

# **Indian education**

### **Sector outlook**

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### **India**

**Education** 

**BUY** 

Aptech (APTR IN)

Educomp (EDSL IN)

O-PF

NIIT (NIIT IN)

U-PF

Everonn (ESIL IN)

No rec

Core Projects (CPTL IN)



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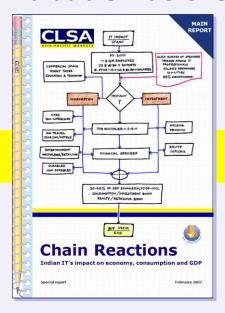


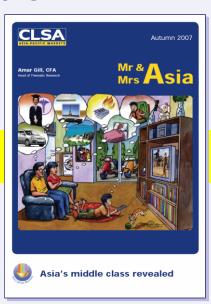
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All prices quoted herein are as at close of business 7 March 2008, unless otherwise stated

### Valuable macro lessons









### **Takeoff**

Organised private initiatives are gaining momentum in India's lucrative education market. Despite regulatory ambiguity in some areas, exciting prospects lie ahead for firms that have already boarded the bus. We put annual private expenditure at US\$40bn and project a 16% five-year Cagr. Educomp and Aptech are BUYs. Revival prospects and cheaper valuations support our Outperform call on NIIT, while we rate Everonn an Underperform as it is expensive and lacks a solid portfolio of services.

A US\$40bn market

We estimate the Kindergarten to Grade 12 (K-12) segment at US\$20bn, private professional colleges at US\$7bn and tutoring at US\$5bn. These are the largest segments of the total private education market that we estimate to be worth some US\$40bn. Other meaningful and fast-growing areas include vocational training at US\$1.4bn, test preparation at US\$1.7bn and preschools at US\$1bn. Our proprietary work indicates a growing shift towards private schooling. India's 75,000 private schools account for 7% of total institutions, but enrol 40% of the country's 219 million students – even as some 142 million children are not in the school system.

Diversity promises consolidation

The combined market capitalisation of listed education companies in India is only about US\$2.6bn, on 2008 revenue of US\$450m. We see consolidation ahead, as national chains emerge. Test prep and tutoring appear most segmented, being spread thinly between small regional players; while areas such as e-learning, teacher training and online tutoring are nascent. K-12 and private professional colleges are the most scalable segments on offer.

Regulatory clarity can catalyse growth

The liberalisation debate will intensify as India's policy planners struggle with a failed public-education system amid continued resistance to the commercialisation of education. Court judgements have talked of a "reasonable surplus" for schools and higher-education establishments, without clarifying the scale of profits that constitute the surplus. In the absence of centralised or regionally consistent regulation, profit is likely to come from the provision of services such as land leases, intellectual property and school management. Nonetheless, recent policy statements indicate a more liberal and welcoming environment ahead for private participation.

Upside for the well positioned

We rate Educomp and Aptech BUYs; NIIT an Outperformer, while Everonn should Underperform. Educomp stands out with sector-leading 90-100% EPS growth coupled with long-term portfolio mapping across attractive segments. Aptech's focus in China and India, and scale in new retail initiatives gives it an EPS Cagr in excess of 50% without the need for high capex. It also enjoys attractive valuations. NIIT, despite its rampup in vocational training, appears hemmed in by its exposure to the slow-growing US corporate-training market, which contributes 56% of revenue. However, inexpensive valuations and improving financials support an Outperform rating. Everonn is most expensive but lacks the breadth of portfolio to back up its valuation multiples.

Valuations of leading education plays

	Rec	Price (Rs)	Mkt cap (US\$m)	Target (Rs)	Upside (%)	EPS Cagr (%) 08-10CL	PE (x) 09CL	PE (x) 10CL	ROAE (%) 09CL
Aptech	BUY	201	217	305	52	51.6	17.1	14.5	36.2
Educomp	BUY	3,384	1,440	7,000	107	104.6	42.8	21.7	45.4
Everonn	U-PF	670	229	680	2	65.1	45.9	29.5	12.9
NIIT	O-PF	108	438	150	39	42.6	17.1	12.2	25.9

Source: CLSA Asia-Pacific Markets



## India's education failings well documented . . .

### A US\$40bn market

India's education and training sector offers private institutions an estimated US\$40bn market, with a potential 16% five-year Cagr. With 142 million of the 361 million school-age children not attending classes, the system's shortcomings are well documented. However, the opportunities for organised private-sector involvement do not enjoy such recognition. Turning education into a profitable, high-growth business is a long-term investment theme. Corporate initiatives are beginning to address the needs of India's youth by tapping into the propensity of the middle class to spend more on education.

