

Private schooling industry in North East India: A trend analysis of Nagaland State

Biswambhara Mishra

Department of Economics, North Eastern Hill University, Meghalaya, India
bmishra_nehu@hotmail.com

P. Srinivasa Suresh

Department of Economics, North Eastern Hill University, Meghalaya, India
sureshps03@yahoo.co.in

K. Rio

Department of Economics, North Eastern Hill University, Meghalaya, India

The present study is an attempt to examine the intricacies of the growth of Private School industry in the North-Eastern Indian State of Nagaland. The study was carried out in Kohima, the capital city of Nagaland State. Data were obtained from field studies as well as from published reports of the Government. The main objective of the study was to ascertain the trends and structure of growth of private school industry. The empirical analysis was carried out by fitting the data to quadratic, cubic, logistic, and the Preece-Baines Curves. The findings revealed that over the years, the trend and structure of growth of private schools has remained positively correlated with the capacity of absorption, quality of the product and their performance and reputation. The results corroborate our hypothesis that the private school industry has emerged not only to take the advantages of the deficiencies of the market economy, but also as a profit making industry.

Nagaland, private schooling, quadratic trend, Preece-Baines curve, India

INTRODUCTION

In a developing society where the question of equity remains elusive, the private school industry emerges not only to take the advantages of the deficiencies of the market economy, but also as a profit making industry. The system of private enterprises imparting school education to students may well be called an 'industry'. This is because 'industry' is often associated with manufacturing and, further, providing for school education has been the prime concern of the state, mainly with the widely acclaimed objectives concerning welfare and promotion of human capital for fostering development. In the changing social and economic environment, the overtone of welfare and development that surrounds schooling is often carried over to private schooling enterprise as well. The reasons for this shift might have been either due to gradual withdrawal of the government in providing the service or due to the changing societal needs and societal value judgments.

Those who know the private schools closely would almost unanimously agree on considering them as an enterprise, like any other enterprise which makes a profit. These schools employ teachers at a very low salary (often about one third of the salary drawn by a teacher in the schools run by the government), charge substantial amount as admission and tuition fees, often provide for residential facilities to enhance profitability, and yet, in many instances, remain unmindful to

provide enough facilities for students. On scrutiny, one may have only a mixed type of feelings about the academic standard of these schools. However, in general, private schools strive hard to impress their clients and exhibit remarkable salesmanship to attract them, whereas the schools in the government sector have no incentives or urge to do so. It is common knowledge that most parents develop a liking to a particular educational institution that is doing well. Matters like HSLC results, quality of education, surroundings, extra-curricular activities and most of all, the devotion of teachers towards the students count. Since many of these qualities are available in some private schools, the parents prefer these brands (branded schools), though all private schools do not behave uniformly.

In consistency with the above arguments, the present paper seeks to portray education as an industry, because it produces the manpower of different skills and efficiency for the production process of the economy. Unlike, the products of other industries that are valued for their usefulness in the production of final consumption, the product of education is valued for its productivity – in production process. This is precisely the reason we consider schools as “teaching firms”. In this context, the question that arises is, what are the motivating factors on the part of the entrepreneurs to start private schools. The present paper attempts to find an answer to the question raised above.

OBJECTIVES OF THE STUDY

By taking the school as an object of industry, an attempt is made in this paper to examine the trends of growth of private school industry and to throw some light on the factors that have remained the driving force in its development over the years. The main objectives of this study are:

1. to study the structure and trends in growth of the private schooling industry, and
2. to ascertain the factors which have helped in the tremendous growth of private school industry over the years in Kohima.

DATA AND METHODOLOGY

The present study, which is empirical in nature, is primarily based on the data collected from the field. For comparative purposes, data from secondary sources are used, mainly published reports (like Statistical Handbook of Nagaland, a Report published by Nagaland Board of School Education, and Census Reports of Nagaland). We have chosen Kohima, the State Capital of Nagaland as our study area.

There are 34 high schools in Kohima of which 31 are run by the private management. Additionally, there are 8 Middle/Primary schools. A schedule was designed by the principal investigator and he met the Principals/Head Masters of the schools, and collected information on various aspects enlisted in the schedule. While data could be collected from 30 private schools (28 private high schools and two private Middle/Primary schools), three of the private high schools refused to be involved in the study. For the purpose of comparison, data were also collected from the high schools run by the government.

The data pertain to the following aspects of the school: (1) Year of establishment, (2) Type of management, (3) Location, (4) Distance from main and approach road, (5) Medium of instruction, (6) Standard, (7) No. of periods taught/day, (8) Class strength, (9) Co-ed Status, (10) Residential and allied facilities, (11) Class-wise sex-wise enrolment, (12) Non-Naga enrolment, (12) Economic background of students, (13) Fees structure, (14) Particulars of teaching and non-teaching staff, and their Salary structure, (15) Physical assets of the school including Library, (16) Facilities for physical education and extra-curricular activities, (17) Sources of income and items

of expenditure, (18) Academic performance, and (19) Problems and prospects perceived by the Principal of the school.

