Information Technology (IT) Education in Andhra Pradesh: A Sociological View

Nagaraju Gundemeda

*Department of Sociology, School of Social Sciences, University of Hyderabad,
Hyderabad 500 046, Telanagana, India
Telephone: 04023133263*

ABSTRACT Information Technology (IT) Education gained significance in the wake of the Globalization of society and liberalization of the economy in India. The present paper based on field work in four cities of Andhra Pradesh, India with 225 student sample, argues that the overwhelming demand for IT education needs to be located within the broader framework of global workforce transition and transformation in the forms and practices of knowledge production and consumption. The paper demonstrates the socioeconomic profile of IT education seekers and maps the aspirations and contestations associated with students' expectations from IT educational institutions. Paper also deals with the everyday experiences and encounters of students in the context of unforeseen global economic crisis and its impacts on employment opportunities generated by IT industry in India.

INTRODUCTION

Information Technology (IT) brought about far-reaching changes in production, services and cultural patterns in the 21st century. The wider application of Information and communication Technology (ICT) in diverse spheres of life across post-industrial societies, led to the rise of knowledge economy which is recognized as a precondition for negotiating with a global economy and society. To sustain the knowledge economy, it is necessary to develop skilled individual who meets the global demands imposed by capitalist economies. It is here that education plays an important role. Countries, which provide education oriented towards creating IT professionals, tend to have great advantage in the present day context. The demand for IT professionals has created conditions for easy flow of trained IT personnel across countries and continents. IT professionals from the developing countries like India have been migrating to the developed countries like USA, Europe, and some of the Asian countries like Singapore, Thailand and Malaysia. These IT professionals in order to gain the social recognition within the country; migrates to the developed nations for better employment opportunities, high salaries and getting fond of the rich lifestyles. These perks, then attract a great deal of importance to study Information Technology education. As a result a number of IT institutions emerged over the last two decades across the country both in public and private sector to provide IT education at various stages of education. Although diverse social communities have been obtaining degrees and diplomas provided by government or private institutions in IT. Access to IT education and employment opportunities tends to be influenced by the patterns of organization in terms of rural-urban, government-private and fee charges. On the other hand, aspiration to access education is determined by the socio-economic and cultural background of the students who are interested in pursuing the IT courses.

A cursory look at the scholarly works on education and equality with reference to caste, class, gender and family were the major themes attracted the attention of scholars in sociology of education over the period of five decades. However, recent studies by the sociologist and social anthropologists such as Chanana (2007) examined the impact of globalization on higher education from the perspective of gender and class. Globalization of the economy and consequently education let feminization of technical education across the states in India. Fuller and Narasimhan (2006, 2007, 2008) study of software

Address for Correspondence:
Senior Research Fellow,
Department of Sociology,
University of Johannesburg,
Johannesburg, South Africa
E-mail: nagarajuhcu@gmail.com,
ngss@uohyd.ernet.in,

industry in Chennai highlights the economic context and social composition of software professional. In their extensive anthropological study of the making of IT industry in Bangalore, Upadhyay and Vasavi (2007, 2008, 2009) found the social background of software professionals. Noted the making social matrix based on caste, class and gender. The study observed that most of the software professionals belong to the upper caste with the urban middle class background.

Biao (2005) study of the transnational software professionals of Andhra Pradesh maps out the social and cultural values of the younger professional classes hails from the dominant castes. Radhakrishnan (2012) study demonstrates the sociological meanings of gender and culture of women software professionals. The study found that despite of higher earnings, IT women are expected to perform the traditional roles as wife, mother and sister-in law. Bhattacharya and Ghosh (2014) study of the social context of women software professionals in Kolkata highlights changing family values towards educating daughters and encouraging them to enter the IT industry. The study found that the pattern of social mobility among the young women software professionals is higher compared to their mothers. Type of occupation, income, social autonomy considered as the indicators of social mobility.

