

Understanding the Profile, Motivations and Current Status of Academic Graduates through Open and Distance Schooling in India

Jyotsna Jha, Neha Ghatak, Shreekanth Mahendiran

Centre for Budget and Policy Studies, India

Abstract: In India, Open and Distance Learning for secondary and higher secondary level is mainly provided by the National Institute of Open Schooling (NIOS). Secondary education in India pertains to class 9 and 10 catering to the age group of 15 to 16. Similarly, higher secondary education refers to class 11 and 12 catering to the age group of 17 to 18. Based on research supported by the Commonwealth of Learning (COL) this paper discusses the results from a telephone survey of close to 1000 learners who were enrolled with NIOS and completed secondary and higher secondary education during 2008-2012 in selected states. It emerged that nearly 81 per cent of respondents were gainfully employed and NIOS helped them look for better jobs, widen their job search, and gain more stable (permanent) and secure (government) jobs. NIOS has successfully enabled a good proportion of learners to continue with their higher education. Flexibility offered by open schooling is the main motivation to join NIOS; individuals facing various constraints in accessing regular secondary education have opted for this option. It appears that two different kinds of learners join NIOS at these two levels; the secondary level seems to have a bigger representation from lower socio-economic strata. The role of open schooling in reducing the gender gap at secondary level of schooling remains mixed.

Keywords: Education, Gender, Open and Distance learning, Distance Education, India, NIOS, Career Trajectory, Tracer, Labour Market, Higher Education, Inequality.

Introduction

While open universities in a number of countries are now well-established and understood, open schools at secondary level are still trying to create a niche. Open and Distance Schooling (used interchangeably with Open and Distance Learning, or, in short, ODL) is characterised by both openness and distance. Distance education is any educational process in which all or most of the teaching is conducted by someone removed in space and/or time from the learner. As a result most of the learning is facilitated through mediums like electronic communication or print. The 'open' nature of education is formally institutionalised through policies that allow for flexibility in terms of open admissions, and freedom of selection of what, when and where to learn (UNESCO 2002). Although it depends on the organisations that deliver distance education to decide upon the extent of their openness, traditionally they have shown a strong inclination towards supporting the freedom of individual learners to exercise choice over one or more of the main processes of their learning. The openness of distance education is also seen in relatively flexible organisational structures, delivery and communication patterns, and the use of various technologies in support of learning.



This work is licensed under a Creative Commons Attribution ShareAlike 4.0 International License.

India is one of the leading countries that have a well-developed and vast structure to provide education at secondary and senior secondary levels through ODL. Although, in terms of proportion, ODL covers only about two percent of the total enrolment at these levels, the reach is high in terms of absolute numbers with nearly one million learners enrolled at present. Therefore, it becomes important to understand the role played by the ODL in enabling learning, higher education or labour market mobility for learners. This paper attempts to answer these questions through an analysis of the results of a survey where close to 1000 learners who completed secondary or/and senior secondary education during 2008-2012 through ODL in selected Indian states were interviewed.¹ These states were Delhi, Rajasthan and Andhra Pradesh (AP).ⁱⁱ The paper aims to understand: (i) the profile of those whoopted for ODL at the secondary and higher secondary levels (ii) their motivations for this option, (iii) their present occupation, and (iv) the role of secondary schooling through ODL in enabling further education and labour market mobility. This paper is important for the fact that tracer studies are not commonly available for ODL systems, especially for school education. There is no published study available using a sizable sample in India. It is also important because ODL is often viewed as an option for providing access to those not reached and the most marginalised sections of society, along with those learners who find it difficult to access regular schools. The analysis also takes this into consideration while examining the results.

In general, the evidence in terms of tracing the status of the open and distance school learners all round the world has been scanty. The Centre for Educational Research and Development at Cambridge conducted a tracer study in Namibia in 2007, where learners who undertook the senior secondary course and graduated from the Namibian College of Open Learning (NAMCOL) between the years 1999-2001, were contacted in order to understand the current occupational status of NAMCOL learners, contribution of NAMCOL in terms of finding employment, ease of entry into tertiary education and the learners' perception of value added that the certificate had in terms of seeking employment opportunities. A similar study was conducted in Zimbabwe in 2015, to understand the career trajectories of learners from the Zimbabwe Open University (ZOU) who undertook a course on media studies started in 1999, which explored the current occupational status of the learners and collected feedback of the learners about the course to make it more market/employment oriented. No such studies exist in India except for those that are very small in coverage and have traced less than fifty graduates. Therefore, this study is an attempt to fill that gap, especially in view of the fact that the country has the largest system and reaches the largest number of students at these levels using ODL.