. . . but commercial opportunities less well recognised

Education is a substantial market when compared with the US\$24bn that the government spends each year on defence, which includes revenue and capital expenditure. Further, the private-sector segment is nearly as big as the combined annual budget for power, roads, airports, ports and telecoms (based on the FY07-12 Five-Year Plan). Private spend on education is also nearly five times the annual Union Budgetary outlay for the segment. Overall, education accounts for 7% of India's FY07 private-consumption expenditure.

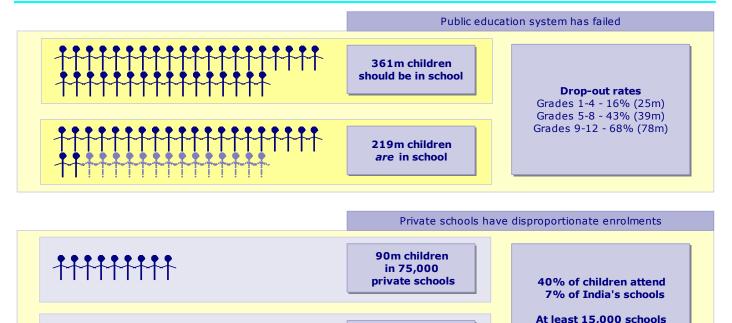
Huge growth potential for those on the bus

In our view, the time for stronger private-sector participation in education has come, and large publicly listed companies will emerge. The biggest listed entity in the education space has FY09CL revenue from the Indian market of under US\$200m. The largest part of the pie is in the K-12 segment and its adjacent markets (tutoring, preschools), and private professional-course colleges (engineering, medical and business). A slew of other areas, such as test preparation, preschools and vocational training, are each worth US\$1-2bn. Breaking the education sector down into 15 segments, we examine the potential for each in terms of private-sector involvement.

Figure 1

### India: Headline data on school education

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129m children

in 950,000 public schools

Source: CLSA Asia-Pacific Markets, Department of education, Media reports, NGO studies

charge >Rs1,250pm



Segments within Indian education - The private sector opportunity Market Cagr (to 2012) **Schooling** Core education segment, with high propensity to spend among middle class US\$20bn 13-14% Regulatory ambiguity continues to hinder unfettered growth K-12 schools High usage of external tuition Un-regulated market; ተተተተ Tutoring 15-16% among urban middle class scattered by locality US\$2.0bn Growth hindered by Growing in sync with enrolment Books growth of schools reuse of books Shift in spending to more expensive options driving growth in urban areas Rural spend needs to provide US\$1.3bn 14% Stationery the growth booster - play on income growth 11% of urban children in preschools, rising Likely to remain an urban phenomenon Preschool US\$120m ASP decline likely as Increasing use in urban middle/ **Educational CD-ROMs** upper middle class households competition increases Fee structure in schools will Installed base has passed critical Multimedia in schools need to uptrend to expand target market long term mass - adoption to accelerate **Professional courses** Career focus - engineering, medicine, MBA preferred Regulations clearer than for K-12 but Private professional colleges <del>11111</del>1 fee structure is partly regulated Career focus - engineering, medicine, MBA preferred Test preparation US\$1.7bn Few national chains, but very large Skill development Employability in focus as services Vocational US\$1.4bn Scalability may remain an issue training such as banking, airlines, retail grow US\$800m High adoption in middle/upper Scalability may remain an issue Indian IT industry reaching Constant competition from graduate courses in IT, which US\$225m IT training limit on engineer hiring, 20-30% given supply constraints are preferred by some employers **Teacher training** Scalability challenges may remain for the next five years US\$70m Emerging segments, high growth Opportunities with the government US\$90m 70% Bid pipeline improving as more public schools open up to ICT L1 bidding process keeps margins lower, high debtor days ICT @ schools Very few scale success stories as of now Other areas in PPP Policy shift apparent towards PPP

Source: CLSA Asia-Pacific Markets



Private-sector opportunity nearly five time annual government spend on education

### **Estimating market size**

Education was allocated about US\$8.6bn by the government in its budget for FY09, but we believe the private sector opportunity is almost five times that amount. Scalability strongly favours the K-12 and associated segments. Other segments are smaller, with IT training, at US\$225m, just one-fifth the size of services training (for airlines, retail malls, banking staff and the like). But services training itself is only one-fifth of tutoring (a US\$5bn market for grades 5-10), and tutoring in turn is a quarter of the K-12 market (US\$20bn). Figure 3 summarises our estimates for segment size in the education sector.