A critical review of the foregoing research studies reveals that, except a study by Biao (2005) which brings to the fore the political and social economy of IT industry in Andhra Pradesh, other studies reflect the research trends on IT industry across the major metropolitan cities of India. With this outlook, the current paper aims to fill the research gap in the area of the social context of IT industry and higher education in Andhra Pradesh with the objectives of mapping the political economy of the IT education; examining the social economy of the new degrees and diploma offered by the IT institutions and by analyzing the expectations and experiences of different social groups in accessing IT education

METHODOLOGY

Andhra Pradesh is one of the major hubs of training, human resources in the field of IT in India. On an average 25% of the total software personnel originates from the cities and towns of Andhra Pradesh. IT jobs are highly coveted among the members of the middle class and upper castes in Andhra Pradesh.*Since Andhra pradesh one of the happening state in IT and related services, to understand the social background of the IT aspirants an empirical study is conducted in this state. Before starting the major fieldwork a short pilot study was carried out to get an idea of over the study filed.* In accordance with the objectives of the paper and research design, the author selected four cities, namely Hyderabad, Vijayawada, Warangal, and Tirupathi. The rationale behind selecting these four cities as field sites is apart from Hyderabad the other three cities represent three sub-regions of Andhra Pradesh namely coastal Andhra, Telangana, and Rayalaseema respectively (Kamat 2011).

There were around 220 IT education centres across the erstwhile Andhra Pradesh. Hyderabad accounts for 96 centres, whereas, Vijayawada, Tirupathi and Warangal accounts for fifteen centres per city with a total of 45 centres, the rest of the institutes (79) spread across the cities and town of Andhra Pradesh. The study was conducted in 16 IT education institutes selected from four cities of Andhra Pradesh. The major focus of the paper is students. The respondents (students) for the present paper fall within the age group of 18-30 years who were pursuing IT education courses at different levels in terms of short and long term courses and level of IT knowledge. This may be termed a purposive sample. The administrative staff of the institutes allowed the author to interact with students. The total sample of the paper is 240; 15 incomplete questionnaires were not included in the analysis. Data obtained from 225 respondents were analysed. The present paper employed both qualitative and quantitative techniquesin addition to the questionnaire used to collect data from the students. In this paper, caste background, social class, rural-urban, gender, educational and professional background of the students is considered as independent variables. The degree of access, perceptions and attitudes of the students are considered as dependent variables.

RESULTS AND DISCUSSION

The findings of the paper are broadly presented under two heads, the first part presents the socioeconomic backgrounds of the students

and the second part outlines the methods of entry and experiences of the students in the IT education centres in Andhra Pradesh.

IT education and training tend to attract various social groups cutting across age factors. With the growing importance of computer literacy and the demand from the market and industry has attached considerable significance to Information Technology courses with varying duration. There are multiple factors driving different social groups ranging from children to adults. Table 1 provides a brief description of the age groups of students enrolled in IT education and training institutes.

Table 1 indicate that almost 50 percent of the respondents fall in the age group of 16-20 years. In other words, half of the students are pursuing either intermediate (10+2) or undergraduate degree programs and learning computer skills simultaneously. The second largest number of students falls in the age group of 20-25 (43 percent). This trend demonstrates that those even at the master's level of their education are pursuing IT education to enhance their skills. The two groups account for more than 90 percent of the total sample. Although diverse age groups are registered in IT education, the driving force of the training industry in the non-formal sector is the college going students. The students in the age group 26-30 or more are relatively less compared to students from other age groups. Table No.1 implies that the students in the 15-25 age groups outnumber all other age groups in IT education and training. There are multiple motivational factors at macro level, for students such as high salaries, employment opportunities, social prestige, abroad trips, higher education where conditions such as unemployment, underemployment, lack of proper working conditions are prevalent.

Table 1: Profile of the respondents

Age group	No.	%
16-20	111	49
21-25	97	43
26-30	17	8
Total	225	100

Admission Process

IT education and training institutes adopt a threefold method in the process of admissions. First, through entrances or a screening test conducted by the institutes; second, through payment; and third, through sponsorships by the government agencies.

Table 2 presents that 27 percent of the students got admission based on the performance in the test conducted by the institutes in addition to a certain payment of fee. Nearly 64 percent of respondents got admission after the payment of required amount charged by the IT education institutes. Over 9 percent of the respondents got admission through sponsorships. The most popular method of admission is through payment. It is the most prevalent method practiced by all the IT educational training institutes. This method, strictly adheres to the individual's paying capacity. Those who can pay the required fee demanded by the IT education and training institutes for the different courses would get admission without appearing for a written test. The third method of admission is the sponsorship method where the government bodies finance IT education of the socially and economically backward students.

