

# Tracing the Education and Employment Status of Open School Graduates in India

Dr. Jyotsna Jha  
Centre for Budget and Policy Studies  
director@cbps.in

Neha Ghatak  
Centre for Budget and Policy Studies  
neha@cbps.in

Shreekanth Mahendiran  
Centre for Budget and Policy Studies  
shreekanth@cbps.in

## Abstract

In India, Open and Distance Learning for secondary and higher secondary level is mainly provided by the National Institute of Open Schooling (NIOS). Based on a research supported by Commonwealth of Learning (COL) the paper summarises the results from a telephonic 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 NIOS certified respondents were gainfully employed. However, a higher proportion of senior secondary graduates were pursuing higher education (38%) as compared to secondary graduates (28%). This implied that two different kinds of learners join NIOS at these two stages; the secondary stage seems to have a bigger representation of lower socio-economic strata. Flexibility offered by the ODL stream was the major reason for enrolling with NIOS with men using this for doing the course while also earning whereas women used this to fulfil their care and domestic responsibilities. NIOS has successfully enabled a good proportion of learners to continue with their higher education. However, the choice of subject was gendered: more men opted more for science and engineering courses, more women opted for humanities. Sixty-five per cent of the respondents who were employed mentioned that NIOS helped them in looking for better jobs, widening the job search, more stable (permanent) and secure (government) jobs. Majority of those in employment were at lower level administrative /support jobs. However, most of the self-employed (63%) did not find NIOS certificates much useful. This implied that it was the certificate and not necessarily the knowledge or skills developed through the course that really mattered. This became apparent even when one examined the way those who were in employment articulated 'certification' as the main contribution of NIOS.

## Introduction

Open and distance learning, ODL, is fast emerging as an alternative or complementary system for schooling at post primary levels. 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. In India, the National Institute of Open Schooling (NIOS), formerly known as National Open School (NOS), 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'.<sup>1</sup> While NIOS operates in most states of India through regional offices and study centres, it has also facilitated a number of states to set up State Open Schools (SOS) to reach out to the larger target population. But 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 three kinds of courses: Secondary, Senior Secondary and Vocational. Nearly 95 per cent of total students at this stage belong to academic streams. Based on a research supported by Commonwealth of Learning (COL), the paper summarises the results of close to 1000 learners who completed secondary or/and higher secondary education during 2008-2012 in selected states.<sup>2</sup> These states are Delhi, Rajasthan and Andhra Pradesh (AP).<sup>3</sup>

The paper aims to understand: (i) the profile of those who opted for NIOS, (ii) their motivations for this option, (iii) their present occupation, and (iv) the role of NIOS education in enabling further education and labour market mobility. NIOS defines its mission as providing access to the un-reached and the most marginalised sections of the society along with those learners who find it difficult to access regular schools. The analysis takes this into consideration while examining the results of the survey. The present study becomes 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 sizable sample in India.

## Methods, Approach and Limitations

The main method used was a telephonic survey. The NIOS raw student data for the period 2008-13 formed the database from where a list was prepared for those who had completed the course in the sample states. This formed our universe out of which respondents were randomly identified and interviewed. Postal survey was tried and abandoned because of the poor response rate. The anonymity of the interviewer in a telephonic 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 telephonic

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<sup>1</sup> www.nios.ac.in

<sup>2</sup> The survey was conducted in 2015; there was not much time gap between completion of their course and survey.

<sup>3</sup> 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.

survey was nearly 17 per cent; a total of 5648 calls were made out of which 954 could be interviewed. The success rate was higher for male (19%) as compared to that for women (13%). A major constraint faced during the survey was the presence of a high number of agents (middle men) and coaching centres, especially in AP. These were the often the cases where the same phone number was repeated for multiple learners; at times even for hundreds. These phone numbers belonged to either a coaching centre<sup>4</sup> or an agent who had facilitated the admission of the learner in NIOS.

### **Profile of Respondents: issues of inequalities, power and representativeness**

Girls, an important identified target group for the ODL mode, continue to be underrepresented in NIOS. But the enrolment, which itself is skewed in favour of male in the NIOS got 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. The reason for poorer response rate for females primarily emanates from their powerlessness within households. Many female learners whose numbers featured in the list 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 (Kirrin et al, 2010). This was especially true for those women who were married. 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 indicate towards the constraints faced in accessing women, at the same time these also point towards their secondary position and powerlessness within their households, and perhaps also that their education had not necessarily equipped them to negotiate these situations.

