Survey of Student Characteristics at the Open University: A Comparison with Conventional Universities in Sri Lanka

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This paper presents the findings of a survey which was designed to identify characteristics such as gender, age, employment etc. of students following six study programmes at the OUSL. The sample consisted of 2197 students registered for the selected programmes. The findings are then related to established trends in the conventional university system to highlight existing similarities and differences.

INTRODUCTION

Distance Education in Sri Lanka had its beginnings with the establishment of the Sri Lanka Institute of Distance Education (SLIDE) in 1976. The objective was to provide tertiary education in Mathematics, Science, Management and Technical Studies. The Open University of Sri Lanka (OUSL) was statutorily established in 1980 by incorporating SLIDE and the External Services Agency (ESA). Its main objectives are providing higher education for the employed and for those who missed opportunities in higher education at conventional universities (Kotelawela and Samarasundara, 1987;

Weerasinghe, 1994)). Participation is open to all those who are above 18 years of age.

At present, the OUSL conducts study programmes in a variety of areas leading to Certificates, Diplomas, Degrees, Post Graduate Degrees and Post Graduate Diplomas. OUSL Foundation Programmes offer opportunities for students who do not have the required G.C.E. (Advanced Level) passes to qualify for the undergraduate programmes. The current student population is about 20,000.

One of the challenges of distance education is coping with the heterogeneity of a student population opting for a study programme. Designing effective study material demands empathy with student characteristics. Woodley and Ashby (1994) have discussed the desirability of assembling learner profiles to help designers with their task of producing distance education study material.

This paper presents a pioneering effort to study student characteristics of selected study programmes at OUSL.

The main objectives of the study were

- to develop and standardise an instrument to maintain a student profile for the OUSL,
- compile student profiles for the selected programmes of study,
- compare and contrast observed profiles between programmes, and
- relate established trends with learner profiles in the conventional university system.

METHODOLOGY

A preliminary draft of the questionnaire was subjected to a limited circulation among senior academic staff of the OUSL and was revised based on their responses. A pre-pilot survey was then conducted with a group of 30 students. The objectives were to establish the clarity of instructions and the suitability of the length of

the instrument. The instrument was revised again and made available in Sinhala, Tamil and English.

The instrument was administered during registration/re-registration for six study programmes in 1994/95. The study programmes so selected included the different categories of programmes offered by the OUSL. Students were expected to respond on a voluntary basis.

Data pertaining to conventional universities was obtained from data published by the University Grants Commission (UGC) in its Statistical Hand Book (1995). Study streams of conventional universities compatible with the selected OUSL study programmes were chosen for the purpose of comparison. Due to unavailability of data related to some characteristics for the conventional system, comparisons could be made only in relation to the following variables.

- gender
- ethnicity
- age.

Other variables are analysed only to show the situation at the OUSL.

Response rate

The percentage responses for each programme selected for the study are presented in Table 1 below.

All programmes except the Diploma in Technology programme and the Foundation programme in Social Studies showed a response rate over 80%. The lowest response rate was observed for the Foundation programme in Social Studies at 18% of the population.

Table 1 - Classification of respondents (OUSL) by study programme

Study Programme	Total enrolled	Number of Responses	%
Certificate Programme in Wild Life Conservation and Management (Wild)	56	46	82
Certificate Course in Tourism Operations (Tour)	48	46	96
Foundation Programme in Social Studies (Soc)	1590	285	18
Diploma in Management Programme (Man)	811	659	81
Bachelor of Science Degree Programme (B.Sc)	1074	911	85
Diploma in Technology Programme (D.Tech)	832	250	30

Source: Survey Data - OUSL

FINDINGS

Gender

Table 2 presents gender distribution for selected programmes of study at the OUSL. Female participation was higher than male participation for the Bachelor of Science Degree Programme. All other programmes showed higher male participation. The Diploma in Technology Programme had the lowest female participation.

Table 2 - Classification of OUSL students by gender

	Wild	Tour	Soc	Man	B.Sc	D.Tech
Female	17.4	19.6	39.6	23.4	58.8	13.9
Male	82.6	80.4	60.4	76.0	40.9	85.7

Source: Survey Data - OUSL

Table 3 presents the gender distribution in the disciplines of Arts, Science, Management and Engineering for conventional universities. The percentage of male participation was higher for all disciplines except Arts where female participation was higher.