Table 2: Admission patterns

Admission criterion	No.	%
Entrance	61	27
Payment	143	64
Sponsorships	21	9
Total	225	100

Apart from the above methods, an informal method of admission was also noticed. It depends upon the understanding and the personal relationship between the management and the admission seekers. In such instances many of the factors, including the fee structure can get modified varying from case to case. The above data clearly shows that the most prevalent method of admission is through payment followed by the sponsorships. The entrance test systematically eliminates the students who are not familiar with the mode of entrance examination based on technical knowledge. Payment method only serves the students who have a very good economic background and it totally excludes the lower classes. According to some of the students of middle class background, in the process of mobilizing funds for educating their children, the parents had to sacrifice several things. The state government's initiative in the

direction of sponsoring IT education to the socially and economically backward sections is a welcome measure.

However, it seems to serve only a limited number of students because the proportion of sponsorships available is less compared to the percentage of graduates hailing from these sections at the state level. To maintain standards in IT education, the reputed institute conducts a preliminary test to assess the student's ability and analytical understanding. It was very much popular until the year 2000.

The financial slowdown has had significant implications for IT education and training institutes in India including Andhra Pradesh. The major outcome of the slowdown was the decline in number of aspirants. IT education institute responded to this by waiving the requirements like admission test. The following case studies reflect the mood of the educated youth and rationale behind pursuing extra IT courses in IT education institutes.

IT institute as passport institutes for IT industry

The criterion in selecting IT education institutes varies from individual to individual. Respondents are classified into four categories:

(1) The reputation of the institutes, (2) quality of teaching,
(3) Physical proximity to home, and (4) range of courses offered.

Table 3 shows that 44.5 percent of students had selected IT education institutes on the basis of reputation and brand name of the company to which a particular centre is affiliated; followed by good teaching with 37 percent; 11 percent of respondents mentioned proximity of the IT Centre. It appears that prospective students collect information about the quality of teaching from their friends and relatives. The data shows that a large chunk of the student community considers the brand name of these IT edu-

Table 3: Criterion in selecting IT Centre

Admission criterion	No.	%
Reputation	100	44.5
Good Teaching	83	37
Nearer to home	25	11
Diverse courses	17	7.5
Total	225	100

cation and training institutes as a significant criterion due to three reasons: one, the brand name enhances job prospects because of its reputation in the industry; two, standards maintained by these institutes regarding infrastructure, study material, courseware and methodology; and three, placement cell provides an opportunity to some of the students in securing jobs in IT training institutes.

Some of the students mentioned that they had chosen the centre after inquiring about the quality of teaching of the IT education institutes. One respondent felt that students take note of the faculty's depth of domain knowledge in a particular course. If they are satisfied with the teacher's potential only then do they join for that particular course. Some of the women students mentioned that the proximity of the IT education centre of their residence was an important criterion in joining the nearby IT Centre.

The foregoing analysis implies that the reputation of the institute dominates in the process of selecting IT education and training institute. Therefore, we may conclude that the IT industry is very much governed by the brand name. The students are ready to pay for the symbolic power of the brand name rather than its potential ability to generate employment opportunities.

Table 4 shows the data pertaining to students' preferences over the long term and short-term courses. The paper reveals that 54 percent of respondents opted for short-term courses, 46 percent of respondents opted for long-term courses. The preference of courses either for short term or long term tends to change according to the student's basic disciplinary background. A systematic analysis has been done to understand the disciplinary background of the students who opted for long term and short-term courses. The data revealed that students who had IT courses as part of their curriculum in engineering and computer application seem to prefer short-term courses to add to what is already offered by the curriculum and to enhance their prospects in the job market.