Socially disadvantaged groups such as Scheduled Castes (SC), Scheduled Tribes (ST) and Muslims<sup>5</sup> have poorer secondary schooling participation rates as compared to other social groups, and therefore important target groups for NIOS. Since rural areas generally stand much worse than urban locations for secondary schooling participation, that 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 reaching any of its target groups such as STs and Muslims successfully, as they were all underrepresented as compared to their population percentages. The same is true for 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-case 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 data set of those who had completed their certification during the same period, i.e., the universe from where the sample was selected. 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 majority fell under 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 from the universe profile: 72 per cent men in the sample as against 68 per cent in the universe, only 55 per cent UCH in the sample as against more than 76 per cent in the universe, which in turn means that other 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. It appears that those NIOS learners who enrol directly rather than through agents / institutions are over represented 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 but seems to be true for the majority. There was not much difference in the economic profile of 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.

### **Present Occupational Status of NIOS Graduates**

Taking secondary and senior secondary together, nearly 81 per cent of NIOS certified respondents reported to be gainfully employed at the time of the survey. 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 takes 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 pursuing higher education (currently students) as against about 28 per cent of secondary graduates (Table 1). This is counter-intuitive as one would normally expect a higher percentage of secondary graduates to be students and vice versa. What this reveals is that it is not common for students to complete their secondary from NIOS and continue with their senior secondary there; the majority of senior secondary learners enrol with NIOS after completing their secondary certification from other examination boards with varied motivations. 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%) respondents who had completed their senior secondary certificate from NIOS had also completed their secondary certification from NIOS. It is likely that a significant proportion of students join NIOS at senior secondary stage through coaching institutions but in absence of any reliable data it is not possible to surmise how big this proportion is. This also means that at least for the majority of students, the motivation for joining NIOS at two different stages: secondary and senior secondary, could be very different from each other. This is also corroborated by the fact that the proportion of those who had attended private schools before

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<sup>4</sup> Coaching centres here mean private institutions that offer coaching/tuitions to learners in secondary and more often senior secondary for competitive entrance exams for engineering and medicine.

<sup>5</sup> 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.

enrolling in the NIOS was much higher for those who got their senior secondary certificates from NIOS (42%) as compared to those who completed their secondary certificates from NIOS (28%).

Male-female differences in the present occupational status were sharp: 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. A much higher percentage of male respondents were either employed or self-employed as compared to female respondents, again this being true for both secondary and senior secondary respondents. But when it came to continuing further education, women were at par with men, the proportion of students being a little higher for the female as compared to male respondents in both the categories. This again could be indicative of a mixed impact: women from middle class households may not be allowed to enter labour market but 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 (Nava et al, 2015). The fact that the proportion of being married was higher among unemployed women also lends weight to this inference. Nevertheless, what is undisputable is that certification from NIOS has helped both men and women access tertiary education.

Table 1: Distribution of Current Activity of Respondent who had completed Secondary and Senior Secondary in NIOS

Current Pursuit	Completed Secondary in NIOS			Completed Senior Secondary in NIOS			Completed Senior or/and Senior Secondary in NIOS		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Student	69	27	96	162	65	227	96	227	323
%	28.16	28.72	27.91	36.73	39.39	37.52	27.51	37.52	33.86
Employed	116	23	139	166	26	192	140	192	332
%	47.35	24.47	40.41	37.64	15.76	31.74	40.11	31.74	34.80
Self-Employed	37	6	43	63	8	71	43	71	114
%	15.10	6.38	12.50	14.29	4.85	11.74	12.32	11.74	11.95
Unemployed	23	38	66	50	65	115	66	115	181
%	9.39	40.43	19.19	11.34	39.39	19.01	18.91	19.01	18.97
Total	245	94	344	441	165	605	349	605	954

Note:

1. 'Current Pursuit' indicates the present occupation of a respondent at the time of survey, which was conducted in 2015.

2. '%' indicate column percentages. For example: % for Male Student under Completed Secondary in NIOS is derived from (Number of Male Student - Completed Secondary in NIOS \* 100)/ (Total number of Male - Completed Secondary in NIOS)

Source: CBPS Survey Data, 2015

### Prime Motivations for Opting the ODL route

The respondents were asked a simple question regarding the reasons for joining NIOS to which both male and female respondents answered almost similarly. Nearly one fourth to one-fifth of respondents opted for NIOS as they could not manage the stress of regular school system and therefore flexibility that NIOS offered was the main reason for their choice. The flexibility also helped those who wanted to upgrade and compensate for the lost time in their education, this being especially true for female respondents. A much higher proportion of female respondents also mentioned their poor health as the reason for not being able to attend regular schools, and therefore using NIOS for that opportunity. NIOS also helped both men and women to overcome constraints posed by the family circumstances: ill health of relatives and financial constraints. A small proportion reported the lack of easy access to educational institution as an important reason. Exploring better employment opportunities figure as an important reason for males who completed their secondary from NIOS. 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.