Based on the data collected, the study proceeds to work out the trends in growth of private schools in Kohima and tries to throw some light on the salient features of these private schools. Appropriate statistical methods including graphical/diagrammatical presentations are used to analyse the data and draw relevant conclusions.

PRIVATE SCHOOLING IN KOHIMA: AN OVERVIEW

Being the state capital, most of the administrative establishments are concentrated in Kohima, thereby giving rise to a situation where a large number of people are engaged in the tertiary sector (service). With a total population of about 78.5 thousand (provisional figure, Census 2001, District Census Handbook, Kohima District), the Kohima town occupies an area of 23 sq. kms. The present density of population in the town works out to be about 30 persons per hectare (about 3000 person per sq.km.), which is lower than the national standard (45.75 persons per hectare).

Along with the concentration of the service sector, Kohima has witnessed the concentration of the school education centres in recent years, with 34 high schools and 8 middle/primary schools. Among the high schools, 31 are run by private organisations and only three are fully managed by the Government of Nagaland. The largest among the high schools run by the government has an enrollment of 845 students. In total, government high schools cater to the schooling needs of a little over 1.5 thousand students in Kohima. However, private high schools (31 in number) cater to the schooling needs of over 25 thousand students. These figures correspond to the year 2000. In 1963, there were only 2 proceeding high schools. The tremendous growth of population in the town from 34.3 thousand in 1981 to 51.4 thousand in 1991, and further to about 76 thousand in 2000, has resulted in an excessive pressure on the existing schooling infrastructure and the inability of the government to cope with the rising pressure, which has encouraged the growth of private schools in the town.

The Salient Features of Private Schools in Kohima

There are 12 (36%) schools in which students are mostly from a modest economic background. The remaining 18 schools (64%) enrol students largely from a better off economic background. Almost three-quarters of the total number of schools are within half a kilometre from the main road. Except for one, a girls' school, all the schools are co-educational. The percentage of the girls (in the total students) in the schools is within a range of 40 to 50 while the percentage of the boys lies in the range 50 to 60. Of the 30 schools, six schools have no non-Naga enrolment. Eleven schools have non-Naga students up to 5 per cent. Thirteen schools have non-Naga enrolments of 10 to 20 per cent. Except for six schools, all schools have a provision for Hindi as the second language. Eleven schools offer *Tenyidie*, a local (Naga) language, as the second language. In most of the schools the percentage of female teachers exceeds the percentage of male teachers. Larger schools, in general, have higher student to classroom and student to teacher ratios.

Growth of Private Schools in Kohima

The first private school in Kohima was established in 1958. This number increased to five in 1968 and 12 in 1980. Since 1981, the growth rate of private schools accelerated and by the year 1993 the number of private schools in the town increased to 30. Before the 1980s the dominant motive for starting a private school was perhaps different from that during and after the 1980s. In the later period, schools have been started due to economic motives and run accordingly. This change in motive of starting and running the private schools has its impact on the motive and management of the older schools as well. In due course, the entire system of private schooling grew up into an

industry. Table 1 presents the details on the number of private schools, their year of establishment, and the enrolment in 2000.

Table 1. Growth of private schools in Kohima, Nagaland

Year	No. of Schools	No. of Students in the Year 2000 (Cumulative)		Year	No. of Schools	No. of Students in the Year 2000 (Cumulative)	
		Total	%			Total	%
1958	1	2145	8.91	1981	13	14400	59.87
1959	2	3679	15.29	1983	15	16219	67.44
1964	3	5217	21.69	1984	16	16741	69.61
1967	4	5712	23.75	1985	18	17390	72.31
1968	5	7345	30.54	1986	19	17625	73.28
1969	6	8662	36.01	1987	21	18939	78.75
1972	8	10947	45.51	1988	24	20672	85.95
1974	10	13631	56.68	1990	25	21725	90.33
1977	11	13754	57.19	1991	27	22820	94.88
1980	12	14153	58.85	1993	30	24049	100.00

Source: Basic Statistics of Nagaland State, 2002

The older schools are better established and enrol (relatively) larger number of students. The oldest six private schools that make up 20 per cent of the total number of private schools in the town, enrol 36 per cent of the total number of students in the private schools, while the newest six schools enrol only 14 per cent of the student population (in the private schools).

Growth in the Size (Number of students enrolled) of the Private Schools

Over the years, the number of private schools increased and their size also increased. Depending on the capacity of absorption and many other factors, including their performance and reputation, the number of students in these schools increased over time.

