afresh and therefore, are original in character. The tools used for data collection are called data collecting devices or tools. One example of such a tool is questionnaire method which is efficient, realistic and convenient. The present baseline report of NSOU intends to explore the status of infrastructure facilities, teaching-learning process, students' status, learning outcome, students' views on teaching-learning methods, and attitude towards Open Educational Resources as well. Apart from students' attitude other baseline data like male-female ratio, SC/ST ratio are derived over the last three years i.e. between 2015-17, so that a clear picture of NSOU can be demonstrated.

The objectives of the present baseline study are

- To evaluate the Enrolments and Achievements in respect to marginalized sections of the society
- To study the Learning Outcomes of the students of University specially in vocational courses
- To study Students' views with special reference to Teaching-Learning Process, Content and Learning Outcome
- To study Students' Attitude towards Mobile-Learning

3.4 Scope and Focus of the Baseline Survey

The present baseline study is focused on studying the academics and administration of the University. The enrolment status including the number of females students from marginalized sections at various disciplines was studied to analyse the academic background which of the students to understand the reach of the university to various sections of the society.

The analysis of the learning outcomes covers the numbers of students appeared in the final year examination, passed the degree since its inception. Similarly, in terms of course-contents and teaching-learning process, students of NSOU were surveyed to get the overall picture. The attitude of students towards M-learning, ICT access and their ICT skills have been studied for in-depth understanding of students' status and their perception towards present digital culture.

Methodology

The tools and techniques used in the present baseline study included the document analysis, questionnaire for students and attitude scale (5-point scale) for students. For the analysis of Infrastructural Facilities, Enrollment and Achievement, Learning Outcome, etc., the central database of the University has been used. On the other hand, the students' views have been recorded on an offline/ online questionnaire developed on Google form for analyzing their status, ICT skills, course content, learning outcomes, teaching-learning process as well as their attitude towards M-learning. The data was gathered with the sample of 306 students who have responded to the questionnaire.

The data have been analyzed quantitatively by implying statistical measures. The tables and figures are presented for visual presentation of data wherever appropriate. The Data analysis and interpretation is presented further in details.

4 Analysis of Data based on the Baseline Survey

If we talk about the Institutional Learning System, we would see that many new methods have been developed to cope up with the practical needs of the society in terms of demands for higher education. The Open and Distance Learning system is one of them. It is usually assumed that, the learners in the ODL system are different from other system due to the institutional and structural uniqueness of this system. To understand the characteristics of these learners, both social and economic, we need to analyze data and have to conclude about their socio-economic status. We undertook the questionnaire survey method for the baseline survey results. The questionnaire was primarily divided into four sections, along with sub-sections. There were bilingual options, both in English and Bengali so that the medium of instructions of the students do not become a hurdle in the way of obtaining true results. The data were collected through online and offline mode. The questionnaire starts with the learners' name along with program, year and subject of enrollment and the name of the Study Centre at which he/she is enrolled. This column is given to segregate different student on the basis of their respective programs i.e., BDP, PG and Vocational and analyze their data accordingly. The present baseline study intends to survey for students of NSOU with special reference to enrolment, teaching-learning process, content, learning outcome and their attitude towards ICT support and Mobile learning.

The baseline survey data analysis is classified into following sections:

- Demographic information and educational qualification of the students
- Course content
- Teaching-learning process
- Learning outcome
- ICT skills of students (accessibility)
- Evaluation process
- Attitude towards M-learning

The last section of the questionnaire deals with the open-ended descriptive type question, where the respondents were given the freedom to write in their own way regarding the functioning of the University. They were asked to provide suggestions

regarding the counselling sessions and the academic counsellors, student support services along with other specific comments.

A. PERSONAL & ENROLMENT DETAILS

1. Programme of Study at NSOU

The figure-6 shows that, out of 306 respondents, 51% from post graduate degree programme, 8% from bachelor degree programme and 41% from Vocational courses. Though we invited responses from all students through printed questionnaire and Google form, we received the responses majority from the post graduate students.

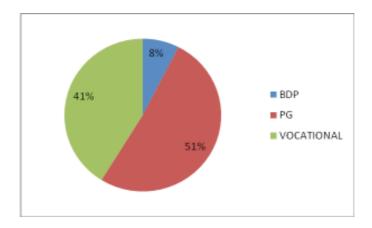


Fig.-6: Enrollment details

2. Gender

Out of 306 respondents, 52% represents are female and 48% represents are male as per fig.-7. Under this survey female respondents are more than that of male respondents. It is evident that female students are more serious about the filling up of survey questionnaire.

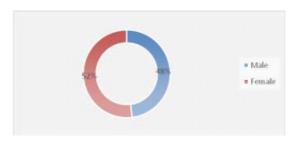


fig.-7: Gender of details

3. Cast

The fig.-8 shows the cast distribution among the respondents. Out of 306 respondents, 18.30% belongs to SC and 2.9% belongs to ST category. University's overall percentage of SC and ST are about 20% and 3% respectively. Therefore the sample represents cast distribution more or less same with the overall enrolment of the university.

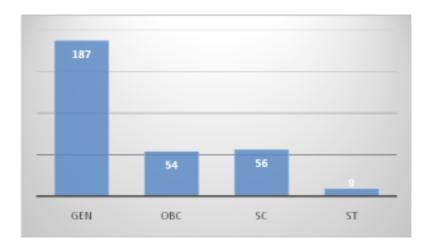


fig.-8 : Cast

4. Age

This section is very interesting. Out of total respondents 51% (156 students) belongs to post graduate level, 41% (125 students) study vocational courses and 8% study bachelor degree programme. The figure shows that 89% of the respondents belong to the age group of 18-35 years and 10% belong to 36-55 years. So it may be said that younger generations are coming to take the ODL programmes.

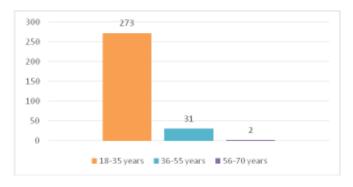


fig.-9 : Age

B. EDUCATIONAL QUALIFICATION

1. Educational Qualification

Out of 306 respondents, most of them are studying post graduate degree programme and next group is studying vocational courses. Naturally their qualification is graduate under 10+2+3 pattern.