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#### Market size and segmentation

Private spending on education in India	
	Annual market (US\$m)
Schooling	
K-12 (tuition fee only)	19,655
Tutoring (Classes of 5-10)	5,351
Textbooks	1,949
Stationery	1,326
Preschool	985
Educational CD-ROMs	117
Multimedia in schools	30
Professional courses	
Private colleges	7,054
Engineering	5,850
Medical	473
MBA	<i>731</i>
Test prep (total)	1,664
Engineering test prep	1,000
UPSC (Indian Civil Service) test prep	120
MBA test prep	104
Medical test prep	420
GRE/GMAT/SAT test prep	20
Skill development	
Vocational training (airlines, retail, financial services, English)	1,365
Child skill enhancement (mental arithmetic, etc.)	777
IT training	225
e-learning	27
Teacher training	15
IT/BPO finishing school	27
Estimated total market size in private sector	40,565
Opportunities with the government	
ICT@Schools	90
Public private partnerships	Evolving
Source: CLSA Asia-Pacific Markets	

Source: CLSA Asia-Pacific Markets

We have based our calculations on demographic data for 2005 and assume the ages of 2-4 years for preschool and 5-19 for K-12. Given the different consumption intensity for education between urban and rural, we assume 28-30% of India's population resides in urban areas.

India's demographics loaded towards youth

Figure 4

Demographic base data				
Age	Population (m)			
0-4	127			
5-9	125			
10-14	123			
15-19	114			
20-24	105			
25-29	94			

Source: CLSA Asia-Pacific Markets, UN Population Database



K-12 private school market a potential US\$20bn market

### 1. Kindergarten to Grade 12

Kindergarten to Grade12 (K-12) is India's core education market. The failure of the public education system to provide high quality education (and even universal education), together with a high propensity within India's middle class to spend on education, results in a shortage of quality private schools relative to demand. It is the most attractive segment for private sector investment within the education sector. In estimating market potential, we have broken our analysis into four parts – the number of children, the number of private schools, the breakdown of students between public and private schools and those not in school, and potential demand for private schools. We estimate unaided (no grants from the government) private school education amounts to about US\$15bn market, with aided private schools another US\$5bn, for a total K-12 market of about US\$20bn.

Education-age pool of 361m children

Figure 5

Number of children by age ar		
	Age (years)	Universe (m)
Grades 1-4	5-9	124.5
Grades 5-8	10-14	122.8
Grades 9-12	15-19	114.1

Source: CLSA Asia-Pacific Markets, United Nations Population Database

About 75,000 private schools

Private schools in 2005

uce believe	J = 000				
	Total schools	Private	Private (%)	Unaided	Unaided (%)
Grades 1-4	770,000	75,460	9.8	55,440	7.2
Grades 5-8	270,000	75,060	27.8	57,780	21.4
Grades 9-12	150.000	88.500	59.0	44,400	29.6

Source: CLSA Asia-Pacific Markets, India department of education

Absent - 142m children

#### Breakdown of private/public schools, those not in school

Demographic data suggest there should be 361m children enrolled in schools, but government data indicate total enrolment of only 219m in 2005. This implies nearly 142m children are not in school. Our analysis points to the higher secondary stage (Grades 9-12), where there should be 114m children, but only 36m are enrolled – a ratio of 32%. This accounts for 78m of the 142m children not in school. The enrolment ratio at the early primary level is 84%, dropping off to 57% at middle school level, and to 32% in Grades 9-12.