Table 3 - Classification of undergraduate entrants to conventional universities by gender

	Arts (%)			Science (%)			Management (%)			Engineering (%)		
Y	1990 /91	1991 /92	1992 /93	1990 /91	1991 /92	1992 /93	1990 /91	1991 /92	1992 /93	1990 /91	1991 /92	1992 /93
F	63	62	61	43	45	34	44	43	45	11	16	14
M	37	38	39	57	55	66	56	57	55	89	84	86

Source: UGC Statistical Hand Book 1994 - modified (1995; pp. 42)
Y- Year, F- Female, M - Male.

Ethnicity

Table 4 presents ethnic participation in the selected study programmes at the OUSL. Participation of Sinhala students was the highest in all programmes varying from 79% for the Certificate Course in Tourism Operations to 91% for the Certificate Programme in Wild Life Conservation and Management. This was followed by Tamil and Moor participation respectively in all programmes except for the Certificate Course in Tourism Operations. Tamil participation remained around 7% except for the Foundation Programme in Social Studies with 13% and the B.Sc Degree Programme with 14%.

Higher participation by Moors in the Certificate Course in Tourism Operations at OUSL stands out as a significant difference. In other programmes it was only 3-5%.

The 'other' category showed only 4% and 2% for the Certificate Course in Tourism Operations and the Foundation programme in Social Studies respectively.

Table 4 - Classification of OUSL students by ethnicity

Race	Wild	Tour	Soc	Man	B.Sc	D.Tech
Sinhalese	91.3	78.3	81.4	88.5	81.0	87.4
Tamil	6.5	6.5	12.6	7.0	13.7	7.8
Moor	2.2	10.9	3.9	3.6	4.8	3.9
Other	0.0	4.3	2.1	0.8	0.4	0.4

Source: Survey Data - OUSL

Table 5 shows statistics for selected programmes in the conventional system. For all programmes, the greatest percentage of students are from the Sinhala community, with Tamils and Moors in smaller numbers respectively.

Table 5 - Classification of undergraduate entrants to conventional universities by ethnicity

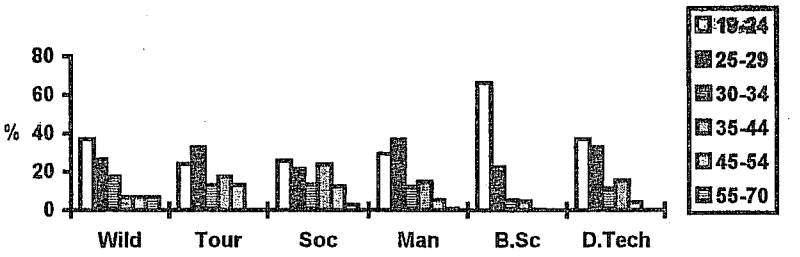
	Arts (%)			Science (%)			Management (%)			Engineering (%)		
Y	1990 /91	1991 /92	1992 /93	1990 /91	1991 /92	1992 /93	1990 /91	1991 /92	1992 /93	1990 /91	1991 /92	1992 /93
S	78	77	82	75	78	86	75	71	82	73	70	84
T	13	16	10	20	19	9	17	21	11	22	26	14
M	9	7	8	4	3	5	8	8	6	4	4	2
O	0.1	0.1	0.6	0.3	0.2	0.2	0.4	0.4	1	0.4	0.3	0.1

Source: UGC Statistical Hand Book 1994 - modified (1995; pp. 49)
Y - Year, S - Sinhala, T - Tamil, M - Moor, O - Others.

Age

Figure 1 presents age group distribution for the selected study programmes at the OUSL. Heterogeneity in age distribution is marked. The B.Sc Degree Programme, the Diploma in Technology Programme, the Certificate Programme in Wild Life Conservation and Management and the Foundation Programme in Social Studies showed a higher percentage of students in the 19-24 year age group. The Certificate Course in Tourism Operations and the Diploma in Management Programme showed a higher percentage of students in the 25-29 year age group.

Figure 1 - Age group distribution at OUSL



On a cumulative basis, only the Foundation Programme in Social Studies showed more than 50% participation of students beyond 30 years of age. The participation of students under 30 years was very high for B.Sc Degree Programme (88%) with 69% for the Diploma in Technology Programme, 65% for the Diploma in Management, 63% for the Certificate Programme in Wild Life Conservation and Management, and 55% for the Certificate Course in Tourism Operations.