Table 4: Option of courses

Course	No.	%
Short-term	121	54
Long-term	104	46
Total	225	100

According to a group of students, the rationale behind their choice of short-term courses was to get an edge over others while competing for jobs. As the software application tools keep changing, they have to keep abreast of the changes and acquire skills in application tools currently in demand. Short-term courses tend to emphasise tool-based learning. An additional advantage of the short-term courses lies in lower fee which enables even some of the lower class students to pursue the course. Students who opted for a long-term course were predominantly from traditional streams like BA, B. Com, B. SC and Postgraduates. Most of the students revealed that the rationale in choosing the long-term courses was to build a career in IT industry and IT enabled service industries. But the IT institutes charge a significant amount for each long-term course.

The minimum amount for a long-term course is Rs. 25,000/- and it goes beyond Rs 68,000/-. The majority of the students felt that the institutes charge high fees. However, the perception that the training has the potential to secure employment and consequent economic benefits and social prestige, motivates students to join for long-term courses. The central and state government policies led to significant decline of employment opportunities in the public sector. The process of liberalization and privatization, lack of job prospects for traditional disciplinary studies and demand for highly qualified personnel with computer skills, compelled students to opt for long-term courses.

Expectations

paper views that changing preference pattern is a response to structural changes brought by globalisation all over the world and liberalization policies initiated in India since the 1990s. This process shifted the balance of employment opportunities towards service oriented jobs which are primarily meant to sustain information societies of the west in general and USA in particular. The high level of demand for those trained in software tools in the wake of the year 2000 (Y2K) problem and the computer training companies gave a boost for tool-based diploma courses. The non-formal sector capitalize on that demand even as the growth witnessed a slowdown in the later years.

Table 5 indicates the expectations of the students from their IT education and training. The students who were in the age group of 18-25 years had a lot of expectations. 39 percent of respondents were expecting jobs from their training. More than 50 percent of the respondents wanted to acquire IT knowledge and 9 percent expressed that they wanted to go abroad. The above data indicates that students still attach a lot of significance to a career related to IT industry and IT enabled service industries. The students were anxious about the courses they were pursuing and the money they had been spending for acquiring skills to get a placement in the industry. The majority of students expressed their anxieties in the wake of retrenchments in IT industry. However, still students seem to have a strong belief in the employment potential of Information Technology. The perceptions and attitudes of the students show that the majority of them believed in the potential of IT industry in generating employment opportunities. However, the recession in the world economy and slowdown in the IT industry changed the attitudes of the students considerably. The process of slowdown created some sort of anxiety among the students who were pursuing IT courses.

Table 5: Expectations from the IT institutes

Expectations	No.	%
Good job	87	39
Acquiring knowledge	117	52
To go abroad	21	9
Total	225	100

Socio-economic Profile of the Students

Sociologists regard caste as one of the basic foundations of social stratification in India. Stratification system and the educational system are not independent entities (Deshpande 2013). In this paper the categorization was done on the basis of the respondent's social rank perception of the position of his / her caste in the hierarchy. For the purpose of the present paper, I followed the classification of caste groups adopted by the government of Andhra Pradesh in terms of OC (other castes), OBC (other backward castes), SC (Dalits) and ST (tribal groups) (Table 6). The specific caste groups included in upper castes or other castes or forward castes, BC, SC, and ST are given bellow. The respondents included

in the paper were asked to indicate to which of the caste groups in terms of OC, BC, SC, ST they belong.

Table 6: Caste background of the students

Caste	No.	%
OC	131	58.2
OBC	72	32
SC	21	9.3
ST	1	0.5
Total	225	100

The process of globalisation significantly changed the priorities of parents and students in the selection of courses. A number of factors motivate students and parents to opt for engineering in IT compared to other professional courses like Medicine. For instance, factors such as immediate employment opportunities, higher pay packages and the social prestige attached to IT jobs led to this social demand for IT education in the state of Andhra Pradesh. IT education in the state to a certain degree has also emerged as one of the potential means for realizing the socioeconomic aspirations of various groups. On the other hand the upper caste Hindu youth are two to four times more likely to be graduates than the youth from OBC, SC, ST categories and Muslims.

Gender Composition

Sex disparities in educational opportunities tend to be greater in developing countries, and India is not an exception to this. The 1960-70's green revolution in agriculture sector, steady growth of Industrial sector and recent developments in Indian economy has relatively brought down discrimination based on gender in the fields of employment and education.