Secondary Education Through ODL in India: A Background

There are two types of structures, both started and funded by union and state governments and therefore largely publicly funded, that provide secondary and senior secondary level education through ODL. These are: the National Institute of Open Schooling (NIOS), formerly known as National Open School (NOS), and State Open Schools (SOS), which respective state governments have started. The NIOS was setup in 1989 as an autonomous body by the Ministry of Human Resource Development (MHRD), Government of India 'to provide open and distance learning to school dropouts and students from disadvantaged sections of society'.ⁱⁱⁱ The NIOS operates in most states of India through regional offices and study centres and it has also facilitated a number of states to set up State Open Schools (SOS) to reach out to the larger target population. However, the NIOS remains the

most important institution both in terms of its reach and leadership; most SOSs seek guidance and support from the NIOS in the areas of courseware, delivery and examinations. NIOS primarily offers two kinds of courses: Academic (Secondary and Senior Secondary) and Vocational. Nearly 95 per cent of allstudents at this stage belong to academic streams. The survey on which this paper is based covered students who had passed out from NIOS. The SOS models vary from state to state, unlike NIOS, where the same model exists throughout India and therefore it is possible to draw a comparable sample from across states.

Methods, Approach and Limitations

The main method used was a telephone survey conducted in 2015. The NIOS raw student data for the period 2008-12 formed the database from which a list was prepared for those who had completed the course in the sample states. This formed the dataset from which respondents were randomly identified and interviewed. A mail survey was tried and abandoned because of the poor response rate. The anonymity of the interviewer in a telephone survey makes it difficult to establish a strong interviewer-interviewee relationship, which also meant that the questionnaires had to be as brief as possible (not more than 10-15 minutes). The overall response rate for the telephone survey was nearly 17 per cent; a total of 5648 calls were made out of which 954 resulted in interviews. The success rate was higher for males (19%) as compared to that for females (13%).

The team was trained on telephone etiquette, which consists of three phases of a telephone interview: (a) first impression; (b) impression during the conversation; and (c) last impression (Figure 1). The survey team included female investigators and also those who knew local languages. The flow chart details the process of the interview (Figure 2).

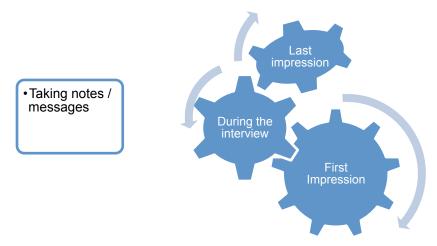
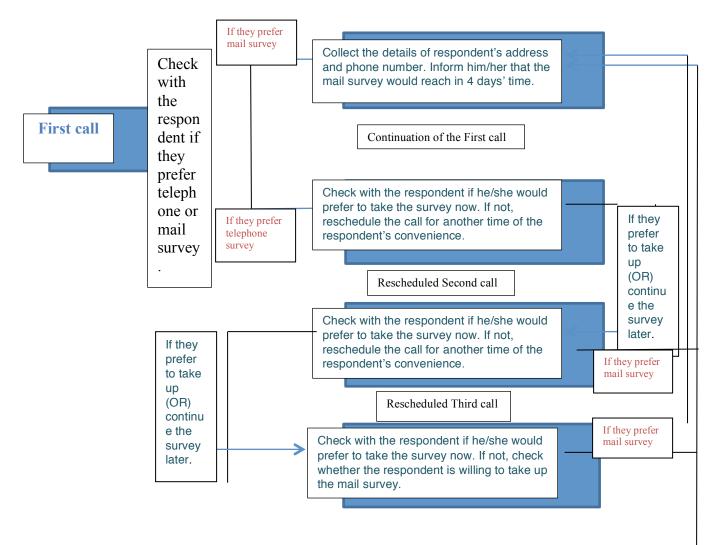


Figure 1: Three phases of a telephone interview

The survey was complemented by a document review, mainly with regard to the university prospectus, to gauge if any form of structural discrimination exists against NIOS certified learners at the entry stage in the higher education institutions. We also attempted consulting a few individuals and institutions to gain further insight into placement of NIOS graduates but, given that the learners do not keep any connection with their institutions, these did not add much to our existing information.





A major constraint faced during the survey was that a large proportion of the telephone numbers recorded and available to the study team did not belong to the students themselves; they either belonged to the middlemen - people who had acted as agents to help these students gain admittance in the NIOS or to the 'Coaching centres' – or to institutions that train or coach young boys and girls to take part in entrance examinations for engineering and medical courses. The presence of middlemen or agents has also been found to be common for NIOS admissions and examinations, primarily to negotiate the technology, as almost the entire admission and other processes are mediated through new technology-based procedures in the NIOS (Minni et.al 2016). The same phone number was repeated for multiple learners; at times even for hundreds, and that made it clear that it did not belong to the student.