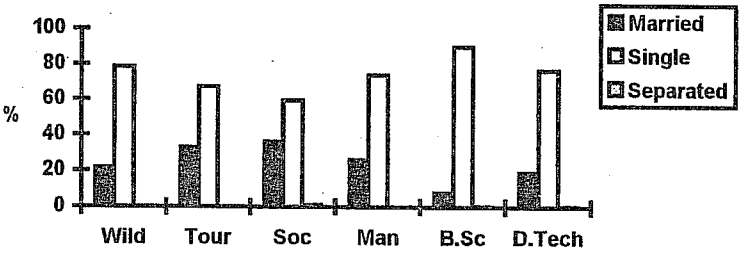
Student population at conventional universities show marked homogeneity in terms of age. Formerly students used to begin undergraduate study between 19-20 years of age. However, civil disturbances which led to sporadic closure of Sri Lankan universities in the recent past have affected the age of university admission. Students now enter at 22-23 years. Older students are found only occasionally.

Civil Status

At the OUSL, this characteristic showed direct relationship with age (Figure 2). The percentage of unmarried students was higher for programmes where the number of students under 30 was high. The 90% of students enrolled for the B.Sc Degree Programme were unmarried as were 78% of those in the Certificate Programme in Wild Life Conservation and Management, 77% in the Diploma in Technology Programme, 74% in the Diploma in Management

Programme, 67% in the Certificate Course in Tourism Operations, and 59% in the Foundation Programme in Social Studies.

Figure 2 - Civil status - OUSL

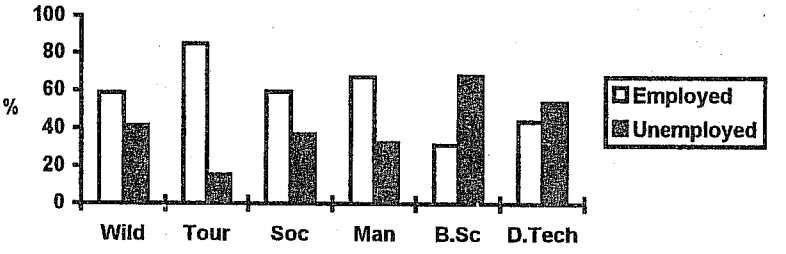


Actual statistics on marital status, in the conventional universities were not available for comparison.

Employment

Figure 3 presents percentages of employed and unemployed students in selected programmes at the OUSL. The B.Sc Degree and Diploma in Technology programmes showed higher percentages of the unemployed category with 68% in the B.Sc Degree Programme and 54% in the Diploma in Technology Programme.

Figure 3 - Employment status of students enrolled in selected study programmes in the OUSL



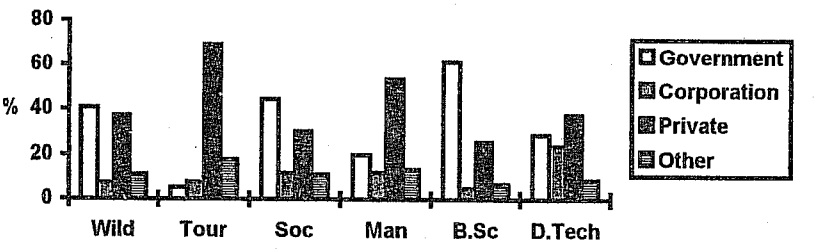
The Certificate Course in Tourism Operations, the Diploma in Management Programme, the Certificate Programme in Wild Life Conservation and Management and the Foundation Programme in

Social Studies showed higher percentages of employed students, with the Certificate Course in Tourism Operations reaching 84.8%.

Employment sector

The Certificate Programme in Wild Life Conservation and Management, the Foundation Programme in Social Studies and the B.Sc Degree Programme showed a majority of students being employed in the government sector. It seems significant that almost 80% of the Certificate Course in Tourism Operations students are from the private sector (Figure 4).