Figure 7

Children not in school (total = 142m)					
	Enrolled (m)	Eligible (m)	Gap (m)	Enrolled (%)	
Grades 1-5	131	156	25	84	
Grades 6-8	52	91	39	57	
Grades 9-12	36	114	78	32	
Total	219	361	142	61	

Source: CLSA Asia-Pacific Markets

Of the 219m enrolled, 90m are in private schools

Splitting enrolled students, between private and public education, we have assumed a school size of 1,200 for private schools. This implies that about 90m children are in private schools (aided and unaided) and 129m in public schools. The average size of government schools is only 136, implying a large majority of them are in villages or small towns, or only cater to Grades 1-5.



#### Figure 8

Private- and public-school enrolment	
Private schools	75,060
Per-school capacity (assumed)	1,200
Children in private schools (m)	90
Total enrolment (m)	219
Not in school (m)	142
Children in public schools (m)	129
Public schools	950,980
Implied per school capacity, public schools	136

Source: CLSA Asia-Pacific Markets

#### Figure 9

## Large number of public schools village-based

<b>Public schools -</b>	<b>Vast</b>	majority	in	rural	areas

Assumed breakdown	Public schools	Enrolment/school	Total children (m)
Village schools	800,000	25	20
Smaller schools	75,000	500	38
Mainstream public schools	75,980	940	71
Total public schools	950,980	136	129

Source: CLSA Asia-Pacific Markets, India department of education

Figure 10

### Check: 2.0-2.5 sections per class grade

	Per school enrolment	Per class	Sections per class
Private schools	1,200	40	2.5
Mainstream public schools	940	40	2.0

Source: CLSA Asia-Pacific Markets, Discussion with professionals in the education industry

### Market size estimation for private schools

Fees at 15,000 schools Rs1,250 or more a month

Armed with data on the number of private schools (75,060) and enrolments (1,200 students on average), we approximate the market size at US\$20bn. This does not include one-time admission fees charged by a large number of institutions, and we have assumed three categories of private schools:

- ☐ Unaided premium = 15,000 schools, monthly fee of Rs1,250
- ☐ Unaided standard = 29,400 schools, monthly fee Rs750
- ☐ Aided = 30,660 schools, monthly fee of Rs450

#### Figure 11

#### Potential US\$20bn market

K-12 - Estimate of market size	
Total private schools in India	75,060
Unaided premium segment, number of schools	15,000
Annual average fee (Rs)	15,000
Annual income (Rsm)	270,000
Annual income (US\$m)	6,750
Unaided standard private schools	29,400
Annual average fee (Rs)	9,000
Annual income (Rsm)	317,520
Annual income (US\$m)	7,938
Aided private schools	30,660
Annual average fee (Rs)	5,400
Annual income (Rsm)	198,677
Annual income (US\$m)	4,967
Total private K-12 market (US\$m)	19,655

Source: CLSA Asia-Pacific Markets, Discussion with professionals in the education industry

### Figure 12

India private K-12 market is meaningfully large than that in developed markets

K-12 private-schools market - A comparison							
	India	UK	US				
Number of schools	75,060	1,276	28,384				
Students enrolled	90,000,000	509,093	5,998,200				
Average annual tuition fees (US\$)	218	12,000	12,500				
Size of private school market (US\$m)	19,655	6,109	74,978				

Source: CLSA Asia-Pacific Markets, isc.co.uk, US department of education



After school - 20m use tutoring

### 2. Tutoring

Augmented teaching outside the classroom is a big business in India. Though a largely urban phenomenon, the numbers add up to a market worth an estimated US\$5.3bn. It is the biggest segment associated with K-12 and the third biggest segment in education overall. We estimate at least 20m children take some form of tuition outside the classroom. This compares with 90m children enrolled into India's private schools, and a total school enrolment of 219m. Notably, the need and usage of external tuitions is even greater for students in public schools, where the quality of "in school" education is often below the standards of private schools. In our view, about 15% of urban children in Grades 5-8 and about 40% of urban children in Grades 9-12 use tuition facilities outside school.

Figure 13

Tutoring - E	Tutoring - Estimate of market size							
	Children (m)	Urban (%)	Target universe (m)	Tutored (%)		Annual fee (Rs)	Market, (Rsm)	Market (US\$m)
Grades 5-8	123	30	37	15	6	9,000	49,714	1,243
Grades 9-12	114	30	34	40	14	12,000	164,333	4,108
Total market size =					214,047	5,351		

Source: CLSA Asia-Pacific Markets, United Nations Population Database

Figure 14

Comparison between K-12 and tutoring				
	Students (m)	Market (US\$m)		
K-12	90	19,655		
Tutoring	19	5,351		

Source: CLSA Asia-Pacific Markets

### India's propensity to spend on education

In late 2007, as part of our *Mr & Mrs Asia* series, we surveyed 1,616 households across 16 state capitals in an attempt to define India's true middle class. Spending on education was the biggest single

monthly outlay after food and groceries, underscoring the extent of the focus on learning among not just the country's elite but its middle class too.