Table 2 presents the size of enrolment in the private schools of Kohima during 1996-2000. It may be observed that different schools exhibit different rates of growth. Four schools show a decline in enrolment. On the other hand, eight schools have experienced a sizeable increase (greater than 50 students per year). Figure 1 depicts the growth of enrolment in schools in Kohima.

Figure 1 compares the indices of growth of private versus government schools in Kohima. At the base year 1996, the index values for both types of schools are zero. However, in the terminal year 2000, the index of government schools has shown a decline but the index of private schools has shown an upward trend. Thus, while the number of schools in the government sector either remained constant or declined, the number of schools in the private sector experienced 40 per cent growth.

Relationship between Age of a School and its Enrolment Size

It has been observed that private schools started in 1958 and the rate of entry (establishment of a new private school) accelerated during and after 1980s. Today, there are private schools that are over 40 years old while others have been established more recently. It is pertinent to enquire if the age of a school matters in determining the size of its enrolment. There are a few points in favour of such an enquiry. First, over the years schools earn a reputation, partly due to the accomplishment of their students in the School Board Examinations and partly due to their internal management. They earn a reputation due to the teaching staff that they employ and retain. Secondly, schools face problems of resource generation, resource management and capacity utilisation. In the long run, schools can expand their capacity and teaching force. They may find better ways to serve their students as well as strengthen their position in the industry. Nevertheless, economies and diseconomies of scale are operative on the schools. Every school has a catchment area and a catchment population. By introducing school buses to transport students to

and from home, catchment area may be expanded. But transportation has its cost in terms of money as well as time. All these considerations suggest that any school cannot possibly grow in size beyond some limit.

Table 2. Growth in the number of students in private schools in Kohima (1996-2000)

Sl No.	Year of Establishment	Total No. of Students in the School 1996-2000					Growth	
		1996	1997	1998	1999	2000	Student per year	Annual Rate
1	1959	1355	1436	1608	1616	1534	44.75	3.3
2	1972	1480	1492	1503	1506	1536	14	0.94
3	1991	NA	365	409	513	645	93.33	25.57
4	1981	275	238	252	248	247	-7	-2.55
5	1968	NA	1686	1644	1697	1633	-17.67	-1.05
6	1972	450	500	550	636	749	74.75	16.61
7	1977	NA	148	125	104	123	-8.34	-5.64
8	1980	458	449	380	344	399	-14.75	-3.23
9	1969	1304	1298	1294	1342	1317	3.25	0.24
10	1993	125	140	153	160	202	19.25	15.4
11	1983	480	470	560	600	649	42.25	8.8
12	1987	610	610	624	601	642	8	1.31
13	1988	514	524	603	714	729	53.75	10.45
14	1985	251	268	272	270	369	29.5	11.75
15	1983	985	1002	1085	1102	1170	46.25	4.69
16	1990	394	613	772	988	1053	164.75	41.81
17	1993	62	78	96	112	162	25	40.32
18	1988	199	230	268	300	350	37.75	18.96
19	1993	516	597	657	786	865	87.25	16.9
20	1958	1985	1962	2056	2087	2145	40	2.01
21	1986	234	241	225	229	235	0.25	0.1
22	1987	512	541	600	650	672	40	7.81
23	1967	350	360	320	365	495	36.25	10.35
24	1974	1750	1780	1900	1930	2030	70	4
25	1964	1510	1522	1520	1525	1538	7	0.46
26	1974	640	645	650	650	654	3.5	0.54
27	1988	389	470	509	538	654	66.25	17.03
28	1991	115	145	200	270	450	83.75	72.82
29	1985	173	188	210	216	280	26.75	15.46
30	1984	500	521	510	506	522	5.5	1.1
Total		* 19800	20519	21555	22605	24049	* 1062	* 5.36

Note: Where the figures for 1996 are not available (NA), the figures for 1997 have been used. * = Estimated