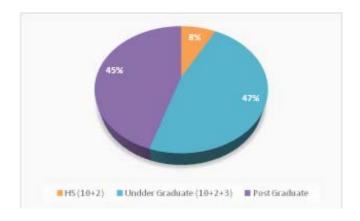


fig.-10: Educational Qualification

2. Are you employed?

In the present survey, who submitted their responses, 41% is working and 58% is unemployed. The working students want to increase their skills and degree for their mobility in their workplace. The unemployed group is utilizing their time either to increase their knowledge or degree as most of them is belong to the age group of 18-35 years.

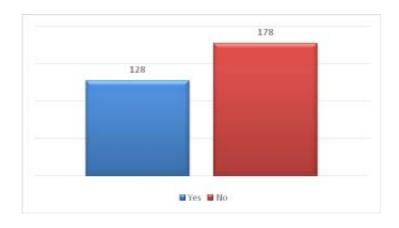


fig.-11: Employment status

3. Employment type

Out of 306 respondents , only 41% is working. Out of this 52% is working in private sector, 27% and 21% are working in the statutory bodies and government sectors respectively.

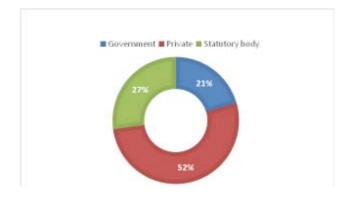


fig.-12 : Employment type

4. Reason for pursuing education through distance mode

Here the respondents were asked to state why they are studying under ODL mode. The responses are mixed. Majority of the respondents states that they have taken admission to increase skills and competencies. The next highest response was time constrains.

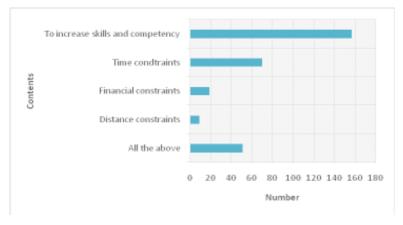


fig.-13: Reasons for taking DE

C. ENROLMENT DETAILS AND INFORMATION ON SLMs

In this section, the students were asked to state about the timely receipts of enrolment, SLMs and appearing in the term end examinations.

1. Did you receive your enrolment no. in time

Usually, in ODL system huge number of students take admission in each academic session. For example about 71,000 students were admitted in 2017 session. In the present study 92% of the respondents received their enrolment in time. This is a good system that the university has developed for online admission.

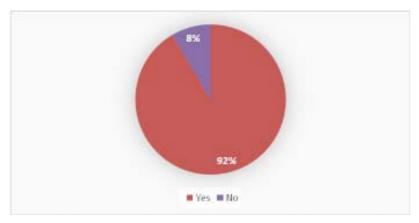


fig.-14: Receiving enrolment No.

2. Are the study materials duly self-explanatory and rigorous?

The SLMs are backbone of any ODL institute. Special care is taken to produce the SLMs in the University. The majority of respondents agreed that the SLMs of the university are self-explanatory and rigorous.

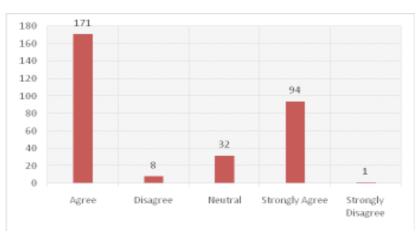


fig.-15 : About SLM

3. Are the study materials voluminous in nature?

In case of ODL institutes, the SLMs are produced in modular form to carry it easily so that they can study during their travel and at work place. In NSOU, to make the SLMs cost effective, all the modules are published in one volume and becomes voluminous. That is why majority of the respondents stated that the study materials are voluminous in nature.

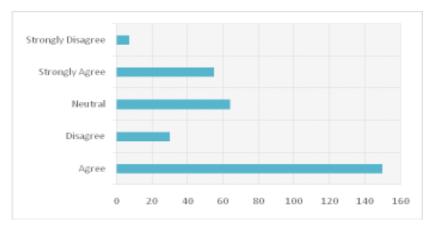


fig.-16: SLM-Voluminous

4. Are the study materials learner-friendly?

The SLMs are developed in such a way that it follows a structured format starting from the objectives and ending with the summary in each unit. Each unit starts with objective and learning outcome and next unit starts with a linkage of the previous unit. It helps the students understand the contents very easily. That is why majority of the respondents agreed that SLMs are learner friendly.

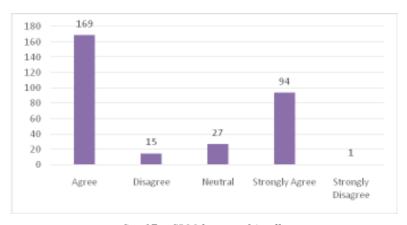


fig.-17: SLM-learner friendly

5. Is the language used in the study materials easy to understand?

Since the SLMs are written in lucid language by the experts, these are easy to understand for the students. The figure also supports this fact.

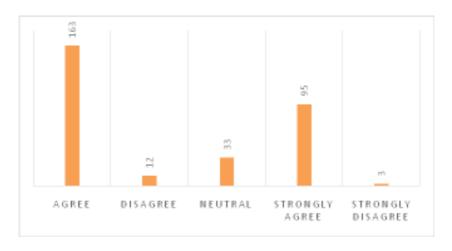


fig.-18: SLM language

6. Does the study material contains sufficient illustrations and worked out examples?

The respondents agreed that the SLMs have sufficient illustration and examples.

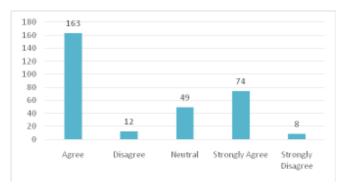


fig.-19: SLM-Illustration

D. TEACHING – LEARNING PROCESS

In this section, the students were asked to provide information on teaching-learning process viz. timely receiving of SLMs, learning pace, behaviour of the counselors etc.

1. The study material is received by the learners before counseling?

The University sends SLMs to the admitted students through the study centres.

It is challenging task on the part of the University to dispatch the SLMs to all the students. Generally the process starts when the last date of admission is over. The study centres department starts in dispatching the course materials after receiving the data base from the registrar department. It takes some time. That is why, all the students may not get their SLMs before commencement of their counseling at the study centre. In the present study, only 56% of the total respondents received SLMs before commencement of the counseling.