Mr & Mrs India survey shows the importance people place on education





Source: CLSA Asia-Pacific Markets



## Re-use of books reduces market size

#### 3. Textbooks

India's education sector consumes nearly US\$2bn worth of textbooks a year, of which US\$1.6bn is in the K-12 segment and US\$300m in higher education. We have assumed that 5-10% of rural and 50-60% of urban children buy new books, with the remainder reusing older text books. In the higher-education segment, we have assumed 30% new book usage.

Figure 16

Population estimation for buying new books – Urban children and higher studies						
	Enrolled (m)	Urban children (m)	New book buyers (%)	User base (m)		
Grades 1-4	105	31	50	16		
Grades 5-8	78	23	60	14		
Grades 9-12	36	11	60	6		
Higher education	10	10	30	3		

Source: CLSA Asia-Pacific Markets, India Department of Education

Figure 17

Population estimation for buying new books - Rural children					
	Enrolled (m)	Rural children (m)	New book buyers (%)	User base (m)	
Grades 1-4	105	73	5	4	
Grades 5-8	78	55	10	5	
Grades 9-12	36	25	10	3	

Source: CLSA Asia-Pacific Markets, India department of education

Figure 18

Market size for books							
	Cost of necessary books (Rs)	Other books to augment learning (Rs)	Urban market (Rsm)	Rural market (Rsm)	Total market (Rsm)	Total market (US\$m)	
Grades 1-4	200	400	9,432	734	10,166	254	
Grades 5-8	500	1,000	21,114	2,737	23,851	596	
Grades 9-12	1,500	3,000	29,160	3,780	32,940	824	
Higher education	3,500		11,004		11,004	275	
Annual market for	or books				77,961	1,949	

Source: CLSA Asia-Pacific Markets, Discussions with professionals running schools

# Rs232 per student per year spend on stationery

### 4. Stationery

Our estimates suggest each K-12 student enrolled in a private school consumes each year Rs400 worth of notebooks, pens, pencils, and other stationery items, and this is just Rs70 a year for public school children. With 90m children in private and 129m in public schools, this market is worth about US\$1.3bn. We have added 10m post-secondary students, each of whom consumes arguably larger amounts of stationery.

Figure 19

Education stationery - Market size estimates						
Private	Public	Colleges	Total			
90	129	10	229			
20	5	30				
15	10	20				
27,000	6,450	6,000	39,450			
100	20	200				
9,000	2,580	2,000	13,580			
36,000	9,030	8,000	53,030			
900	226	200	1,326			
400	70	800	232			
	Private 90 20 15 27,000 100 9,000 36,000 900	Private         Public           90         129           20         5           15         10           27,000         6,450           100         20           9,000         2,580           36,000         9,030           900         226	Private         Public         Colleges           90         129         10           20         5         30           15         10         20           27,000         6,450         6,000           100         20         200           9,000         2,580         2,000           36,000         9,030         8,000           900         226         200			

Source: CLSA Asia-Pacific Markets



# Preschool attracts 11.5% of urban children

#### 5. Preschool

Non-profit organisations estimate  $\sim 11.5\%$  of urban children aged two-to-four years are in preschool education, which implies that of a total urban target base of 19m children, 2.0-2.5m are enrolled. The market is extremely fragmented, with the largest chain comprising just 550 schools, less than 4% of the total market potential for 15,000 preschools in India. Select urban preschools charge as much as Rs5,000 a month. We have assumed a more usual fee of Rs1,500 per month to arrive at our market estimate of US\$985m.