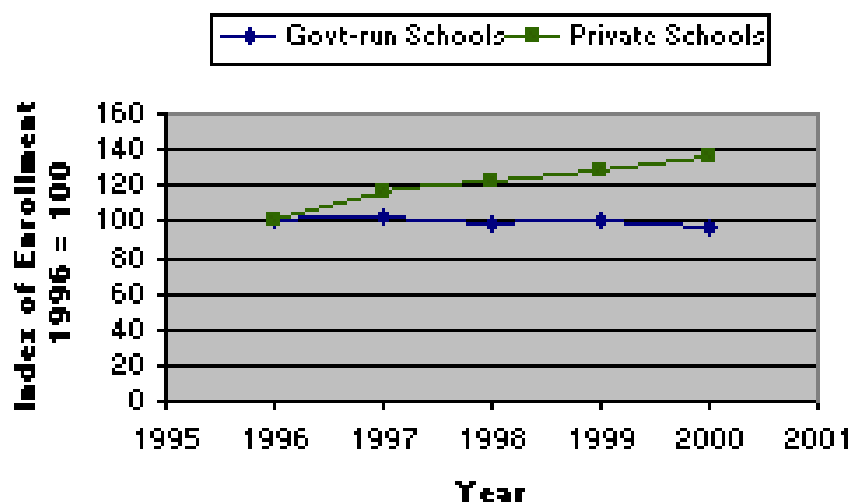


Figure 1. Growth of enrolment in the schools in Kohima

EMPIRICAL ANALYSIS

The empirical analysis for the available data constitutes two components. First, in order to ascertain the trends in growth of private schools in Kohima, trend analysis was carried out by fitting the data for both quadratic and cubic curves. Second, by using the similar method, the relationship between the age of a school and its enrolment size was examined.

In the trend analysis, the number of schools was taken as the dependent variable and time was considered as the explanatory variable. The following model was used to estimate the quadratic trend.

$$N = a_0 + a_1 T + a_2 T^2$$

For the cubic trend, the following model was used

$$N = a_0 + a_1 T + a_2 T^2 + a_3 T^3$$

where N = Number of schools, and T = time period.

A comprehensive presentation of trends in growth of (the number of) private schools in Kohima was made by a quadratic or cubic curve described in the following section.

Quadratic Trend

The estimated trend equation is as follows:

$$N = 1.9396 + 0.0146 T + 0.0207 T^2$$

where $R^2 = 0.998$ and $F = 574.10$ for $n = 20$. The quadratic trend is depicted in Figure 2, which shows the actual and estimated values of N against T .

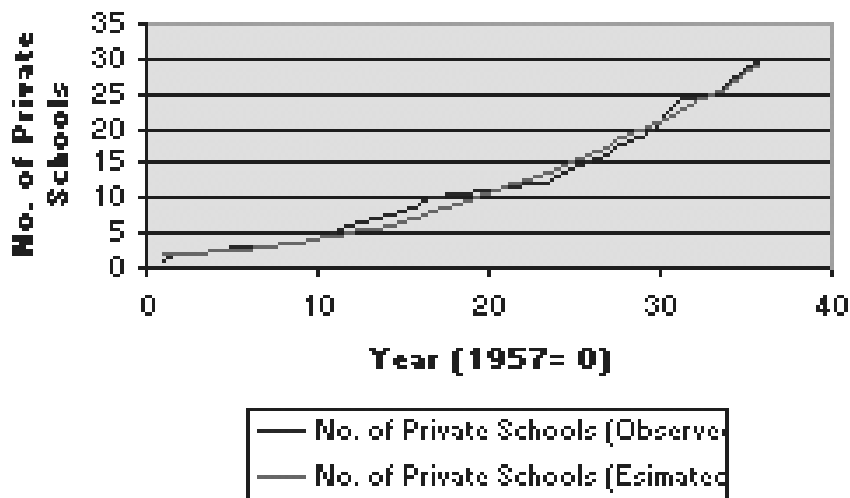


Figure 2. Quadratic trends in growth of private schools in Kohima

Cubic Trend

Alternatively, one may present the growth of the number of private schools by a cubic curve. The estimated cubic equation is given by:

$$N = 0.5780 + 0.4860T - 0.0113 a_2 T^2 + .0006 T^3$$

where $R^2 = 0.998$ and $F = 574.10$ for $n = 20$. The coefficients of the curve are given in Table 3 and are depicted in Figure 3. The coefficient associated with T^2 is statistically insignificant, which shows that the cubic curve is a better fit than the quadratic curve.

Table 3. Cubic trends in growth of Private Schools

Model: No. of Schools =	n =20	Coefficient	Std. Err.	Beta	t value	Sig.
f(*,*,*);	(Constant)	0.578	0.772		0.749	0.465
For 1957 : T = 0	T	0.486	0.174	0.595	2.788	0.013
R ² = 0.992	T ²	-1.136E-02	0.011	-0.535	-1.045	0.312
F = 463.75	T ³	5.818E-04	0.000	0.965	2.999	0.008