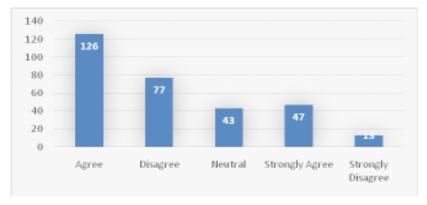


fig.-20: Receiving SLM

2. The learner is allowed to learn at his/her own pace

The course materials are written in a lucid language and are presented in a structured form. The counselling sessions are arranged in the respective study centre for vocational courses and BDP courses and for post graduate degree courses counseling sessions are held at some selected study centres where duly qualified teachers are engaged to take the sessions. These steps help the learners learn at his/her own pace. About 75% of the respondents agree that they have learn at their own pace. (fig.21)

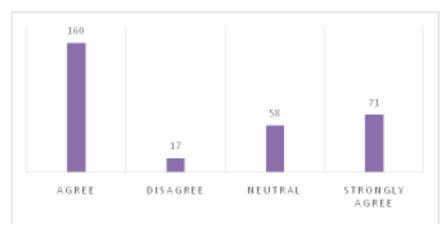


fig.-21

3. Counselling sessions at the study centre are beneficial

As the counseling sessions are conducted by the duly qualified teachers, 85% respondents are happy with the counseling session. (fig. 22)

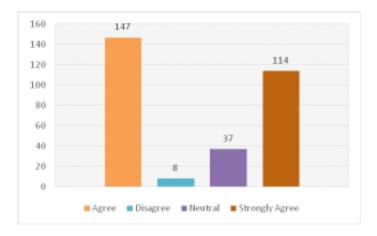


fig.-22

4. The interaction of the Counsellor with the learners is interesting

The counseling sessions / personal contact programmes are basically interactive sessions and doubt clearing sessions. The students and teachers are encouraged to start a debate on any topic on the subject, so that every student can participate. As per the fig.-23 shows that about 80% of the respondents agree that the counseling sessions are interesting.

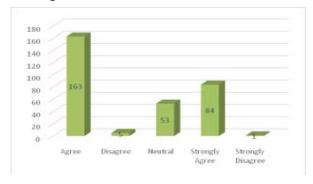


fig.-23

5. The counsellor is punctual in attending the class

The schedule of the counseling sessions are communicated well before the sessions to the academic counsellors and the learners. The academic counselors are very serious and punctual in their work. Only 04% of the respondents reported that the counselors are not punctual in their time. (fig. 24)

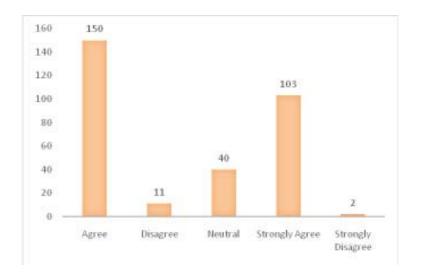


fig.-24

6. Online lectures are preferred over attending Counselling sessions

The University started to offer online lecture since 2014-15 through its LMS for all the vocational courses and some selected PG courses. The A/V lectures are recorded by the eminent teachers which are uploaded on the LMS. The registered students can access these pre-recorded lectures through user ID and password. The result is very encouraging. 58% of the respondents prefer the online lecture. It saves their time of travel as well as they can have learning experience any time at either their home or their work place. (fig. 25)

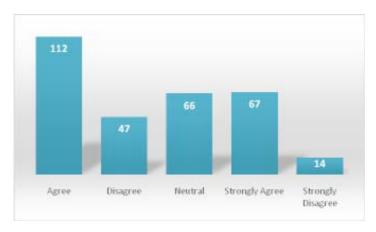


fig.-25

7. In case of Practical classes, the workshop sessions are conducted to the full satisfaction of the learners

This question was asked specially to the students of vocational and practical based courses. About 80% of the respondents are satisfied with their practical sessions. (fig. 26)

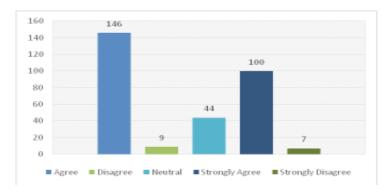


fig.-26

E. LEARNING OUTCOMES

1. Course unit clearly states learning outcomes

The entire course is divided into papers. Each paper is divided into modules and units. Each unit starts with objective and introduction of the (content/subject). At the beginning of each unit, it is specifically written that what the students will learn and the possible outcome. About 84% of the respondents agree that the learning outcome is correctly described in the course unit. (fig. 27)

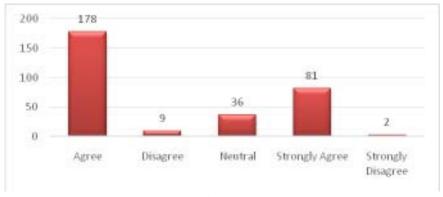


fig.-27

2. Course unit description clearly state learning objectives

As already said, each unit starts with clear objective of the text. The fig.-28 shows, about 87% of the respondents state that the course unit describes the learning objectives clearly.

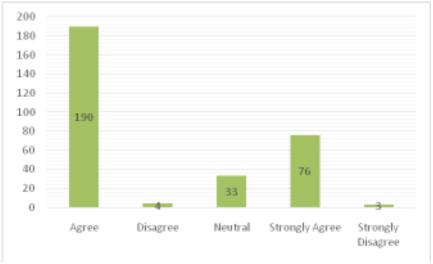


fig.-28

3. Assignments are based on learning outcomes

The question papers of both the assignments and term-end examination are set only on the basis of the syllabus. The paper setters follow the university instructions and take due care in setting the question papers. Only 1.30% respondents feel that assignments are not based on the learning outcomes / syllabus. (fig. 29)

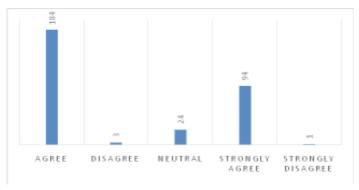


fig.-29

F. ATTITUDE TOWARDS ICT & MOBILE LEARNING

This section is dedicated to assess the students' skill in ICT and their attitude towards ICT support services and M-learning. The University tries to reach the students directly through its ICT support services e.g. SMS, interactive web portal etc.