Potential US\$1bn

preschool market

### Figure 20

Urban preschools – Estimate of market size	
Target age	2-4 years
Estimated number of children (m)	19
Enrolment (%)	11.5
Effective base (m)	2.2
Number of children per school	150
Potential number of schools	14,594
Largest chain	550
Share held by largest chain (%)	3.8
Assumed fee per month (Rs)	1,500
Potential annual revenue (Rsm)	39,402
Potential annual revenue (US\$m)	985

Source: CLSA Asia-Pacific Markets, UN Population Database

Figure 21

# Preschool penetration comparison with US

Increased penetration will drive the preschool market in India					
	us	India			
Number of children ages 2-4 (m)	8.4	63.5			
Number of children in pre-school (000)	1,206	2,200			
Penetration (%)	14.4	3.4			
Source: CLSA Asia-Pacific Markets, UN Population Database	ase, US Department of Education	on			

6. Educational CD-ROMs

# Usage of CD-ROMs increasing in urban households

Use of educational CD-ROMs is increasing within middle to upper-middle class urban households. Assuming 5% of urban households buy 10 CD-ROMs a year, the market size is nearly US\$120m. Intensive use is evident in the 2-9 years age group, with wider use emerging in the secondary and higher secondary curriculum, notably maths and science for Grades 9 and 10. There is a potential for a substantial expansion in this market over time.

Market size of approximately US\$120m

Figure 22

Educational CD-ROMs – Estimate of market size	
Retailing over the counter	
Cost per CD ROM (Rs)	249
Target age group	Urban, ages 2-9
Universe (m)	56.4
Children per household	1.5
Number of households (m)	37.6
Households buying CD-ROMs (%)	5
Effective target (m households)	1.9
Annual CD-ROMs buying per household	10
Market (Rsm)	4,680
Market (US\$m)	117
Source: CLSA Asia-Pacific Markets	



#### **Multimedia inside schools** is a new wave

### 7. Multimedia in schools

Given that the current base of wired classrooms is small, at around 600, for a market size of US\$30m, we anticipate 75-80% Cagr here for the next several years. New channels of delivering multimedia content into classrooms have emerged, with Educomp's Smart Class an early starter. At 25 classes per school, 45 students per class, and Rs150 fee per student per month, this market can grow up to US\$750-800m on the back of India's 15,000 private schools with monthly tuition fees of more than Rs1,250.

Figure 23

Multimedia inside schools	
Schools charging fees above Rs1,250pm	15,000
Number of classes per school (avg)	25
Number of students per class (avg)	45
Payment per student per month (Rs)	150
Market potential (Rsm)	30,375
Market potential (US\$m)	759
Current base (schools)	600
Current market (US\$m)	30

Source: CLSA Asia-Pacific Markets, Discussions with professionals in the education industry

### 8. Private professional colleges

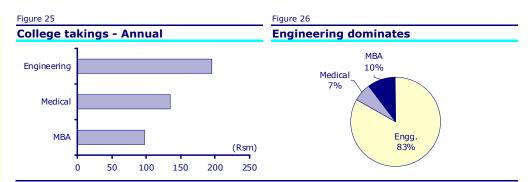
**Private engineering** colleges dominate There are more than 1,200 private engineering colleges, 300 business schools and more than 140 private medical colleges in India. These represent a US\$7bn market, with engineering taking the major share at US\$5.85bn (or 83% of the total). After K-12, private professional colleges form the single biggest category in Indian education.

**Huge potential in private** professional colleges

Fin	ure	24	
1 19	uic	27	

Private professional colleges – Estimate of market size	
Medical	
Private colleges	140
Per college per batch	100
Total students	70,000
Annual fee (Rs)	250,000
One time admission fee (Rs)	100,000
Revenue (Rsm)	18,900
Per college (Rsm)	135
Revenue (US\$m)	473
Engineering	
Private colleges	1,200
Per college per batch	300
Total students	1,440,000
Annual fee (Rs)	150,000
One time admission fee (Rs)	50,000
Revenue (Rsm)	234,000
Per college (Rsm)	195
Revenue (US\$m)	5,850
MBA	
Private colleges	300
Per college per batch	150
Total students	90,000
Annual fee (Rs)	300,000
One time admission fee (Rs)	50,000
Revenue (Rsm)	29,250
Per college (Rsm)	98
Revenue (US\$m)	731
Total market (US\$m)	7,054





Source: CLSA Asia-Pacific Markets, Discussions with professionals running private professional colleges

More approvals in the pipeline

The number of colleges continues to increase, with the biggest stream of applications coming into engineering. There are more than 1,600 approved engineering colleges, with 1,200 of them private. It should be noted that more than 400 applications have been filed with the government to set up new engineering colleges in FY08, with more than 100 so far approved.