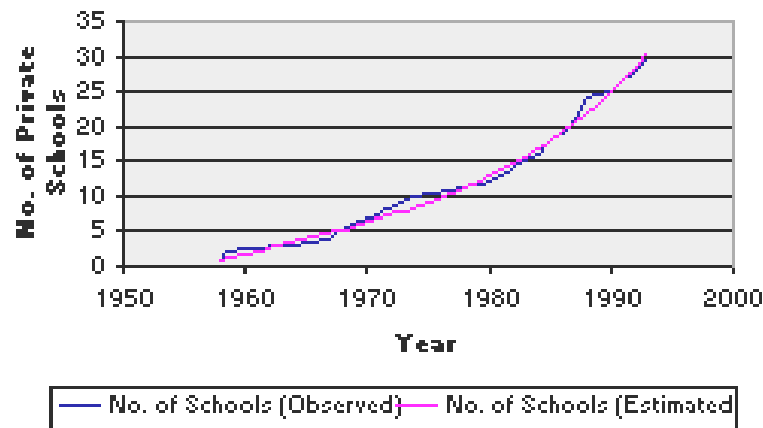
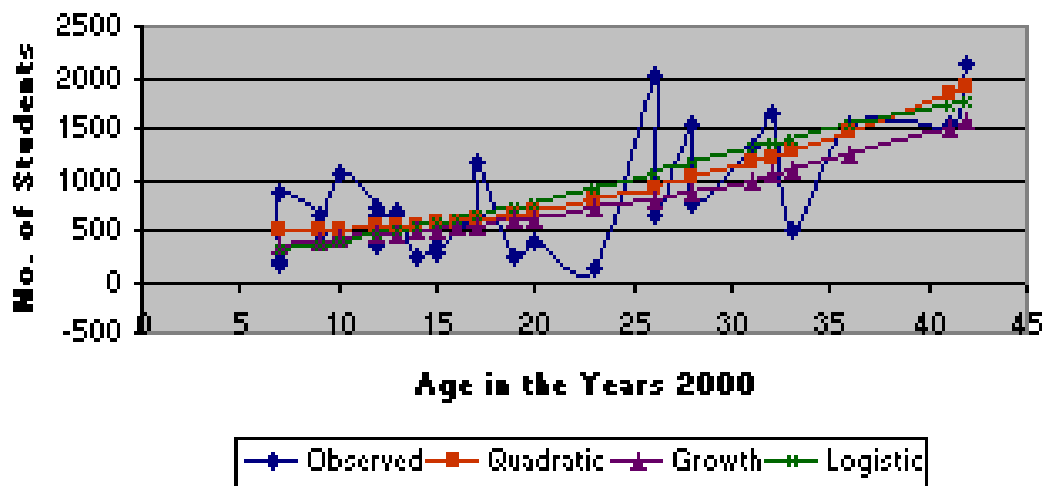


Figure 3. Cubic trends in growth of private Schools

The statistical relationship between the age of a school and its enrolment size is given in Table 4. Size as a function of age of the school is depicted in Figure 4.

Table 4. Statistical relationship between age of the a school and its enrolment size

Curve Type	b ₀	b ₁	b ₂	R ²	F	Signif	df.	K
Quadratic	579.972	-18.67	1.203	0.496	13.31	0.000	27	-
Growth	5.6085	0.0418	-	0.319	13.10	0.001	28	-
Logistic	0.0051	0.9132	-	0.418	20.07	0.000	28	2200



F(t): No. of students (on Roll); Age = t (= 2000–Year of Establishment)

Figure 4. Size (No. of students) as a function of age of school

The relationship between the age of a school and its enrolment size may be investigated by the method of curve fitting. Here, the intention is to ascertain whether the older schools are larger from enrolment point of or not. First, it was thought imperative to choose three types of curves to fit the data: (a) the Quadratic Curve, (b) the Growth Curve, and (c) the Logistic Curve.

The equations of the three said curves are given below:

$$\text{Quadratic : } F(t) = b_0 + b_1 t + b_2 t^2 ; \text{ where } t = 1, 2, \dots, n$$

$$\text{Growth : } \text{Log}_e\{F(t)\} = b_0 + b_1 t ; \text{ where } t = 1, 2, \dots, n$$

$$\text{Logistic : } \text{Log}_e[\{F(t)\}^{-1} - (K)^{-1}] = \text{Log}_e\{b_0 + \text{Log}_e(b_1) t\} ;$$

where $t = 1, 2, \dots, n$ and $0 < \text{Max}\{F(t)\} < K$. Here K is the upper bound of $F(t)$. Fitting of the Logistic curve requires that K is set by the analyst. The present analysis uses $K = 2200$, because no school has enrolment greater than 2200. So this is taken as the upper limit.

The relationship between the age of a school and its enrolment size may also be investigated by fitting the Preece-Baines Curve and also the modified Preece-Baines Curve. Unlike the logistic curve, the Preece-Baines Curve not only sets the upper limit of size, it looks into the details of how and when growth is accelerated and decelerated. The equations of the two said curves are given below.

$$\text{Preece-Baines Curve: } F(t) = h_1 - (h_1 - h_0) / [0.5 \exp\{s_0(t - \phi)\} + 0.5 \exp\{s_1(t - \phi)\}]$$

$$\text{Modified Preece-Baines Curve: } F(t) = h_1 - (h_1 - h_0) / [k_0 \exp\{s_0(t - \phi)\} + (1 - k_0) \exp\{s_1(t - \phi)\}]$$

The difference between the (normal) Preece-Baines and the modified Preece-Baines equations is that while in the former k_0 is assumed to be equal to 0.5, in the latter it is estimated. The modified Preece-Baines equation is more flexible than the (normal) Preece-Baines equation.