1. Accessibility of ICT support

The fig.-30 shows that all the respondents have accessibility of ICT support. They are taking advantages of ICT to get the information and lectures through LMS with their registered mobile number.

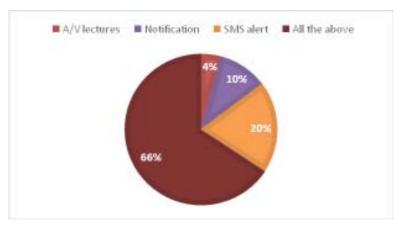


fig.-30

2. Accessed SLMs on NSOU website

The University has uploaded the SLMs on its website which can be accessed by any students and anywhere the student is. This initiative helps the students to get the course materials at the very moment when they take admission. It facilitates them instant access to course materials. In the present study, about 82% respondents have accessed online SLMs. (fig. 31)

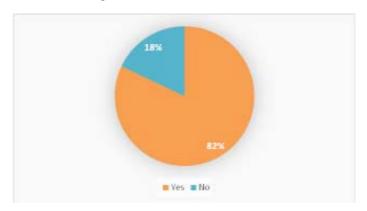


fig.-31

3. Accessed SLMs through NSOU OER Repository

NSOU OER repository has been created in the year 2016-17 to make available all the academic resources free of cost. In the first phase, the course materials of ICT enabled courses are being uploaded in the OER repository. Though all the students are not aware of this repository, 70% of the respondents accessed SLMs through the repository. (fig. 32)

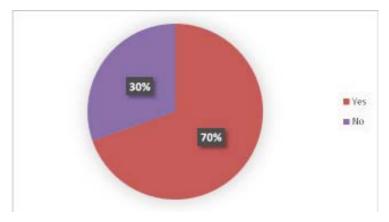


fig.-32

4. Do you have an internet accessibility at your home

The ICT support depends on the availability of internet connection. The fig.33 shows that about 80% of the respondents access internet at their home.

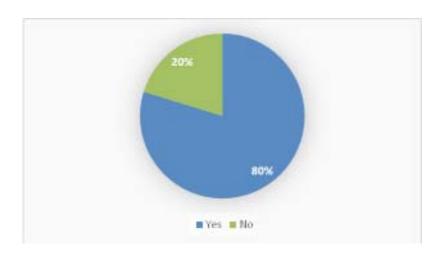


fig.-33

5. Do you have personal PC/Laptop/Mobile

About 82% of the respondents access the SLMs through NSOU website. The fig. 34 shows that 92% of the respondents have either PC or Laptop or smart phone. Through this device they are accessing the ICT support and SLMs etc.

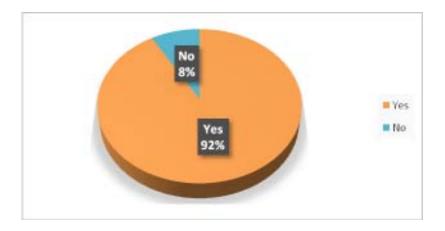


fig.-34

6. Do your mobile phone enriching your learning process?

Mobile phone facilitates personalized learning. When ever required one can access academic content through their mobile phone having internet connection. 88% of the respondents agree that mobile phone enriches their learning process.(fig. 35)

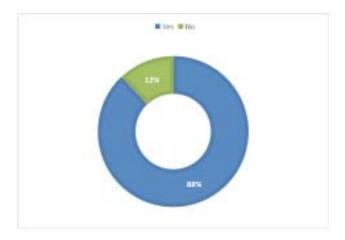


fig.-35

7. Can you download figure/charts/tables from the web using a mobile device

79% of the respondents can download figures / tables/ charts/ tables from their mobile devices. (fig. 36)

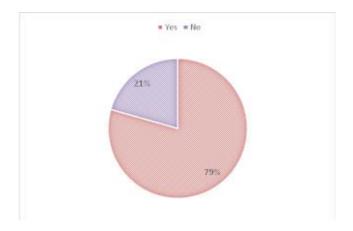


fig.-36

8. Can you log on to the university website and other websites on your mobile device

The students are very technology savvy. In the present study, according to the fig. 37 about 79% of the respondents can log on to the university website and other website on their mobile devices.

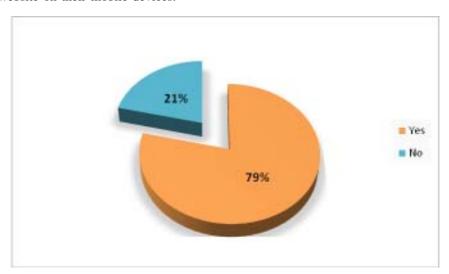


fig.-37

9. Do the audio/ video lectures enhance your learning skill?

The fig.-38 shows that 87% of the respondent agree that the A/V lectures enhance their learning skills.

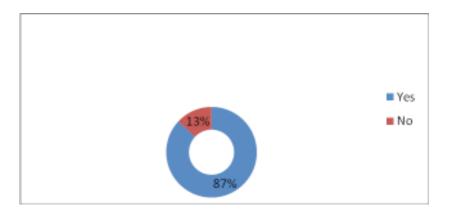


fig.-38

10. Are audio/ video lectures downloadable?

The fig.-39 shows that 63% of the respondents have downloaded the A/V lectures successfully. It helps them learn even offline mode.

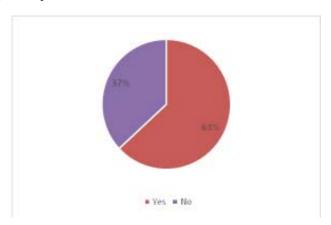


fig.-39

11. Is SD card distributed by the NSOU consisting Audio/ video lectures effective for teaching

Though the University uses ICT extensively it is dependent on internet connectivity. Sometimes, the poor internet connectivity may affect the ICT support. To overcome this situation, the university provides SD card containing A/V lectures

to facilitate offline learning. 71% of the respondents have accessed the A/V lectures through SD cards on their mobile devices and they agree that SD card has a positive effect on teaching-learning process.