Table 7 shows the gender composition of respondents. 64 percent of the respondents were men and 36 percent were women. The representation of men is nearly two times higher than

Table 7: Gender composition

GenderCaste	No.	%
Male	144	64
Female	81	36
Total	225	100

that of women. Compared to other streams of technical education, the proportion of women pursuing IT education is much higher. The reasons are that IT-related jobs do not demand physical labour, and they resemble white-collar jobs. Nearly 35 percent of the IT professionals in IT Indian industry are women (Data Quest 2012). The above trend shows that IT industry has been liberally recruiting women in professional software jobs by denouncing patriarchal notions of women's intellectual potential.

The steady growth in the number of women in IT and ITES industry is associated with a number of factors. First, women students viewed that IT jobs as women friendly compared to other jobs which demand travel and need to handle machinery and hardships (mechanical and civil engineering). Second, the office based work organization of IT careers also tends to motivate large proportion of women towards IT jobs. Third, social institutions such as marriage also demand women to enrol in IT courses. The rationale behind this is that most of the grooms in general and grooms based in the United States of America expect an IT degree from the bride. Fourth, the dowry would also, to some degree be determined by the educational qualification of the bride, as a result the middle class parents encourage their daughter to study IT courses. The study found that married women whose husbands are based in America expected to acquire skills and knowledge in IT before they leave India (Nagaraju and Haribabu 2004; Chanana 2007; Chattergee and Ghosh 2014).

Further, the institution of marriage is also undergoing change from sacred and divine bliss to a pragmatic contract. Both the bride's party and groom's party prefer an alliance with a boy or girl who has acquired IT education. Prospective brides favour grooms employed abroad. Most of the young women learn computer courses as an additional qualification with the view of enhancing their marriage prospects (Nagaraju G 2014). Biao (2005) rightly captured the pulse of educated youth of Andhra Pradesh belonging to dominant peasant castes, particularly Kamma and Reddy, who attach a lot of significance to IT jobs. Those who are working in western countries (including America) command more respect compared to others working in India. This is because most of the IT professionals from Andhra Pradesh earn on an average two to five

times more than a non-IT engineer. An IT groom from Kamma or Reddy caste working in a big firm is expected to receive a dowry of 8 to 20 lakh rupees which is more than double that of a non-IT engineer. If the boy is U.S. based, the figure could go up to Rs.80 lakhs. Thus, as a result, women's participation in IT education has also been growing across all caste groups, especially among those who hail from the forward castes and live in cities and towns so that it could minimize, if not completely escape payment of dowry.

Rural –Urban Profile of the Respondents

The rural and urban disparities in educational opportunities tend to be greater in India; Andhra Pradesh is not an exception to this. Table 8 indicates that the representation of students from rural and urban background enrolled in IT education institutes.

The data from Table 8 reveals that 34 percent of the respondents hailed from rural villages; whereas 66 percent of the respondents were from urban backgrounds. Although the proportion of rural population in India is nearly seventy percent of the total population, the proportion of the rural students in IT education is very less. The majority of students benefiting from IT education opportunities belong to urban areas. The advantages of the urbanites are becoming barriers for rural students. Latently, this has the effect of insulating the educational facilities from being accessed by the latter. With regard to finance, networks, and awareness of education urban people have a decisive edge over their rural counterparts, in addition to problems arising from their migration to the cities to pursue education (Jayaram1990; Radhakrishnan 2012)

Table 8: Rural and urban background of respondents

Place	No.	%
Rural	76	34
Urban	149	66
Total	225	100

Marital Profile of the Respondents

Marriage is one of the basic institutions of the Indian society. The social significance attached to marriage by diverse social groups, irrespective of their caste, class, religion and re-

gions is immense. Several traditional practices associated with marriage are still in vogue. For example, arranged marriages where the parents of the girl look for a suitable boy and negotiate with the boy's parents for entering into a marital alliance.