The Preece-Baines curve is popular in Physical Anthropology where the (mean) height of persons (in the age-group 3 to 18 or 20) is regressed on age. Persons reach their maximum height at the age of maturity and different communities (anthropological types) have different maturity heights. The study seeks to draw a conclusion from Preece-Baines regarding the maturity size (enrolment) of private schools that have attained the 't' years of age, which may be a good age for maturity. The estimated parameters of the normal and modified Preece-Baines curves are reported in Tables 5 and 6 respectively.

Table 5. Estimated parameters of (normal) Preece-Baines Curve

Parameter	Estimate	Asymptotic	Confidence Interval (95%)	
			Lower	Upper
$R^2 = 0.499$	$N = 30$	Std. Err.		
h_0	913.39	3134.74	-5542.73	7369.50
h_1	2471.58	4907.31	-7635.22	12578.38
s_0	-0.02	0.12	-0.27	0.23
s_1	0.09	0.45	-0.84	1.01
ϕ	25.88	60.30	-98.31	150.07

Starting points: $h_0=1200$, $h_1=1400$, $s_0=0.04$, $s_1=0.4$, $\phi=17$; Method of estimation: Non-linear Regression using Sequential Quadratic Programming (unconstrained).

Table 6. Estimated parameters of Modified Preece-Baines Curve

Parameter	Estimate	Asymptotic	Confidence Interval (95%)	
			Lower	Upper
$R^2 = 0.513$	$N = 30$	Std. Err.		
h_0	1328.45	1327035703.40	-2745181179.00	2745183835.70
h_1	1368.35	180.22	995.54	1741.17
s_0	0.00	0.03	-0.06	0.06
s_1	6.30	941758.45	-1948169.49	1948182.09
ϕ	25.93	5541322.28	-11463072.57	11463124.43
k_0	0.05	1565902.00	-3239315.04	3239315.14

Starting points: $h_0=130$, $h_1=170$, $s_0=0.2$, $s_1=0.8$, $\phi=18$, $k_0=0.5$, Constraint : All parameters $\Rightarrow 0$. Method of estimation: Non-linear Regression using Sequential Quadratic Programming.

A comparative analysis of the results of the above two curves shows that, the modified Preece-Baines Curve gives a better fit to the data, judged in terms of the R^2 . It is found that the normal Preece-Baines curve estimates the largest (enrolment) size at 2471 and the critical age (ϕ) at about 26 years. However, the modified Preece-Baines curve suggests that 1368 is the maturity size with a critical age of 26 years. The intricate relationship between the age of the school and the enrolment size as envisaged by fitting the Preece-Baines, Quadratic and other curves are given in Table 7. These are depicted in Figure 5.

Table 7. Relationship between age of the school and the size (No. of students): growth curves

Year of Establishment	Age of School in Year 2K	Total No. of Students	Predicted/Estimated Number of Students by Curve Fitting				
			Preece-Baines		Quadratic	Growth	Logistic K = 2200
			Normal	Modified			
1959	41	1534	1784.47	1368.36	1836.77	1512.18	1729.04
1972	28	1536	1032.63	1368.36	1000.38	878.51	1165.72
1991	9	645	528.97	520.90	509.39	397.22	367.61
1981	19	247	622.43	520.90	659.53	603.20	730.99
1968	32	1633	1274.89	1368.36	1214.42	1038.29	1360.60
1972	28	749	1032.63	1368.36	1000.38	878.51	1165.72
1977	23	123	770.76	520.90	786.96	712.90	917.68
1980	20	399	653.47	520.90	687.78	628.93	775.98
1969	31	1317	1213.36	1368.36	1157.30	995.80	1312.96
1993	7	202	549.13	520.90	508.23	365.38	315.29
1983	17	649	572.88	520.90	610.26	554.85	645.16
1987	13	642	522.54	520.90	540.57	469.46	492.61
1988	12	729	519.33	520.90	529.17	450.25	458.76
1985	15	369	539.87	520.90	570.60	510.37	565.53
1983	17	1170	572.88	520.90	610.26	554.85	645.16
1990	10	1053	522.77	520.90	513.58	414.16	396.27
1993	7	162	549.13	520.90	508.23	365.38	315.29
1988	12	350	519.33	520.90	529.17	450.25	458.76
1993	7	865	549.13	520.90	508.23	365.38	315.29
1958	42	2145	1831.63	1368.36	1917.95	1576.69	1761.80
1986	14	235	529.32	520.90	554.39	489.49	528.21
1987	13	672	522.54	520.90	540.57	469.46	492.61
1967	33	495	1336.35	1368.36	1273.95	1082.58	1407.22
1974	26	2030	919.87	1341.97	907.79	808.09	1065.88
1964	36	1538	1516.36	1368.36	1466.96	1227.12	1539.56
1974	26	654	919.87	1341.97	907.79	808.09	1065.88
1988	12	654	519.33	520.90	529.17	450.25	458.76
1991	9	450	528.97	520.90	509.39	397.22	367.61
1985	15	280	539.87	520.90	570.60	510.37	565.53
1984	16	522	554.35	520.90	589.23	532.15	604.53