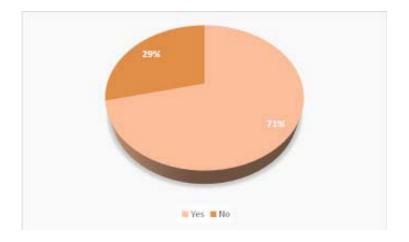


fig.-40

12. Are you acquainted with searching/ browsing web, setting bookmarks, and downloading files?

79% of the respondents are acquainted with searching/ browsing web, setting bookmarks, and downloading files. From the fig.-41 it may be said that the students are expert in the ICT environment.

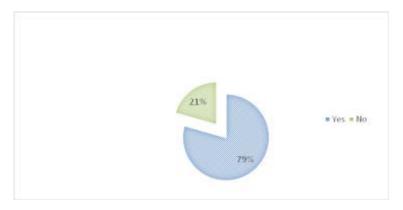


fig.-41

13. Do you attend Face to Face classroom teaching regularly?

The attendance in the counseling sessions/ personal contact programme is not mandatory for the students. We encourage them to attend these PCPs for their benefit. These sessions give them opportunities to interact with the teachers as well as with their peers. The fig.-42 shows, 80% respondents regularly attend the face to face classroom teaching.

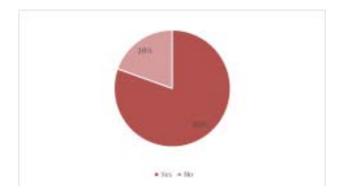


fig.-42

G. EVALUATION PROCESS

1. Do you know the evaluation system of NSOU?

In the ODL system, there are two components of the examination system. One is formative (home assignment) and other is summative (term-end examination). Both have weightage. The final gradation of a particular student is calculated by taking the weightage of the both the examination. The students are well informed about the university examination system. The fig.-43 also shows 90% of the respondents are well aware of the examination system of the university.

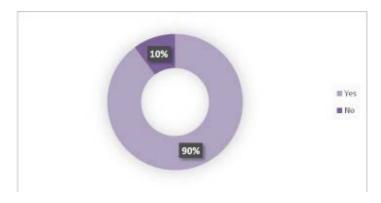


fig.-43

2. How do you receive Assignment?

The home assignment carries marks from 20% to 30% depending on the prtogrammes. The assignments are made available to the students at the study centrs and through the website. The students can take the copy of the assignments from study centres (48%), from the website (18%) and some of them take from both the sources. (fig. 44)

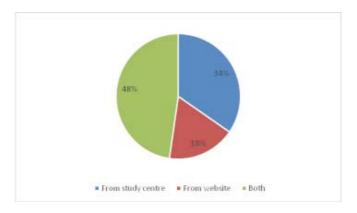


fig.-44

3. Do you need help from outside the study centre to prepare your assignment?

Generally the assignments are given to the students during the counselling sessions. Sometimes the last date of submission of assignments falls before the commencement of the counselling session for a particular paper. In such cases, the students have to take assistance from outside the study centres. In the present study 63% of the respondents (51% PG, 41% Vocational) took help from outside the study centre for the preparation of their assignments. (fig. 45)

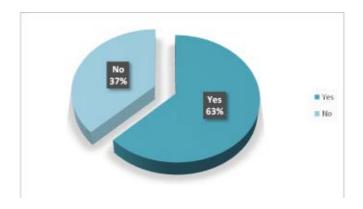


fig.-45

4. Do you get back your evaluated assignment papers from your study centre?

In ODL system, the evaluated assignment papers are returned to the students with tutors' comments. The objective of such initiative is to help the students in improving their answers. The fig.-46, shows 91% of the respondents get back their evaluated assignment papers from their study centres.

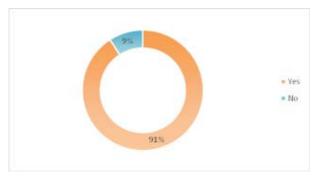


fig.-46

5. Is the Examination Centre far from your study centre?

The university does not allow home centre for the final examination. Every possible steps are taken by the university to allot examination centre nearest to the study centres where they take admission. The fig.-47, shows 53% of the respondents agree that the examination centre is far from their study cnetres.

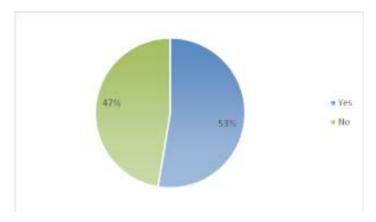


fig.-47

5 Summary of the survey result

5.1 General information about the Respondents

- (i) Through offline and google form the respondents submitted the questionnaire. The survey was conducted for two months. Out of 306 respondents 51% was from PG courses and 41% was from vocational courses. 8% was from BDP courses.
- (ii) Among the 306 of surveyed students, 52% was female students and 58% was unemployed.
- (iii) It is interesting to state that 89% of the students belong to the age group of 18-35 years and 10% belongs to the age group of 36-55 years. It may be inferred that ODL programmes are becoming popular among the young people as an alternative option of higher education.
- (iv) As per central database of the university, the enrolment of disadvantaged group is more or less same with the surveyed students. In the present survey SC is 18.30% and ST is 2.9% which are 20-22% and 3% respectively of central database in respect of students enrolled in all courses.
- (v) A mixed response has been received from the surveyed students who have selected the ODL programme for various reasons viz. skill and competency enhancement, distance constraints, time constraints, financial constraints etc.
- (vi) In terms of getting enrolment number in time, most of the students positively agreed that they receive their enrolment number in time.

5.2 ICT skills

- (i) Among, 306 (respondents) majority of them get the relevant information and updates from the university website.
- (ii) The students can download the notice and other related information from the university website.
- (iii) Majority of the students (82%) can access the SLMs through the LMS and NSOU OER repository.
- (iv) Majority of the students (71%) agree that SD card containing A/V lectures can contribute effective learning.
- (v) The students can access and download their assignments through the website.

5.3 Course-Contents

- (i) The students responded positively that the language used in the course materials are easy to understand and comprehensible.
- (ii) Besides the print quality and language, the SLM is self-explanatory, rigorous properly organized with sufficient illustrations and hands on examples.
- (iii) The students also reported that the study materials are voluminous in nature.