Flexibility is perceived differently by men and women. For male respondents, it meant combining their work with studies, whereas it was the ease to studying from home combining their care responsibilities for women. This resonates with a small internal study by NIOS where they traced cases of 29 past learners<sup>6</sup> and had reported similar findings. 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 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 secondary level for vulnerable groups but this vulnerability is not necessarily emanating from poverty or remoteness or from known social group related disadvantages.

<sup>6</sup>Case Study on NIOS Learners, NIOS, 2011. This is an internal study carried out by NIOS. CBPS procured a hard copy of the study from NIOS, Delhi Office in 2015.

Table 2: Reasons for Joining NIOS\* (Percentage distribution gender and level)

Reasons for joining	Secondary		Senior Secondary	
	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
Constraints due to family problem (health, culture & financial)	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)

\*Multiple answers question and therefore the totals are more than the number of respondents

Source: CBPS Survey Data, 2015

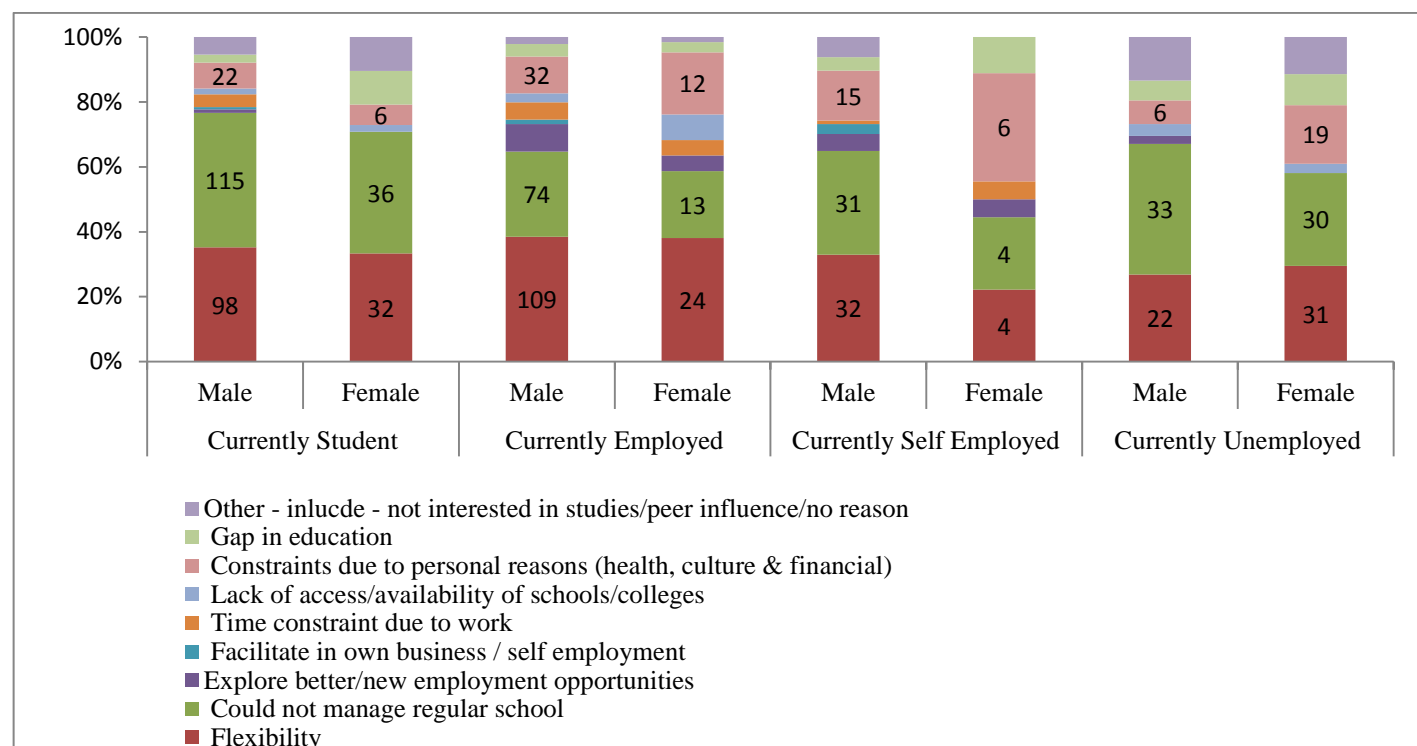


Figure 1: Present Status and Sex wise distribution of Reasons for Joining NIOS Source: CBPS Survey Data, 2015