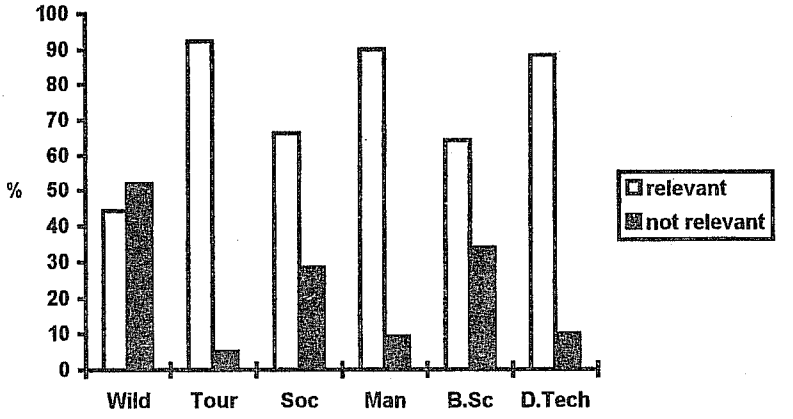
Figure 4 - Employment sector - OUSL



Occupation

The major categories of employment in the B.Sc Degree Programme comprised of teachers (39%), clerical (20%) and technical personnel (15%). The Diploma in Technology Programme had 64% employed in jobs involving technical work. The Diploma in Management Programme had 32% of students in managerial positions, 20% in clerical grades and 10% in professional employment. 20% of students in the Foundation Programme in Social Studies were employed as teachers while 21% were engaged in clerical work. In the Certificate Course in Tourism Operations, the corresponding figures were 23% managerial, 21% service, 15% sales and 10% professional categories. In the Certificate Programme in Wild Life Conservation and Management 22% of students were working in a managerial capacity,

Figure 5 - Relevance of studies to employment



It is common understanding that students in the conventional universities, being full time students, are not normally employed. However, statistics on employed status of students were not available for the conventional system.

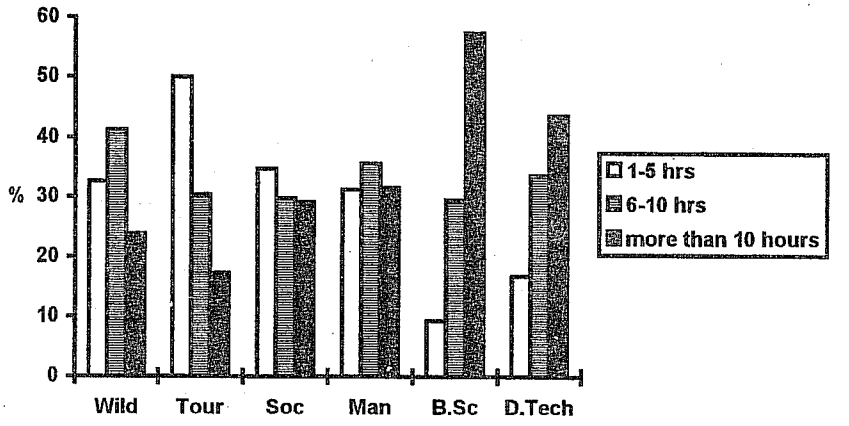
Time spent on studies

Figure 6 shows responses relating to time spent on studies. Co-relation of study time with age showed that in all study programmes except in the Certificate Course in Tourism Operations, time spent on studies gradually declined with age. In the Certificate Course in Tourism Operations, however almost all age groups spent 1-5 hours per week on their studies.

When time spent was analysed in relation to age and employment it was found that the B.Sc Degree and Diploma in Technology Programmes, which have a higher percentage of young, unemployed students, require longer periods of study. In the B.Sc Degree Programme 57% and in the Diploma in Technology Programme 44% of students spent more than 10 hours per week on studies.

In the B.Sc Degree Programme students in almost all age groups spent longer hours studying than the students in other selected programmes.

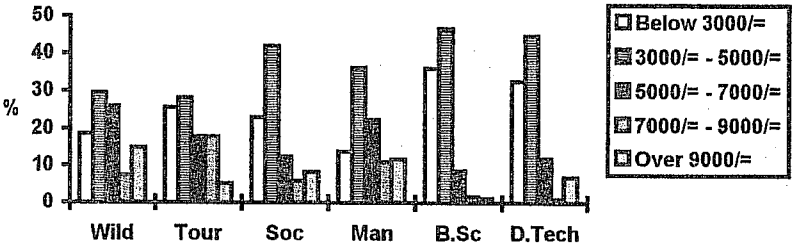
Figure 6 - Time spent on studies



Income

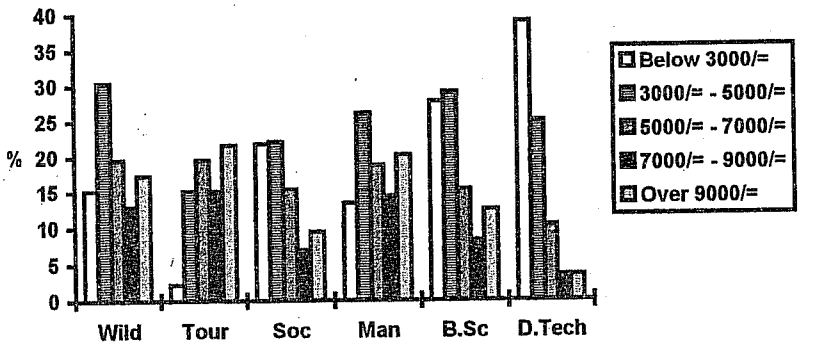
The majority of respondents for all OUSL study programmes either have an individual income between rupees three thousand to rupees five thousand (Figure 7) or belong to a family whose income is in that range (Figure 8).