The analysis carried out in the preceding sections throws up some interesting results. The growth rate of private schools in Kohima (1958-200) is described by a quadratic trend. In 1958 there was only one private school. The number increased to 12 in 1980, 25 in 1990, 30 in 1993 and 31 today. The median size school enrolls about 800 students. The largest school enrolls over 2000 students while the smallest schools enrol a little over 100 students. In 18 schools students are mostly from a better economic background while in the rest (12 out of 30) of the schools, students are mostly from a modest economic background. Against this, three government-run schools serve low income group students only.

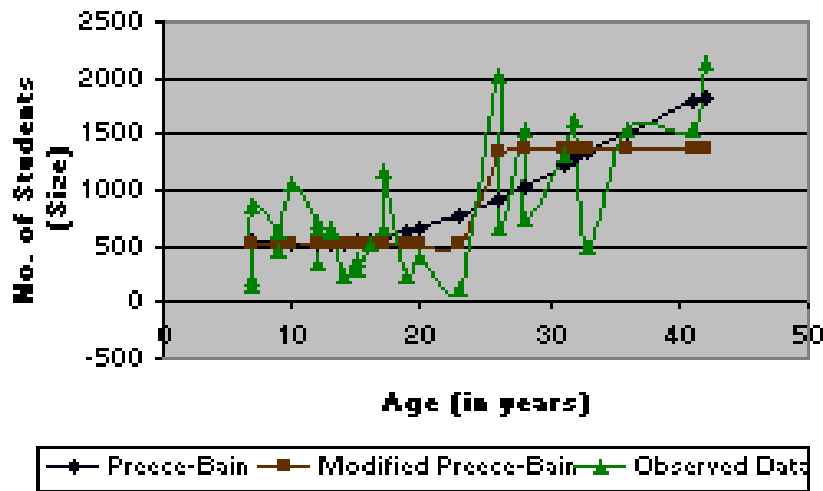


Figure 5. Preece-Bain and Modified Preece-Bain Curves

A comparison of the results of all the alternative models reveals that while the growth curve is least fitting to data, the quadratic curve turns out to be a better fit. This is indicated by the R^2 values. Further, better fit of quadratic curve indicates that the upper limit of 2200 may not be real and it may be crossed in suitable circumstances. Further, it may be stated that the Preece-Baines Curve (normal) is much like the quadratic curve, but Preece-Baines Curve (modified) indicates that schools become optimal at 1300 enrolment and 26 years of age or so. The results obtained reveal that of all the models estimated, the Preece-Baines Curve (modified) gives better fit to the data, while the Preece-Baines Curve (normal) is the second best.

CONCLUSIONS

The analysis carried out reveals that private schooling industry is growing at an ever-accelerating pace in response to the demand of the people of Kohima for school education. The explanatory power of the quadratic trend curve is slightly better than the cubic trend curve. This trend indicates that growth of enrolment in the school is proportional to the pupils' strength of the schools. The coefficients associated with time indicate that the growth rate of enrolment is greater than the growth rate of population in the town. This also indicates that the private schools are attracting more students than their natural share vis-a-vis the government-run schools. The resultant trend observed has become more pronounced in the last two decades or so. It has also been observed that older schools have attracted more pupils, partly because of their rapport with the parents and partly due to credibility in the market regarding the quality of education they impart. On the other hand, newly established schools, though numerous, are smaller in size in general.

BIBLIOGRAPHY

- Arrow, K. J. (1951,1963) *Social Choice and Individual Values*. Yale University Press, New Haven.
- Basch, D. L. (1997) Private experience in the early 1990s: The impact of rapidly increasing college- funded grants. *Research in Higher Education*, 38 (3), 271-296.
- Basch, D. L. (1999) Changes in the endowment spending of private colleges in the early 1990's, *Journal of Higher Education*, 70 (3), 278.
- Bates, L. J. and Santerre, R. E. (2000) A Time Series Analysis of Private College Closures and Mergers. *Review of Industrial Organisation*, 17 (3), 267-276.