Profile of Respondents: Disparities Exist

Girls, an important identified target group for the ODL, are also underrepresented in NIOS. But the enrolment, which itself is skewed in favour of males in the NIOS was further skewed because of the lower response rate of women: female respondents constituted 28 per cent of total respondents, as against 32 percent of the total NIOS certified learners for 2008-13 period, which was the dataset from

which the sample was selected. The reason for poorer response rates for females primarily emanates from their powerlessness within households. Many female learners whose telephone numbers featured in the list that we used to access them did not have direct access to telephones, and the male family members who received the calls did not always allow them to talk. This clearly reaffirms the general trend that despite wide reach, women do not necessarily have direct access to technology, such as mobile phones, something that allows them freedom to communicate.^{iv} This was especially true for those women who were married. We faced difficulty in accessing married women learners for another reason as well. A number of female respondents who were married had later changed their phones, and their parental family members were not willing to share the new telephone numbers. All these point towards the constraints faced in accessing women learners, and, at the same time, also point towards their secondary position and powerlessness within their households, and perhaps also to their education not necessarily equipping them to negotiate these situations.

Socially disadvantaged groups such as Scheduled Castes (SC), Scheduled Tribes (ST) and Muslims have poorer secondary schooling participation rates as compared to other social groups, and therefore they are important target groups for NIOS. Since rural areas generally fare much worse than urban locations for secondary schooling participation, this is another important target for NIOS. Except for representation of the SCs, which somewhat matched their representation in population, NIOS does not seem to be very successful in reaching any of the target groups, such as STs and Muslims, as they were all underrepresented as compared to their population percentages. The same is true for the rural population as well. On the other hand, upper caste Hindus (UCH), generally referred to as the 'General' is over-represented. This means that NIOS has an overrepresentation of urban upper-caste Hindus, who, otherwise, also have better educational attainments than other social or religious groups.

The sample had a greater representation of OBCs and STs as respondents in comparison to their representation in the dataset of those who had completed their certification during the same period, i.e., the dataset from which the sample was selected. The majority of the respondents were Hindu, followed by Muslims and Christians. There was no variation visible in the caste and religion profile in the sex segregated numbers. In terms of age, more than 90 per cent of the learners belonged to the age group of 19-30 years, amongst which the majority fell in the age group of 24-30 years. This was true for both male and female respondents and was strictly similar to the pattern that existed for the total number of NIOS certified learners in the three states.

The social profile of respondents differed slightly from the profile of the original dataset of NIOS learners: 72 per cent men in the sample as against 68 per cent in the NIOS dataset; only 55 per cent UCH in the sample as against more than 76 per cent in the NIOS dataset, which, in turn, means that the disadvantaged groups (SC, STs and Muslims) are overrepresented in the sample. The results, therefore, need to be interpreted with caution in terms of generalising those for all NIOS certified learners. Also, it appears that those NIOS learners who enrol directly rather than through agents / institutions are overrepresented in the sample. We also collected data on ownership of accommodation, ownership of vehicles and parental education to get an understanding of the economic profile. What emerged was that the majority of the respondents came from an upwardly mobile, aspiring lower middle class. This may not be true for all respondents coming from

various social and religious groups, or between males and females, except that fathers of female respondents had slightly better educational attainments as compared to those of male respondents. This implies that though varying in terms of their caste and religious profile, the learners seem to be similar in terms of the economic profile of their households.

It is also important to understand the reasons for the lower representation of upper caste Hindus in the sample. The NIOS learners can broadly be divided into three categories. One is the group who directly enrols, as intended by the NIOS design and structure. Two is the group who enrol through their schools and other institutions, such as non-governmental organisations working on children's education. Three is that group who enrols using agents; the use of agents is also common because of the lack of access to online skills and facilities. The second group can be further sub-divided into three kinds of institutions: schools and other NGOs that encourage their students to opt for NIOS as an examination board that is more flexible and therefore more creative; schools that encourage NIOS as an examination board option to those students who are perceived as not scoring very high in the regular boards, i.e., as an 'easy' board for certification; and finally coaching institutions where students enrol for the intensive training to take competitive entrance examinations for medicine and engineering courses, and need secondary and higher secondary certification to be eligible for those entrance examinations.^v

The distribution of students across these categories is not known and it is not even possible to know if such records are maintained. A little over 8 per cent of the total respondents reported attending regular schools while being enrolled in NIOS. The percentage seems to be a little higher for females but, given the small number, this difference may not be significant. However, as stated earlier, the respondents did not really belong to the lowest socio-economic strata, reaffirming that, in general, the middle class has accessed NIOS more commonly than the others.

Present Occupational Status of NIOS Graduates

Taking secondary and senior secondary together, nearly 81 per cent of NIOS certified respondents reported being gainfully employed at the time of the survey: they were either continuing with their further education or self-employed or were in paid employment. About one third reported to be students, slightly above one third were in employment and the remaining 12 per cent were self-employed. This situation changes when one considers the secondary and senior secondary pass-outs separately. A little more than 52 per cent of secondary graduates were employed/ self-employed as against 43 per cent of senior secondary graduates. Similarly, nearly 38 percent of senior secondary graduates were students as against about 28 per cent of secondary graduates (Table 1).