Figure 7 - Personal Income



In the Certificate Programme in Wild Life Conservation and Management, the Diploma in Management Programme and in the Certificate Course in Tourism Operations 20% of students had an income which was in the range of rupees five thousand to rupees seven thousand. Studied in relation to employment, these findings can be linked with the students, occupations.

Figure 8 - Family Income



Sponsorship

Here the intention was to find out who sponsor students for studies. The Mahapola Scholarship scheme is available for both conventional and Open University students. However, the B.Sc Degree Programme and the Diploma in Technology Programme in the OUSL showed a higher percentage of younger unemployed students 88% and 73% respectively, with sponsorship by parents (Table 7).

Table 7 Analysis of applicants by Sponsorship

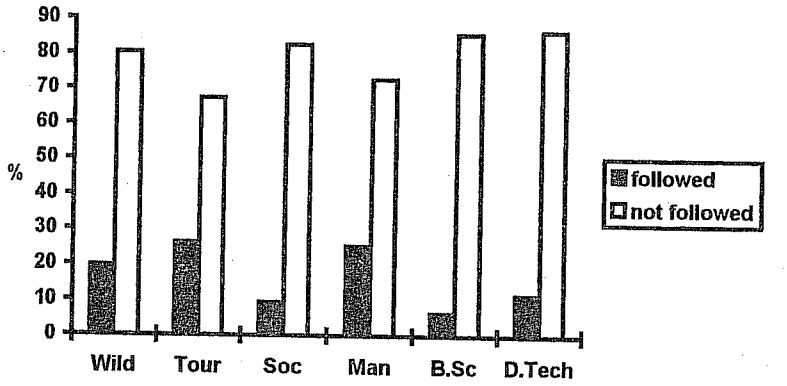
Name of the Sponsor	Wild	Tour	Soc	Man	B.Sc	D.Tech
Myself	56.5	82.6	58.9	63.0	26.2	35.5
Spouse	0.0	0.0	2.5	0.8	1.1	0.0
Parents	32.6	13.0	27.4	29.7	63.0	41.1
Siblings	6.5	0.0	1.8	0.9	2.4	3.0
Myself & family	4.3	0.0	2.5	2.6	3.4	5.2
Institution	0.0	2.2	1.1	0.6	0.2	0.4
Myself & employer	0.0	0.0	0.7	0.8	0.1	1.7
Mahapola Scholarship	0.0	0.0	0.0	0.2	0.1	4.3
University Bursary	0.0	0.0	0.0	0.0	0.2	0.0

Source: Survey Data - OUSL

Prior exposure to OUSL courses

Figure 9 shows the percentages of those who have followed other programmes at OUSL prior to the programmes currently enrolled in. All programmes seem to reflect some prior exposure to OUSL methodology or programmes and seemingly a loyalty to OUSL.

Figure 9 - A Prior exposure to OUSL courses



DISCUSSION

The study shows that there are significant differences in learner profiles between different programmes of study at OUSL. This is to be expected. The success of a distance education institute depends on the ability to perceive and cater to such differences.

The B.Sc Degree Programme and the Diploma in Technology Programme had the highest participation of those in 19-24 year age group. Unemployed student percentages were also high for these programmes. Accepted social norms allow us to infer that this younger age group represents the majority of the unmarried students. A majority of students belong to the low income group, with high sponsorship from parents. This suggests that enrolment by younger students was due to their need or desire for a career in the selected field and that this ambition was supported by their parents. This segment may comprise those who would have failed to obtain free education at the conventional universities and also those who opt out due to various other reasons i.e. personal problems. Data revealed that out of those who had qualified only 30% in Science, 9% in

Commerce and 13% in Arts were admitted to the conventional universities in the 1992/93 academic year (UGC Statistical Hand Book 1995, pp. 37). It would be interesting to analyse how well the younger population performs in the distance mode of learning, as they had entered the OUSL immediately after having left the school system. The longer study hours spent by this age group would relate to availability of free time as against those who are employed. This also indicates that they should be given necessary support to adapt to new learning styles as self learners.