5.4 Teaching-Learning Process

- Majority of the students get their SLMs before commencement of counselling sessions.
- (ii) According to the survey, students reported that they are allowed to learn at their own space.
- (iii) According to the students, the study centre is cordial, sympathetic and helpful for their teaching learning process.
- (iv) In terms of counselling provided by the university, students expressed that counselling sessions are beneficial. The counsellors are punctual to conduct the classes and their interaction with learner is considered to be good and helpful.
- (v) Students also revealed that they usually receive the study materials before the counselling sessions which can be utilized during the session.
- (vi) The students expressed that the laboratory/ workshop sessions are satisfactory.
- (vii) Some of the students also need the help besides the counselling sessions for preparation of assignments.

5.5 Students' Attitude towards Mobile-Learning

- (i) As per the survey, the respondents have expressed positive attitude towards M-learning.
- (ii) They opined that their mobile device can help them to attain more ideas in learning and the audio-video lectures are more suitable for distance learners.
- (iii) Furthermore, these audio-video lectures facilitates personalized learning as well.
- (iv) They reported positively that the features such as graphics, pictures, and diagrams enhance the learning, therefore the mobile devices can be helpful for learning.
- (v) For them, the audio-video contents and lectures are more useful and relevant for present generation of digital learners as mobile technology enhances their desire to learn without time and space constraints.
- (vi) Students agreed that they can interact with peers through mobile devices for discussion and learning.

5.6 Learning Outcomes

- (i) There are about 13,091 and 12,093 students of Bachelor Degree Programme and Post Graduate Degree Programme, Vocational programme who have been awarded the degree during the last two years 2015-16 and 2016-17 respectively.
- (ii) Among the 306 surveyed students, most of them reported that the assignments given as a part of program are based on learning outcomes.
- (iii) The respondents reported positively that each unit of the course clearly describes the learning outcomes and has also a clear statement of expectations from the students.
- (iv) Additionally, students expressed positive response that learning outcomes are also mentioned in the SLMs of different programmes and students reported that the specified workload on students are appropriate to achieve the mentioned learning outcomes.

6 Challenges

The biggest challenge of ODL system is to assemble the students in one place. Under this system, huge number of students can pursue their study. But they hardly come to their study centres except certain situations like counselling sessions, submission of assignment, submission the examination form etc. The survey like this, is very difficult to conduct among the students of ODL institutions. To overcome this challenge we developed the questionnaire in online and offline mode. The printed questionnaires were distributed to the students of Post Graduate and Vocational Courses and the online questionnaire was made available through Google Form. The online response was not satisfactory, out of 306 respondents, we received only 72 responses through Google Form. The results of the survey have been presented here considering both the online and offline responses received from the students. In most of the cases the Coordinator of the respective study centre was repeatedly requested to submit the questionnaire. Mostly, the questionnaire were filled up during the personal contact programmes (PCP) held at the study centres to get mixed group of students i.e. both of rural and urban study centres. Another challenge we faced was time constraints. Within a very limited period of time (approximately 45 days) the baseline survey was conducted.

The focus of the survey was to i) assess the ICT skills of the students, ii) know the attitude of the students' towards M-learning, iii) Students' attitude to wards the ICT support including NSOU OER repository which is being provided by the University etc. for the benefit of the students. The result may be different, if the number of respondents would increase.

7 Recommendations and Conclusion

7.1 Recommendation

The university is doing a remarkable job in the area of skill development programmes specially in the rural areas where there is a scope for youth to take training in a particular field. Now they realized that only vocational training can make them employable and job ready for the job market. The university offers various types of vocational training which meets the need of the employers' new skills set and competency. After successful completion of the training programme, one can easily find a job in the industry or can develop his own business. As per survey, the students are not aware of the services which the university provides to its students. Lots of initiatives have been taken by the university to reach the students with the help of ICT. But most of the students are not aware and not getting the benefits of the ICT support. The university may take appropriate steps to inform the students about its latest initiatives like ICT support, A/V lectures, SD card, (instant messaging) etc.

7.2 Conclusion

The present baseline study has explored the academic and other areas to draw a clear picture of the university. The university provides all basic infrastructural facilities to its learners for quality education and training. The findings of the baseline survey reflect that though the study materials are voluminous in nature, its content is easy to understand with acceptable standards of quality and presentation as per ODL norms. At the same time, the SLMs contain the learning outcomes and objectives at each course unit. Moreover, the university is keen to support through ICT at various level to reach the mass. Along with internet infrastructure, it facilitates learners with e-Learning, OER, and other audio-video resources. Interestingly, majority of the students receive these academic contents and information from ICT platforms of the university website and SMS alert on their mobile phones. The results indicate that the university is using technology to contact its students directly. In terms of students'

attitude towards M-learning, it was reported that they are comfortable in using mobile and computer devices for surfing internet and websites, downloading resources including software, using hyperlink, creating bookmarks etc. The positive attitude of students are useful as a reflection of implementing ICT related policy and initiatives by NSOU in a positive direction. The University may also address some of the issues in respect of which poor responses have been received viz. uploading more A/V lectures, course materials on the LMS as well as on OER repository so that they can access the academic resources/ content any where at any time. These steps may bring the education to the doorsteps of the students.

Appendix : Questionnaire



School of Vocational Studies Netaji Subhas Open University

(Established by WB Act (XIX) of 1997, Recognized by UGC)

Baseline Study with special reference to enrolment, teaching-learning process, content and learning outcome

1	PER	RSONAL & ENROLLMENT DETAILS						
	1.1	Name of the Study Centre (পাঠকেন্দ্রের নাম)						
	1.2	(a) Subject: (বিষয়)	(b) Program: BDP / PG / Vocation				PG / Vocational	
	1.3	Enrollment No: (নিবন্ধক নম্বর)						
	1.4	Name (নাম)						
	1.5	Gender (লিঙ্গ)	Male (পুরুষ) Fer		male (স্ত্রী)	Others (অন্যান্য)		
	1.6	Religion (ধর্ম)						
	1.7	Cast (জাতি)						
	1.8	Age (বয়স)	18-35	36-	55	56-70	71-Above	
	1.9	Marital Status (বৈবাহিক)	Married (বিবাহিত)				arried বাহিত)	
2	EDU	CATION QUALIFIC	ATION					
	2.1	H.S. (উচ্চ মাধ্যমিক)						
	2.2	Graduation (স্নাতক)						
	2.3	P.G.(M.A., M.SC.,						
		M.COM) (স্নাতকোত্তর)						