A higher percentage of senior secondary graduates are still students and vice versa, i.e., a higher percentage of secondary graduates are in employment (Figure 3). What this reveals is that the pools from where NIOS learners are coming for secondary and senior secondary courses are different; students who complete their secondary from NIOS are not necessarily the ones who are enrolling for their senior secondary courses again in NIOS. The majority of senior secondary learners are enrolling in NIOS after completing their secondary certification from other examination boards and not from NIOS.

Present Status	Those who completed Secondary Certification from NIOS	Those who completed Senior Secondary Certification from NIOS	Total
Student	96 (27.51)	227 (37.52)	323 (33.86)
Employed	140 (40.11)	192 (31.74)	332 (34.80)
Self-Employed	43 (12.32)	71 (11.74)	114 (11.95)
Unemployed	66 (18.91)	115 (19.01)	181 (18.97)
Total	345 (100.00)	605 (100.00)	950 (100.00)

 Table 1: Present Occupational Status of the Respondents* (2015)

*Who completed secondary and senior secondary between 2008-2012

Notes: Percentages are given in brackets.

Source: Primary Survey Data collected by CBPS, 2015

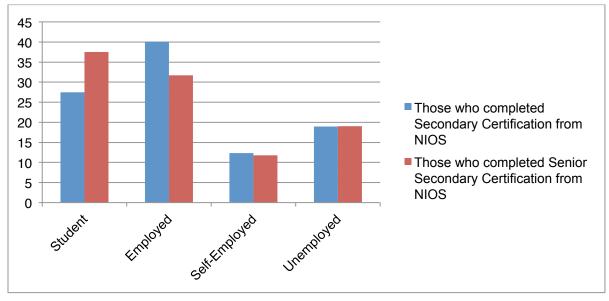
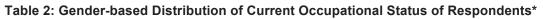


Figure 3: Percentage Distribution of the Present Occupational Status of the Respondents (Secondary and Senior Secondary graduates from NIOS

This observation is further validated by a deeper analysis of data. Out of 96 respondents who were amongst secondary pass-outs reported to be students, only 15 (15.6%) were pursuing their senior secondary/vocational course from NIOS, and only 80 out of 605 (13.2%) of respondents who had completed their senior secondary certificate from NIOS had also completed their secondary certification from NIOS. Since there are two different kinds of learners who enrol in secondary and senior secondary in NIOS, this also means that at least for the majority of students, the motivation for joining NIOS at two different levels—secondary and senior secondary level do so with the primary motivation to attend coaching classes and get a senior secondary certificate, which is a pre-requisite to qualify for engineering and medical exams. This conjecture is corroborated by the fact that the proportion of those who had attended private schools before enrolling in the NIOS was much higher for those who got their senior secondary certificates from NIOS (28%).

Current Occupation	Completed Secondary Certification from NIOS		Completed Senior Secondary Certification from NIOS			Total			
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Student	69	27	96	162	65	227	231	92	323
Employed	116	23	139	166	26	192	282	49	331
Self- Employed	37	6	43	63	8	71	100	14	114
Unemployed	28	38	66	50	65	115	78	103	181
Total	250	94	344	441	164	605	691	258	949



*Who completed secondary and senior secondary between 2008-2012

Source: Primary Survey Data collected by CBPS, 2015

A sharp gender disparity exists in the present occupational status among NIOS graduates: while only about 11 per cent of male respondents were unemployed, nearly 40 per cent of female respondents reported being unemployed, this being true for both secondary and senior secondary pass-outs. In other words, a much higher percentage of male respondents were either employed or self-employed as compared to female respondents, this being true for both secondary and senior secondary respondents. However, it is interesting to note that when it came to continuing further education, women were at par with men, the proportion of students being a little higher for female as compared to male respondents in both the categories of secondary and senior secondary graduates.

This again could be indicative of a mixed impact: women from middle class households may not be allowed to enter the labour market but be allowed to continue their higher education, especially because of higher demand for 'educated brides', or simply because continuing education is perceived as relatively less threatening in patriarchal societies. The literature on education, gender and social policy emanating from developing countries clearly indicates that labour market segregations and discriminations are common, and they rarely encourage greater levels of female education Subrahmanian, (2002), Chanana, (1996) Latha (2015). Andrea (2010) clearly points out how education for women is not necessarily sought to fulfil the demand of the labour market but that of the marriage market, where educated wives and mothers are preferred in comparison to uneducated ones, especially by upwardly mobile, educated men. The fact that the proportion of married was higher among unemployed women in this survey also lends weight to this inference. Nevertheless, what is undisputable is that NIOS certification has helped both men and women access tertiary education.