- Berger, M. C. and Kostal, T. (2002) Financial Resources, Regulation and Enrolment in US Public Higher Education. *Economics of Education Review*, 21 (2), 101-110.
- Birdsall, N. (1996) Public Spending on Higher Education in Developing Countries: Too much or too little? *Economics of Education Review*, 15 (4), 407-419.
- Brint, S. (2002) Data on Higher Education in the United States – Are the Existing Resources Adequate? *American Behavioural Scientist*, 45(10), 1493-1522.
- Burkhalter, B. B. (1996) How Can institutions of Higher Education Achieve Quality within the New Economy, *Total Quality Management*, 7 (2), 153-160.
- Chandrasekaran, P. (1997). *Educational Planning and Management*. Sterling Publishers: New Delhi.
- Channa, S. M. (1992) *Nagaland: A Contemporary Ethnography*. Cosmo Publication: New Delhi.
- Currie, J. and Vidovich, L. (2000) Privatisation and competition policies for Australian universities. *International Journal of Educational Development*, 20 (2), 135-151.
- Director of Census Operations (2001) *Census of India- 2001: Provisional Population Totals (Paper – 2 of 2001)*. Directorate of Census Operations, Govt. of Nagaland, Kohima, Nagaland.
- Dow, G. M. (1966) *Parent, Pupil and School: Victoria's Education System*. Cassel: Australia.
- Duggan, S. J. (1997) The Role of International organisation in the financing of higher education in Cambodia. *Higher Education*, 34 (1), 1-22.
- Eisemon, T. (1992) Private initiatives in higher education in Kenya. *Higher Education*, 24(2), 157-175.
- Floud, J. H. and Anderson, C. A. (1961) *Education, Economy and Society*. The Free Press: New York.
- Garrett, R (2001) The coming challenge: Private competition in English higher education. *Minerva*, 39 (1), 99-114.
- Gayle, V., Berridges, D. and Davies, R. (2002) Young people's entry into higher education: Quantifying influential factors. *Oxford Review of Education*.
- Genck, H. F. (1983) *Improving School Performance*. Praeger Publishers: New York.
- Hauspie, R. C., Wachholder, A., Baron, G., Cantraine, F., Susanne, C. and Graffar, M. (1980) A comparative study of the fit of four different functions to longitudinal data of growth of height of Belgian girls. *Annals of Human Biology*. 7 (4), 347-358.
- Hyslop-Margison, E J (2000) The market economy discourse on education: Interpretation, impact, and resistance. *Alberta Journal of Educational Research*, 46 (3), 203-213.
- Kempner, K. and Taylor, C. (1998) An alternative assessment to higher education outcomes: Differentiating by institutional type. *Higher Education*, 36 (3), 301-321.
- Leftwich, R. H. and Sharp, A. M. (1984) *Economics of Social Issues*. Business Publications: Texas.
- Lehming R. and Kane M. (1981) *Improving Schools: Using What We Know*. Sage: London.
- Lengrand, P. (1975) *An Introduction to Lifelong Education* Croom Helm. London
- Mirrlees, J A (1975) *The Theory of Moral Hazard and Unobservable Behaviour – Part I*. Mimeo, Nuffield College: Oxford.

- Morey, A. (2001) The growth of for-profit higher education – Implications for teacher education. *Journal of Teacher Education*, 52 (4), 300-311.
- Morishima, M. (1976) *The Economic Theory of Modern Society*. Cambridge University Press: London.
- North Eastern Council (1995/2000) *Basic Statistics of North Eastern Region 1995/2000*. NEC, Ministry of Home Affairs: India, Shillong.
- Perlman, R. (1973) *The Economics of Education*. McGraw Hill Book Company: New Delhi.
- Perna, L. W. (2002) Financing higher education at selective private institutions: Implications for college access and choice. *Review of Higher Education*, 25 (2), 225.
- Preece, M. A. and Baines, M. J. (1978) A new family of mathematical models describing the human growth curve. *Annals of Human Biology*, 5, 1-24.
- Strydom, A. H. K. and Fourie, M. (1999) Higher education research in South Africa: Achievements, conditions and new challenges. *Higher Education*, 38 (2), 155-167.
- Teichler, U. (1996) Comparative higher education: Potentials and limits. *Higher Education*, 32 (4), 431-465.
- Tilak, B.G.J. (1989) *Female schooling in East Asia: A Review of Growth, Problems, and Possible Determinants*. Washington: D.C.: PHREE Background Paper Series 8598, World Bank.
- Ved, P. (1993) *School Education in Rural India*. Mittal Publication: New Delhi.