		Current status:	Yes/(হাঁ)	No/(না)			
		Employed/unemployed If yes, please mention					
		the type: (বর্তমান অবস্থা ঃ চাকরীজীবি/					
		(বত্মান অবস্থা ঃ চাকরাজাব/ চাকরীজীবি নয়)	Employment type:				
		যদি চাকরীজীবি হন তাহলে	Government Service				
		চাকরীর প্রকার উল্লেখ করুন।	(সরকারী চাকরী)				
			Private service				
			(বে-সরকারী চাকরী) Business				
			(ব্যাবসা)				
			Agriculture				
			(কৃষি) Others				
			(অন্যান্য)				
		D					
		Reason for pursuing education through distance mode:					
		(দূরশিক্ষা পাঠক্রমে অন্তর্ভুক্তির কারণ) :					
		To increase job skills (কাজের দক্ষতা ও নিজেকে উন্নতি করার লক্ষ্যে)					
		Time constraint (সময়ের কারণে)					
		Financial constraint (আর্থিক কারণে)					
		Distance constraint (দূরত্বজনিত কারণে)					
		Others (অন্যান্য কারণে)					
3	ENF	ROLLMENT DETAILS (नि	নবন্ধন নম্বরের বিশদ বিবরণ) :				
	3.1	Did you receive your enrol	lment number in time?				
		(আপনি সময় মতো আপনার নিবন্ধন নম্বরটি পেয়েছিলেন?)					
	3.2	In how many term end examinations you have appeared for?					
		(কতগুলি বার্ষিক পরীক্ষায় উপস্থিত ছিলেন?)					
	3.3	In how many papers you have appeared for?					
		(কতগুলি পরীক্ষায় বিষয়ভিত্তিক পত্রে আপনি উপস্থিত ছিলেন?)					

$\overline{}$							
			Strongly	Agree	Neutral	Disagree	
		mark)	agree				disagree
		(যেকোন একটি নির্বাচন করুন টিক	(দৃঢ়ভাবে	(সম্মত)	(ানরপেক্ষ)	(অ-সম্মত)	
		(✔) চিহ্নের সাহায্যে)	সম্মত)				অ-সম্মত)
		Are the study materials duly		1			
		self-explanatory and rigorous? (শিক্ষার্থীর ব্যবহারার্থে পাঠ উপকরণগুলির		! 			
		প্রস্তুতিকরণ যথোপযুক্ত উদ্ভাবনী ও বিশদপূর্ণ।)					
		Are the study materials voluminous					
		in nature?					
		(পাঠ উপকরণগুলি প্রকৃতভাবেই কি অনেক বেশী ব্যাপ্ত?)		۱ ۱			
		·	 	!		\vdash	
		Are the study materials learner-friendly?		۱ ۱			
		পোঠ উপকরণগুলি কি শিক্ষার্থীর অনুকূলে?)		1			
		Is the language used in the study					
		materials easy to understand?		1			
		(পাঠ উপকরণগুলির মধ্যে ব্যবহৃত ভাষা সহজ ও বোধগম্য?)		۱ ۱			
		,		L	<u> </u>		
		Are the ideas of different concepts properly organized?		۱ ۱			
		সিত্তি প্রায়ের প্রেয়ার বিষয় ভিত্তিক ধারণা		۱ ۱			
		সমুহ সুবিন্যাসভাবে সম্পৃক্ত?)		1			
		Does the study material contain					
		sufficient illustrations and worked		۱ ۱			
		out examples? (পাঠ উপকরণগুলির বিষয়বস্তু সঠিক দৃষ্টান্ত		۱ ۱			
		ও উদাহরণ সহকারে আলোচ্য?)		۱ ۱			
TI	EACE	HING-LEARNING PROCESS (শিক্ষা-	<u>শিক্ষ</u> ণ ও	<u>।</u> ক্লিকি)		<u> </u>	
H	DACI		. 1457	. 411 (
		The study material is received by the learners before counseling?		۱ ۱			
		(শিক্ষার্থী কী কাউন্সেলিং এর পূর্বেই পাঠ		۱ ۱			
		উপকরণগুলি হাতে পেয়েছেন?)					
		The learner allowed to learn at					
		his/her own pace.		۱ ۱			
		(শিক্ষা পদ্ধতি শিক্ষার্থীর নিজ সুবিধা অনুযায়ী গ্রহণ করতে পারে।)		۱ ۱			
		`					
		The study center cordial, sympathetic and helpful?		۱ ۱			
		(নির্ধারিত পাঠকেন্দ্র কী আন্তরিক		۱ ۱			
Ш		সহানুভূতিশীল এবং সাহায্যকারী?					

	Counseling sessions at the study center are beneficial. (পাঠকেন্দ্রের কাউন্সেলিং প্রক্রিয়াগুলি শিক্ষার্থীর পক্ষে লাভদায়ক।)			
	The interaction of the Counselor with the learners is satisfactory. (শিক্ষার্থীও কাউন্সেলর বিষয়ভিত্তিক পারস্পরিক আদান-প্রদানের মান কেমন।)			
	The counselor is punctual in attending the class. (সময়মতো কাউন্সিলার উপস্থিত থাকে।)			
	Online lectures are preferred over attending Counseling sessions. (কাউন্সেলিং সেশনের তুলনায় অনলাইন লেকচার অগ্রাধিকার পায়।)			
	In case of Practical classes, the workshop sessions are conducted to the full satisfaction of the learners. (প্র্যাকটিকাল ক্লাস ও কর্মশালাগুলি কি শিক্ষার্থীর জন্য সম্ভোষজনক।)			
	Reference books are required in order to supplement your study material. (পাঠ্য উপকরণগুলির সঙ্গে সহযোগী বই-এর প্রয়োজন আছে।)			
LEAR	NING OUTCOMES (শিক্ষণের ফলাফল)			
	Course unit description clearly state learning outcomes. (Course unitগুলির বিন্যান্তকরণ শিক্ষণের ফলাফলকে স্বচ্ছভাবে নির্দেশায়িত করে।)			
	Course unit description clearly state learning objectives. (শিক্ষার উদ্দেশ্যে Course unit-এর বিন্যাস দ্বারা সঠিকভাবে ব্যাক্ত।)			
	Assignments are based on learning outcomes? (অনুশীলন পত্রগুলি শিক্ষণের ফলাফল অনুযায়ী তৈরি?)			