Motivations for Choosing ODL

An analysis of main motivations for choosing the NIOS for secondary or senior secondary level education shows that though the NIOS was not really successful in reaching the major socially and educationally disadvantaged groups, such as tribal or Muslim populations, it was definitely acting as an option to a large number of men and women, who were facing constraints of one kind or another in accessing the mainstream formal secondary and senior secondary schooling system.

The respondents were asked a simple question regarding their reasons for joining NIOS, to which both male and female respondents answered similarly with some exceptions. A much higher

proportion of female respondents mentioned their own poor health as the reason for not being able to attend regular schools, and therefore used NIOS for that opportunity (Table 3). This probably highlights the need for much greater public attention to the issue of poor health in adolescent girls and women. An equally important point that needs attention is that nearly one fifth to one fourth of respondents opted for NIOS, as they could not manage the stress of regular schooling and, therefore, the flexibility that NIOS offered was the main reason for their choice. While it is comforting to know that the flexibility offered by NIOS is perceived as useful, it is distressing to know that a large number of students find regular schooling stressful.

	Secondary	,	Senior Secondary		
Reasons for joining	Male	Female	Male	Female	
Could not manage regular school	31.47	24.51	35.58	32.22	
Flexibility	28.69	30.39	38.65	33.33	
Household related Constraints	11.55	4.9	4.09	4.44	
Gap in education	6.77	13.74	2.04	5.56	
Respondent's health problem	4.78	11.76	2.86	10	
Explore better opportunities in existing employment	4.38	1.96	1.64	0.56	
Explore new employment opportunities	1.99	0.98	2.04	0	
Lack of access/availability of schools/colleges	1.99	0.98	2.25	5	
Facilitate in own business / self-employment	1.20	0	1.23	0	
Time constraint due to work	0.40	0.98	5.33	1.67	
Others - include - not interested in studies/peer influence/no reason	6.77	9.8	4.29	7.22	
Total	100 (n=251)	100 (n=102)	100 (n=489)	100 (n=180)	

Table 3: Reasons for Joining NIOS	* (Percentage Distribution)
-----------------------------------	-----------------------------

*Multiple answers question and therefore the totals are more than the number of respondents Source: Primary Survey Data collected by CBPS, 2015

The flexibility of the ODL system, as operating in the NIOS, also helped those who wanted to upgrade and compensate for the lost time in their education, this being especially true for female respondents. NIOS also helped both men and women to overcome constraints posed by their family circumstances: ill health of relatives and financial constraints. A small proportion reported a lack of easy access to educational institutions as an important reason. This establishes the fact that despite limitations, NIOS is helping students overcome access constraints to school, either posed by the supply side, in terms of the regular school not being conveniently located, or by the demand side, in terms of socio-cultural practices. Exploring better employment opportunities does not figure as an important reason in general. However, a much greater percentage of male respondents who completed their secondary from NIOS cite this reason as compared to female respondents. This indicates that these are working men who are seeking some mobility by attaining the secondary education certificate, which is also an eligibility criterion for a number of employment opportunities. What emerges is that NIOS has been successful in providing opportunity to those: (i) who were likely to have discontinued their schooling because of economic, social and personal reasons, and (ii) who were likely to experience or experienced failure in the mainstream regular system because of its rigidity. This means that NIOS has been able to fulfil its objective of being a viable alternative at the secondary level for vulnerable groups but this vulnerability doesn't necessarily emanate from poverty, remoteness or from known social group related disadvantages. In this context, it is important to note that though the 'flexibility' is a desirable characteristic, and in the case of ODL in general, this seems to be the main motivation for learners to choose this option, there is also a need to further examine the gender-impact of such flexibility being offered. Men respondents looked at flexibility as being helpful because it enabled them to combine their studies with work; for women respondents, it was the ease of studying from home, as they could combine studies with their care responsibilities. This fact, which resonates with a small internal study by NIOS where they traced cases of 29 past learners (NIIOS, 2011) and had reported similar findings, can be interpreted as both facilitating gender parity and widening the gender gap at the same time; while the fact that these women, who would have no opportunity to study if there were no ODL options available, is a welcome step, the fact that it reinforces their care role and confinement in the home space makes this intervention questionable for its gender-equality-enabling impact Jagsi et al (2011) Bezbaruah (2012). It is obvious that gender impact is much more layered and complex, and calls for much deeper analyses.

Enabling Learners for Tertiary Education

This study attempted to explore the linkages with tertiary education using two means. The first was through the analysis of the present highest educational qualifications of the past NIOS certified learners, as this helped in understanding whether they had continued their further education or not. Seventy one per cent of female respondents and 80 per cent of male respondents who were currently students were pursuing undergraduate courses from various universities. This obviously meant that the NIOS education at the secondary or senior secondary stage had helped them access higher education. However, the choice of subject was gendered: more men opted more for science and engineering courses, more women opted for the humanities.