Table 9 shows that 7 percent of respondents were married and 93 percent of the respondents were not married. Within the married category, the proportion of married women was higher when compared to that of married men. The number of married women was double that of married men. There are significant reasons for the high number of married women in IT courses. One of the reasons is to fulfil the wishes of their spouse. To maintain a good quality of life, it is imperative to work along with men to meet the cost of living and to enhance their standard of living. Another category among married women is that of the ones who are waiting to join their spouse abroad. They use the waiting period to acquire IT skills with the idea of securing employment after their arrival there. So the hopes of getting employment opportunities in the country of destination seem to motivate the women to pursue IT education. Moreover the cost of acquiring IT skills is lesser in India than in the Western countries.

Table 9: Marital status of respondents

Marital status	No.	%
Married	16	7
Unmarried	209	93
Total	225	100

Parental Education

Literature on the influence of social background suggests that parent's education is one of the important variables that determines the social class position of persons. The higher the level of education of the parents the higher the social class position. Further, qualified parents tend to provide conducive environment for the children to acquire cultural capital, which generally influences one's performance in education and consequent employment. To examine the extent of influence of the parental education on the student's education levels and aspirations the present paper collected data on each respondent's father's education. As the father's education level seems to play a more decisive role in

shaping children's education in the Indian society, which is patriarchal in nature (Karuna 2007). The educational qualification of respondents' fathers has been categorized under the following heads:

(a) Primary education, (b) Secondary education, (c) Graduation and below (Inter and Degree),
(d) Post-graduation, (e) Post-graduation and above

It appears that relatively higher levels of education on the part of the father enabled the students gain access to IT education. Table 10 shows that only 3.5 percent respondents reported that their fathers had primary education. 11.5 percent reported that their fathers had secondary education, nearly half (48 percent) of the number of the student's father were graduates, 30 percent reported post graduation level, and 7 percent reported that their fathers had had above PG qualifications. The data imply that most of the student's fathers were highly qualified with graduate and post graduate degrees. Based on the data pertaining to education qualification of fathers, the paper proposes that father's education significantly influences students' access to IT educational opportunities which has become popular in recent times. Students whose father attained post-graduation education qualifications represent nearly 30 percent of our sample size. It shows that highly educated parents attached a deal of importance to IT education as a means of upward social mobility and consequently higher standard of living. The educated communities were the first to embrace new educational streams. Since careers related to IT acquired social prestige and higher monetary levels, the IT education which is the medium for jobs also got tremendous importance among all the social groups in general and the educated sections in particular. Since the paper did not get information pertaining to educational quali-

Table 10: Educational qualifications of respondent's father

Education	No.	%
Primary	8	3.5
Secondary	26	11.5
Graduation	108	48
PG	67	30
Above PG	16	7
Total	225	100

fications of respondent's mothers, the analysis has been done on the educational qualifications of the respondent's fathers.

Family Class

Class disparities tend to provide differential access to social groups based on their position in the class structure. In the present paper respondents were asked to classify their households based on the position of the class to which their households belonged. The responses are presented in Table 11. According to Table 11 only 5 percent of respondents identified themselves as upper class, 88% of respondents indicated that they belong to middle class and 7 percent of respondents identified with lower class. It clearly indicates that the largest number of students hails from middle class when compared to both higher and lower classes. The quest for high quality of life both in material and non-material forms motivates middle class to choose IT education and training as a means to realize their aspiration brought by the new cultural ethos. The lower level earnings hinder the possibility of taking IT education in the non-formal sector requires substantial funds.

Table 11: Class status of respondents

Class perception	No.	%
Upper class	11	05
Middle class	199	88
Lower class	15	7
Total	225	100

Kinship Networks

The data were collected to examine the role of kinship networks in motivating the students to pursue IT education. The responses of 225 respondents were classified broadly into two groups; 1) who have relatives working as software professionals, and 2), those who did not have relatives working as software professionals. The Table 12 shows that 40 percent of the

Table 12: Kinship networks

Response	No.	%
Yes	91	40
No	134	60
Total	225	100

respondents have relatives who were software engineers and 60 percent reported that they did not have relatives working in IT industry either in India or abroad. Most of the students who have relatives working as software professionals did indicate that their relatives motivated them to pursue IT courses. Relatives play a crucial role in providing information about the appropriate IT courses, job prospects and other related information. The paper found that kith and kin relations play a crucial role in enabling access to critical information and the appropriate contacts in IT industry facilitate the entry of people possessing diverse forms of capital. Here it is important to mention that Bourdieu's (1997) concept of social capital. His basic argument is that wealth in the form of knowledge or ideas plays a key role in shaping the society. It is the extension of the Marxist idea of economic capital, which highlights that possessors of this capital wield considerable power over others in gaining preferred occupational positions. Even in educational system the success and failure are predominantly dictated by the extent to which individuals possess social capital.