The B.Sc. Degree Programme at OUSL seems to have offered greater opportunities for female participation. This phenomenon may perhaps, be due to the fact that a large number of teachers enrol in this programme. According to available statistics the majority of non graduate teachers (67%) are females (School Census, 1992). This segment may therefore have turned to OUSL as a viable means of obtaining a degree while in employment. OUSL responded to this need by launching a Bachelor of Education (B.Ed) in Science through collaboration by the Faculties of Natural Sciences and Humanities and Social Sciences in 1992. A comparison of profiles between B.Sc. and B.Ed Degree Programmes may prove useful to understand how this need has been fulfilled.

Gunawardena (1997) reported that the participation by women in professional science and engineering based courses in conventional universities was lower than in the other courses. OUSL seems to have changed this trend for Science. However, participation of females in engineering studies (Diploma in Technology Programme) seems to remain unchanged.

In the conventional system, there is a greater preponderance of females reading for a degree in the Faculties of Arts/Humanities. At OUSL, the programme comparable to the conventional BA is the Foundation programme in Social Studies which permits students to move upwards to a BA. In this programme, however, it was the males who were the larger group. The largest age group was in the 19-29 age range. Cumulative percentages showed that more than

50% of the students were beyond the age of 30 years. It would be interesting to investigate whether the decline of female participation as compared with female participation in the conventional universities is related to the age profile. Comparison of age with time spent on studies revealed that the younger group (19-24) spent more than ten hours per week. This contrasts with the B.Sc. Degree Programme where almost all age groups spent long hours studying. Here the older age group are mainly the employed and hence may represent motivated teachers and clerical staff in search of upward mobility in their careers. As noted above, the younger group may represent school leavers in search of a career.

The Certificate Programme in Wild Life Conservation and Management appeared to be a mixed bag. The participation of the 19-24 year age group was high. The percentage of employed students was higher than that of the unemployed. Employment was higher in the government sector, possibly in Forestry and Wild Life. 22% was in managerial with 11% in service sector, 20% had more than Rs.5000/= per month income. Although not a focus of this study, it appears that the unemployed young are interested in nature conservation issues, while mid-life groups seek career mobility.

The Certificate Course in Tourism Operations and the Diploma in Management Programmes catered to a relatively more mature clientele with a majority participation from the 25-29 year age group. A high percentage was employed. Males showed higher participation rates and most came from the private sector. Many worked in management or service capacities with incomes above Rs.5000/= per month. The motivation of the 25-29 age group seemed high as they spent long hours studying.

Ethnic participation reflected the ethnic ratios of the island; 74% are Sinhalese, 12.6% Tamils, 7.1% Moor and 6.8% 'Other'. Table 5 reflects a gradual decrease in Tamil participation for all programmes in the conventional university system, which may be a result of the ethnic crisis in the northern region of the island. Tamil participation in all programmes at OUSL seems lower than at conventional

universities. It would be interesting to find out whether this has some kind of relationship with the medium of study. Participation by Moors which remained low as in the conventional system showed a dramatic increase over Tamil participation for the Course in Tourism Operations. It seems to show that there is a sizeable number of Moors in the Tourism service sector. Further this programme is offered in English and often it is the Burghers and urban Moors who seem to be proficient in English.

Overall, students who were employed appear to believe that completing studies would provide them with upward career mobility. The Science and Technology streams appear to attract younger students in search of career development and economic betterment. The majority of respondents belonged to a group with an income level of Rs. 3000/= - 5000/= per month. All programmes had a certain proportion of students who seemed to continue in the system after completing one study programme. OUSL does provide ladders of opportunity for upward movement from awareness courses to certificates and onward to undergraduate programmes through foundation studies. It appears that these opportunities are being exploited to some degree.

The questionnaire used in the study has been modified consequently under the guidance of a consultant from the Open University, UK, with the participation of a team of OUSL staff. It has also been decided that the questionnaire should be incorporated into the standard student application form of the OUSL. This will make it mandatory for students to fill in the profile when applying for admission and would thereby ensure the complete collection of all student profiles.

A complete database of student profiles would help satisfy the need to analyse student performances against student characteristics and to ascertain success rates of completion and drop out rates etc. in order to provide further insights into the effectiveness of distance education at the OUSL.

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