The second means was to see if NIOS learners face any discrimination in entry to higher education institutions. The NIOS Prospectus reports that its certification is recognised by all state and two central secondary school examination boards, and it also lists a large number of universities including most of the 'prestigious' central and state universities and institutions as recognising the NIOS certification. Although most engineering entrance examinations had been open to NIOS graduates, it was not true for medicine. But as a result of NIOS efforts, the Medical Council of India decided to make NIOS certified learners eligible for admission to MBBS course in 2012.

We examined the prospectus and admission rules of 126 universities located in Delhi, Andhra Pradesh, Rajasthan and Karnataka^{vi} to assess if any institutional discrimination exists against those who get their school certificates using ODL mode. The eligibility criteria in these universities did not create any disadvantage for NIOS certified learners. Twenty five percent of these 126 universities had clearly mentioned acceptance of NIOS certificates. None mentioned non-recognition of the NIOS certificate. No upper age limit for admission existed, which could have acted against NIOS graduates as they include a good number of learners who re-start after a delay.

Learners' Perception of the Value Add

In addition to asking what the main motivation for joining NIOS was, we also tried to gauge learners' perspective regarding how NIOS education added value to their efforts, or enabled them to pursue whatever they wanted: higher education, job mobility or employment or self-employment. We asked all respondents if education through NIOS added value to their pursuit or not, and those who said yes were also asked to explain how it did so.

Did NIOS education Add Value?	Completed Secondary in NIOS		Completed Senior Secondary in NIOS		Total (Completed either Secondary or Senior Secondary in NIOS		
	Male	Female	Male	Female	Male	Female	Total
	Currently S	tudents				1	
Yes	83.33	86.96	86.62	72.00	85.71	75.51	82.54
No	16.67	13.04	13.38	28.00	14.29	24.49	17.46
	Currently Employed						
Yes	63.41	40.00	67.14	66.67	65.77	57.14	64.80
No	36.59	60.00	32.86	33.33	34.23	42.86	35.20
	Currently Self Employed						
Yes	3.45	4.00	4.15	1.67	3.86	2.73	3.70
No	65.52	60.00	58.54	83.33	61.43	72.73	62.96
	Currently Unemployed						
Yes	90.91	88.46	92.31	86.67	91.80	87.32	89.39
No	9.09	11.54	7.69	13.33	8.20	12.68	10.61

Table 4: Did NIOS education add value by present occupation (percentage distribution)?

Note: Non-responses are not reported here, therefore summation of values reported in yes and no rows for each current activity may not equal to 100 percent.

Source: Primary Survey Data collected by CBPS, 2015

The proportion of those who saw value in NIOS education was the highest for those who were pursuing higher education (Table 4). More than 80 per cent of the respondents who were currently students mentioned that NIOS had facilitated their further education by helping them to get the desired certificates in the desired courses. About 40 per cent of respondents in the student category answering yes to the question regarding value add said that the course and certification helped them widen their choices, either in terms of institutions or courses that they could choose from. An additional 40 per cent mentioned that the subjects and other criteria offered in NIOS helped in meeting the criteria for admission in their current courses and therefore, it was useful. This shows that NIOS course structures and certification has successfully enabled learners who wanted to pursue higher education to do so. This was true for both male and female learners.

However, it is important to note that about 17 per cent of those who are currently students also reported that NIOS education did not lead to any value add in their path to higher education. The proportion of those answering 'no' was higher for women, and especially for women who had

completed their senior secondary certificate through NIOS. The limited scope of this study does not provide any insight into why this is so but this fact indeed deserves further enquiry.

When asked whether NIOS added value in their endeavour to find employment or move up the ladder, more than one third of those currently employed replied in the negative. This distribution remains almost the same for both male and female, and for both secondary and senior secondary graduates. About two third of those currently employed who found it useful cited: widening their search for jobs, enabling their search for more stable ('permanent') and secure ('government') jobs, and also in upward mobility by making it possible for to apply for 'jobs with higher salary'. This is significant as it comes from the respondents who are mainly engaged in low-paying, low-status jobs and had there been no such flexible opportunity available, the majority of these people would not have been able to attain the mobility that they have using NIOS (Table 5).

Table 5: Major Jobs pursued by respondents who are currently emp	oloyed
--	--------

Sex	Currently Employed*
Male	Administrative (includes Clerks, Desk Job in Private offices, Office Assistants in Private Firms, etc.)
	Government Sector
	Sales
	Housekeeping / Helper
Female	Anganwadi worker
	Administrative (includes Clerks, Desk Job in Private offices, Office Assistants in Private Firms, etc.)