## Enabling Learners for Further Education

The study attempted to explore the linkages with the tertiary education using three means. One was to understand the present highest educational qualifications of the past NIOS certified learners to be able to see if they had continued their further education or not. Seventy one per cent of female respondents and eighty per cent of male respondents who were currently students were pursuing undergraduate courses from various universities. However, the choice of subject was gendered: more men opted more for science and engineering courses, more women opted for 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 were 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<sup>7</sup> to assess if there is any discrimination exists against those who get their school certificates using NIOS or SOS. The eligibility criteria in these universities did not create any disadvantage for NIOS certified learners. Twenty five percent of these 126 universities had

<sup>7</sup> Karnataka was added as CBPS is located in Karnataka and we thought it would add to the understanding if we include more states.

clearly mentioned acceptance of NIOS certificates. None mentioned non recognition of NIOS certificate. No upper age limit for admission existed.

We also tried to gauge learners' perspective regarding if NIOS education added value in their efforts to go for higher education. 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 student category answering yes to the question regarding value addition said that the course and certification helped them widen their choices, either in terms of institutions and courses that they could choose from. An additional 40 per cent mentioned that the subjects offered by 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 also 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 addition in their path to higher education. The proportion of those answering in '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.

### **Enabling Learners for Labour Market Participation and Mobility**

When asked whether NIOS added value in their endeavour to find employment or move up in the ladder, more than one third of currently employed replied in 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 articulated these as: widening their search for jobs, in enabling their search for more stable ('permanent') and secure ('government') jobs, and also in upward mobility by making it possible for existing employees 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, majority of these people would not have been able to attain the mobility that they have if not for NIOS.

What is, however, worrying, is that the role and contribution of NIOS appears to be limited to certification rather than knowledge and skill upgradation. An overwhelming 65 per cent of those who were self-employed found said that NIOS did not add any value. Assuming that the certification is less important for those who are self-employed, these 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.

### **Conclusions**

It emerged that nearly 81 per cent of NIOS certified respondents were gainfully employed: either as a student, or self-employed or in paid employment – this is indeed an indication 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. An important conclusion that emerges is that though NIOS has not been successful in reaching the known educationally disadvantaged groups such as SC, ST, OBC or Muslim groups, and remains much more urban with poor presence in rural areas, it has played an important role in enabling young people to continue education and upgrade their schooling levels, especially those facing economic, social and personal hardships and those who had experienced failure in the mainstream regular system because of its rigidity. Flexible norms and requirements have made it 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 online route where the ease of accessing online, and other enabling technologies, for various purposes is limited, as seen with the female respondents who don't even have access to mobile phones, despite the digital reach in remote India. 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.

NIOS widened the access to schooling opportunities for both men and women. But the answer to whether NIOS promotes gender equity is 'mixed' because it also restricted them to domestic; however, it is still positive if ODL has not helped those who were anyway confined to domestic. The choice of subject for those who were pursuing higher education was gendered: more men opted more for science and engineering courses, more women opted for humanities – this is not specific to NIOS learners and not any different from choice of subjects from students who passed out from mainstream regular system. In other words, NIOS education does not seem to have changed any gender norm though it did help those many girls continue their schooling.

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 job market early and then cannot move up because of the 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, a matter of concern is that NIOS seems to be providing an 'easy' route for certification rather than a creative and stress-free option of schooling. Although it is not unique to NIOS and school degrees are serving the purposes of screening in most cases, this phenomenon deserves attention.

In the end, this tracer study needs to be viewed as preliminary one that provides pointers for a number of more elaborate researches in future. In the context of NIOS, it would help to trace different kinds of students separately. This would help us understand the trajectories followed by different kinds of learners better. Towards this end, it would help researchers tremendously if the student data is made more usable and user-friendly, and made available in public domain at regular interval. Some measures to weed out agents/middlemen could be useful, e.g., modify the admission software so that one phone number can be entered only once, or at most twice. This would force agents/institutions to provide the learners' numbers. NIOS could also write to universities for data on admission of students entering using NIOS certificates. This will 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 employment of those with NIOS certificates. One such example is NASSCOM – National Association of Software and Services Companies. Working towards the formation of an Alumni Network would also go a long way in building a network for NIOS graduates, and also in conducting future tracer studies.

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