Medium

Sociologists and educational planners view language as one of the important means of transmitting knowledge and imparting education. Academicians differ on the issue of medium of instruction. The elite of Indian society supports English language as a medium of instruction as it has acquired importance all over the world in diverse fields. In the wake of globalisation, English language acquired even more significance. Some of the scholars differ in continuing English language as the medium of instruction on the grounds that it is a foreign language. They argue that familiarity and convenience of local language for communication both in written and oral form is ideal and it should be promoted.

Table 13 shows the medium of language at Primary, Secondary, Intermediate and Graduation levels. The largest number of respondents had English as the medium of language right from their primary school up to college. There was a steady increase in the number of respondents who had English as a medium of instruction from school to college for education. Up to secondary level 57 percent were educated in English medium, whereas 73 percent respondents were educated in English medium at intermediate level and nearly 80 percent respondents were taught in English medium at the bachelor's degree level. Over time, there has been an increasing tendency of sending children to primary level schools that emphasize English language as a medium of instruction, even in small towns and villages. It is perceived that education in English medium helps in acquiring upward social mobility. The data show that the majority of the students pursuing IT education have had English as a medium of instruction followed by those who were educated in Telugu medium. The proportion of students who had Hindi and Urdu as medium of instruction at various levels is insignificant compared to those who got an education in the English and Telugu medium.

CONCLUSION

The analysis of the socioeconomic profile of the students revealed that caste, class, father's education, income, background and social capital play an important role in accessing IT education. Most of the students enrolled for the IT course predominantly came from the urban middle class background. In terms of caste the ma-

Table 13: Medium of instruction

Language	Primary education		Secondary education		Intermediate		Bachelor's degree	
	No.	%	No.	%	No.	%	No.	%
Telugu	97	43.1	93	41.3	59	26.2	33	14.7
English	125	55.6	128	56.9	164	72.9	164	61.8
Urdu	2	0.9	3	1.3	1	0.4	1	0.4
Hindi	1	0.4	1	0.4	1	0.4	1	0.4
NA[*]	-	-	-	-	-	-	52	23.1
Total	225	100	225	100	225	100	225	100

[*] Not applicable

jority was drawn from upper caste in Andhra and Rayalaseem region, whereas in Telangana students from backward communities outnumbered the upper castes. Most of the students studying in Hyderabad hails from urban backgrounds, whereas only 30 percent of rural students enrolled other three cities. The proportion of the students from scheduled castes was minimal and the proportion of the students from scheduled tribes was insignificant in the study across the three regions except in Vijayawada represent coastal Andhra. The paper found that most of the students joined in IT educational institutions with lots of expectations. However, students did undergo tensions and shared a sense of despair about the future prospects of IT employment, especially in the wake of slowdown in IT industry. Those students hail from the upper and middle classes with a proper social capital were confident about their prospective employment chances. The paper argues that the neo-liberal reforms in the economy and in turn educates led to the privatization of knowledge and subverts the public education and prevents and the goals of social justice.

RECOMMENDATIONS

Based on the findings of the empirical study, it recommends some of the strategies to strengthen the government policies pertaining to IT education to include the underprivileged sections. First, the pattern of distribution of IT education is skewed in nature in Rayalaseema, followed by Telangana and coastal Andhra. Most of the IT education institutes are located in the urban centre, whereas the rural areas are excluded. Here the state has to evolve special programs in the rural areas to include the majority of the aspirants of IT education. Second, the state should design special policies for Dalits, scheduled tribes and women to enhance their economic potential and upward social mobility across the three regions. Third, with the growing presence of private sector in almost all the fields the private sector has to take social responsibility in making IT education accessible to all sections. Fourth, special emphasis should be laid on concept-based education rather than the tool based training, which will help those with IT education and training in gaining overall

competence and ability to withstand market fluctuations in the demand for software application tools.

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