Source: Primary Survey Data collected by CBPS, 2015

Moving ahead, what is noteworthy is that those in self-employment had a different and disappointing perception about NIOS education. More than 60 percent of respondents in the self-employed category said that NIOS education did not add any value. Assuming that the certification is less important for those who are self-employed, this can be interpreted as a comment on the education or skill component being not useful / relevant. Those self-employed who found it useful did so, on account of the certificate helping them access loans more easily. This assumes significance as nearly 90 percent of those who were unemployed found it useful. It appears that female respondents, even if unemployed, found it useful as the certification would have added to their status and perhaps mattered in the marriage market, this being untrue for the self-employed, who were perhaps more interested in upgrading their skills.

Conclusions

An important conclusion that emerges from this analysis is that NIOS has not remained an option only for the more marginalised and drop outs. It has evolved as an option for a variety of users. Although the reach to those who are known as educationally marginalised has not been as high as intended or expected — a good proportion of users were disadvantaged in some manner or the other – largely on account of socio-cultural and individual household related factors. Therefore, although NIOS needs to make a greater effort to reach the known educationally disadvantaged groups, such as SC, ST, OBC or Muslims, and in rural areas, it has achieved success in enabling young people to continue their education and upgrade their schooling levels, especially those facing economic, social and personal hardships and those who were experiencing failure in the mainstream regular system because of its rigidity.

The NIOS' success in reaching those who face constraints in accessing regular schools, through the use of flexible norms and requirements, shows that it is a more creative and accessible option for many. This very fact makes it even more important for NIOS to try to reach out to socially disadvantaged groups in rural areas as they are known to be facing these constraints. This implies that NIOS needs to reconsider its strategy of reaching individuals through the online route despite limited digital reach in remote India, where the ease of using it for various purposes is limited. The fact that NIOS is highly Internet dependent, with all the information available online, demands a fair amount of Internet literacy to be present, which seems to act as a major barrier for expanding reach in rural areas.

It emerged that nearly 81 per cent of NIOS certified respondents were gainfully employed: either as a student, self-employed or in paid employment – this is indeed a measure of success. However, what is interesting is that two different kinds of learners join NIOS at two levels of secondary and senior secondary; the secondary stage seems to have a bigger representation of lower socio-economic strata. This implies that while at the secondary level NIOS is reaching a greater proportion of the intended target, those who are drop outs or have faced some constraints at the senior secondary level, and it is used more by those who desire an easy or non-demanding option. NIOS alone cannot control the demand and such trends are more a result of macro-economic factors that operate at a much wider level. However, NIOS can make efforts to widen its reach to those who are really facing constraints due to remoteness and other reasons, while letting others also use it as they are doing so currently.

NIOS education does not seem to have changed any gender norm, though it did help a good number of girls and women in continuing with their schooling. NIOS widened access to schooling opportunities for both men and women but it also did not contribute to any push towards physical or psychosocial mobility away from domesticity. However, finally it can still be perceived as positive if ODL has helped those who were confined to domesticity anyway.

In general, the NIOS seems to have played a successful role in both facilitating labour market mobility and entry to higher education. It especially seemed to have helped those who enter the job market early and then cannot move up because of lack of certification, i.e., lower level administrative /support jobs. In general, there does not seem to be any institutional barrier in entry to higher education for NIOS certified learners. However, since NIOS is currently operative as an exam centric system, a matter of concern is that NIOS seems to be perceived as an 'easy' route for certification rather than a creative and stress-free option of schooling. Although this is not unique to NIOS, as school degrees are also used to as a screening instrument for higher education or labour market opportunities. Certificates or to certify specially in this case, comes with the promise that the learner possesses certain kind of knowledge that renders him/her capable of taking the next step into higher education or entering the labour market. But, when the testing process (examination) is plagued with unscrupulous practices and a general lack of accountability of the system towards the learner and vice versa, the certificate gets reduced to a mere document and an end result of a process where learning did not actually take place Minni et al, (2016). Although there is no harm in developing a flexible system for certification plays a major role in labour market processes, it is rather a need given the fact that mainstream systems are rigid and unresponsive to the needs of several kinds including those who face socio-economic and locational barriers, and those who do not face such barriers but

prefer a less stressful system. Nevertheless, the process of certification has to be rigorous and reliable, otherwise it can merely act as a fulfilment of screening requirements and not reflect the level of learning.

The NIOS needs to take note of this fact and think of introducing measures so that even if it remains a means of certification, it does not become solely an easy route of certification. In other words, NIOS needs to introduce measures to retain its ability in imparting education and learning to its students, and not as an instrument to get the desired certificates. Towards that end, it would also be helpful if certain systems are created to strengthen the data systems with NIOS and make that data accessible in the public domain. This includes data on students as well as on institutions. NIOS could also write to universities for data on admission of students entering using NIOS certificates. This would create a very useful database that can help in tracing the students. NIOS could also write to some of the major associations that employ people with secondary / senior secondary certificates for their data on the employment of those with NIOS certificates. Working towards the formation of an Alumni Network would also go a long way in future tracer studies.