4.	l	TTUDE TOWARDS ICT AND M েও MOBILE থেকে শিক্ষাগ্রহণের মনো		\G		
	4.1	Accessibility of ICT Supports offered by University : (বিশ্ববিদ্যালয় কর্তৃক প্রস্তাবিত ICT সুবিধাসমূহ) :				
		SMS alerts	Yes/(খাঁ)	No/(না)		
		A/V Lectures	Yes/(হাঁ)	No/(না)		
		Notifications	Yes/(হাঁ)	No/(না)		
	4.2	Administrative supports	Yes/(হাঁ)	No/(না)		
	4.3	Academic Supports Study Materials (through University website)	Yes/(एँ ज़)	No/(না)		
		Lab based Practices	Yes/(হাঁ)	No/(না)		
	4.4	Accessibility of NSOU-OER (Open Educational Resource) Repository	Yes/(হুঁগ্ৰ)	No/(না)		
		Accessibility of NSOU Library	Yes/(হাঁ)	No/(না)		
	4.5	Students Accessibility (শিক্ষার্থীর আ	ভগম্যতা) :			
		Do you have an internet accessibility at your home? আপনার বাড়িতে নিজম্ব ইন্টারনেট আছে?	Yes/(হাঁ)	No/(না)		
		Do you have personal PC/Laptop/ Mobile? আপনার নিজস্ব কম্পিউটার/ল্যাপটপ/ মোবাইল আছে?	on the basis of its (যদি থাকে তবে এর সিস্টেম আপনার কা মধ্যে আছে?)	will be preferable s reliability. মধ্যে কোন্ অপারেটিং		
			Windows Linux Mac OS			

Does your mobile phone enrich your learning process? (আপনার মোবাইল ফোনটি কী আপনার শিক্ষা পদ্ধতিকে উৎকর্ষতা দান করে?)	Yes/(दाँ)	No/(না)
Can you download figure/ charts/tables from the web using a mobile device? (আপনি আপনার মোবাইল থেকে চিত্র/চার্ট/ সারণী ডাউনলাভ করতে পারেন?)	Yes/(दाँ)	No/(না)
Can you log on to the university website and other websites on your mobile device? (আপনি কী আপনার মোবাইল ফোন থেকে বিশ্ববিদ্যালয়ের ওয়েবসাইট ও অন্যান্য ওয়েবসাইট-এ লগ অন করতে পারেন?)	Yes/(इँगो)	No/(না)
Are audio/ video lectures enhancing your learning skill at Open & distance learning environment? (মৃক্ত শিক্ষা পদ্ধতিতে অডিও/ভিডিও লেকচার কি আপনার শিক্ষা দক্ষতাকে উৎকর্যতা দান করে?)	Yes/(ஜো)	No/(না)
Are audio/ video lectures downloadable? (অডিও/ভিডিও বক্তৃতা কি ডাউনলোড যোগ্য?)	Yes/(হাঁ)	No/(না)
Is SD card distributed by the NSOU consisting Audio/ video lectures effective for teaching-learning environment? (এস. ডি. কার্ডের মধ্যে অডিও/ভিডিও বক্তব্য সরবরাহ করার ফলে সেই বক্তব্যগুলি আপনার শিক্ষণের পক্ষে কি কার্যকরী?)	Yes/(यूँग)	No/(না)
Are you acquainted with searching/ browsing web, setting bookmarks, and downloading files? (আপনি কম্পিউটার ইন্টারনেটের মাধ্যম থেকে অনুসন্ধান, ওয়েব ব্রাউসিং, বুকমার্ক সেটিং এবং ফাইল ডাউনলোডের সঙ্গে পরিচিত?	Yes/(दाँ)	No/(না)
Are you acquainted with software installation and configuration on your computer? (আপনি আপনার কম্পিউটারে সফটওয়্যার ইনস্টল এবং কনফিগারেশনের সঙ্গে পরিচিত?)	Yes/(হুঁগ)	No/(না)

5		Personal Contact Program (PCP) (ব্যক্তিগত ক্লাসের যোগাযোগ পর্ব।)		Ye	s/(হাঁ)	No/(না)	
		_	arity of PCPs in study cen লি পাঠকেন্দ্রে নিয়মমাফিক হয়		Ye	s/(হাঁ)	No/(না)
			onducted classes are inform	native	Ye	s/(খ়াঁ)	No/(না)
		(পরিচালিত ক্লাসগুলি কি তথ্যপূর্ণ ও উ	ট্ডাবনী ?)	(র্যা	no please sug ন না হয়, তাহয়ে মত দিন।)		
		entire (সম্পূর্ণ	al classes are effective for course? course-এর ক্ষেত্রে Practical গুলি কি কার্যকরী?)	r the	Ye	s/(হাাঁ)	No/(না)
6	EVA	LUAT	ION PROCESS (মূল্যায়ন	পদ্ধতি)			
	6.1	evalua (বিশ্ববি	u well acquainted with the tion process of university? দ্যালয়ের বর্তমান মূল্যায়ন প্রত্রি আপনি কী ভালভাবে অবগত?)	· •য়ার	Ye	s/(হাঁ)	No/(না)
	6.2	Assign	ment (অনুশীলন পত্ৰ) (✔)				
		6.2.1	Mode of Accessibility (অভিগম্যতার প্রভারভেদ)	Online (অন-লাই		Offline (অফ-লাইন)	Both (উভয়)
		6.2.2	Ease of understandability (সহজবোধ্য)				
		6.2.3	Language (ভাষা)				
	6.3	Term 1	m End Examination (বার্ষিক পরীক্ষা) 🗸)				
		6.3.1	Ease of understandability				
			(সহজবোধ্য)				
		6.3.2	Language (ভাষা)				

	Give your opinion to improve the support service of the University. বিশ্ববিদ্যালয়ের পরিষেবা উন্নতিতে আপনার মতামত দিন।
	ganan:
	411/411
	धनावाप Thank You
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