References

- Andrea, N. S. (Centro di RicercasuiSistemiInformativi, LUISS Guido Carli, Rome, Italy). (2010). The impact of gender culture on women's carer trajectories: An Australian case study. Retrieved from http://www.emeraldinsight.com/doi/abs/10.1108/02610151111124941
- Bezbaruah, S. (2015). *Banking on equality, women, work and employment in the banking sector in india*. Retrieved from https://books.google.co.in/books/about/Banking_on_Equality.html?id=JMYqBwAAQBAJ=en.
- Bukodi, E., Dex, S., & Joshi, H. (2012). *Changing career trajectories of men and women across time*. Retrieved from, http://www.elgaronline.com/view/9781849806268.00009.xml
- Fentiman, A. (2007). Tracer study of former NAMCOL learners. Cambridge: IRFOL.
- International Centre for Research on Women, Canada. *How technology can advance women economically*. Retrieved from http://www.icrw.org/files/publications/Bridging-the-Gender-Divide-How-Technology-can-Advance-Women-Economically.pdf
- Latha, J., & Sindhuja, M. (2015). A study on the career trajectories of women employees in information technology (it) industry with special reference to chennai city. Retrieved from

http://www.iosrjournals.org/iosrjmce/papers/ICRTEM/ME/Volume4/IOSRME09.pdf?id=762

- Jagsi, R., DeCastro, R., Griffith, K.A., Rangarajan, S., Churchill, C., Stewart, A., & Ubel, P.A. (2011). Similarities and difference in career trajectories of male and female career development award recipients. Retrieved from http://journals.lww.com/academicmedicine/Fulltext/2011/11000/Similarities_and_Difference_in_the_Career. 37.aspx
- Kirrin, G., Kim, B., Janna, M., Payal, P., & Aslihan K. (2010). Bridging the gender divide How technology can advance women economically. international centre for research on women, Canada. Retrieved from

http://www.icrw.org/files/publications/Bridging-the-Gender-Divide-How-Technology-can-Advance-Women-Economically.pdf

- Minni, P., Pancharatnam, P., Rajgopal, S., & Jha, J. (2016). *How open is open school in inda? A learners' perspective*. Pan-Commonwealth Forum 8: Kuala Lumpur. Retrieved from http://oasis.col.org/handle/11599/2563
- Muchena, E., Muonwa, W., & Makwanya P. (2015, May). Zimbabwe Open University (ZOU) graduates and the job market: A case study on the employability of ZOU media graduates. (Harare Regional Centre). *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 20(5), 70-75.

Planning Commission, Government of India. *Twelfth Five Year Plan (2012-2017) - Social Sectors*. Vol III. (2013). New Delhi: Sage Publications.

UNESCO. (2002). Open and distance learning: Trends policies and strategy considerations. Paris: UNESCO.

Authors

Dr. Jyotsna Jha heads Centre for Budget and Policy Studies (CBPS), located in Bangalore, India. Trained as an economist, she has more than two decades of experience of working on education, gender and other development related issues. She has worked as an adviser to Social Transformation Programmes Division at Commonwealth Secretariat in London. Email: Jyotsna@cbps.in

Neha Ghatak is a Senior Research Associate at the Centre for Budget and Policy Studies (CBPS). With nearly 6 years of experience at the Centre, she has been engaged with research studies on gender and education. She has a master's degree in sociology from Delhi School of Economics, Delhi University. Email: Neha@cbps.in

Shreekanth Mahendiran is a Research Advisory at the Centre for Budget and Policy Studies (CBPS). He primarily focuses on education, gender and decentralization using quantitative methods. Before joining CBPS, he worked in Centre for Public Policy, Indian Institute of Management, Bangalore. Shreekanth has a Masters in Economics from Madras School of Economics, Anna University. Email: shreekanth@cbps.in

Notes

ⁱⁱⁱ www.nios.ac.in

^v This information is based on an ongoing study being conducted by the same organisation - Open and Distance Learning as a Cost Effective Option for Secondary Level Schooling in India: Potential and Pre-requisites. ^{vi} Karnataka was added as the research organisation is located in Karnataka and we thought it would add to the understanding if we include more states.

ⁱ The survey was conducted in 2015; there was not much time gap between completion of their course and survey.

ⁱⁱ These states represent the diverse parts of the country; AP is located in the South and Rajasthan in the West. Delhi, the national capital is located in the North and has the highest number of NIOS learners compared to all other states in India.

^{iv} A perusal of the Secondary Education Management Information System (SEMIS) data for the years 2010-2011, 2011-12 and 2012-13 shows that the representation of SCs and STs in secondary education is consistently low. Only 16.73 per cent SCs (SC are 19.5 per cent of the total population of India – Census 2011) and 7.72 STs (STs form 8.7 per cent of the total population of India – Census 2011) were enrolled in secondary education in the year 2012-13.