Cost assumptions for higher education Colleges charge an annual fee and a one-time admission fee per student. The annual fee varies from Rs150,000 for an engineering college to Rs300,000 for an MBA. Admission fees vary, but range from Rs50,000 to Rs100,000. Some colleges are reportedly charging admission fees of more than Rs500,000. Course duration varies, from five years for a medical degree, to four years for engineering and two years for an MBA.

# Test prep dominated by engineering

### 9. Test preparation

Nearly 400,000 students took the IIT-Joint Entrance Examination (for the four-year engineering course offered by the Indian Institutes of Technology, IITs) last year, and another 230,000 took the IIM-Common Admission Test for MBAs (two year MBA programme at the Indian Institutes of Management, IIMs). India's test preparation market, or test prep, is the most visible poster child of private participation in education. The attractiveness of a selected few careers – engineering, medicine, civil services and business management – has ensured disproportionate spending by India's middle class on test prep. We estimate this market to be worth more than US\$1.7bn, based on an approximate annual 2.1m students taking one of the professional entrance tests. About 1.6m of these, or 75%, pay for some form of test preparation.

Market expanding with 15-20% Cagr

Some the key assumptions driving our market estimation for test prep include the following:

- □ While 400,000 students took the IIT entrance examination, 1m students took one of the many engineering entrance examinations nationwide (including examinations for regional engineering colleges). A typical engineering aspirant makes use of test prep in Grades 11 and 12, paying Rs25,000 per year.
- We have used multipliers of 2x for estimating the total number taking examinations for medical degrees and MBAs. The CBSE and IIM entrance examinations represent the premium category. Including regional medical colleges and the top-20 business schools, the actual number is greater.
- ☐ Medical test prep is assumed to be a two-year undertaking, with Civil Services, MBA and GRE/GMAT requiring one year.

Our calculations indicate engineering is the dominant section of the market, at nearly US\$1bn, followed by medical. Civil Services, MBA and others are smaller components of the market.

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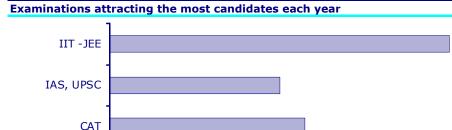
**CBSE** 

GRE/GMAT/SAT



### Engineering attracts most test takers

Figure 27



Note: IIT-JEE = Indian Institute of Technology-Joint Entrance Examination; IAS = Indian Administrative Service; UPSC = Union Public Service Commission, governing body for civil services entrance examinations, CAT = Common Admission Test, for qualification in premier MBA courses in India. Source: CLSA Asia-Pacific Markets, Discussions with various test-prep companies

Both classroom and correspondence courses

Figure 28

Test preparation – Estimate of market size									
	Aspirants	Prep use (%)	Target	Avg. spend pa (Rs)	Market (Rsm)	Market (US\$m)			
Engineering	1,000,000	80	800,000	25,000	40,000	1,000			
Civil Service	200,000	80	160,000	30,000	4,800	120			
MBA	460,000	60	276,000	15,000	4,140	104			
Medical	350,000	80	280,000	30,000	16,800	420			
GRE/GMAT/SAT	85,000	80	68,000	12,000	816	20			
	2,095,000		1,584,000		66,556	1,664			

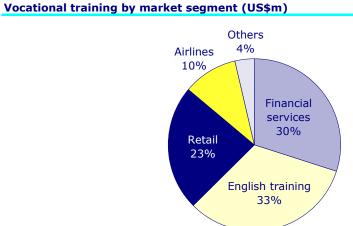
Source: CLSA Asia-Pacific Markets, Discussions with various test-prep companies

# Training needs growing in sync with expansion of service sector

### 10. Vocational training

Vocational training includes staff training for airlines, retail chains, hotels, financial services and basic skills such as English improvement. There is significant private-sector involvement in this area, and we estimate the market to be worth nearly US\$1.4bn a year. We believe growth areas are staff training in financial services, training in retail, and improving English-language skills.

Figure 29



Source: CLSA Asia-Pacific Markets



Figure 30

Staff training requirements									
	Current employment	Cagr (%)	Employment post 3 years	Addition over 3 years	Per year addition				
Airlines	60,000	65	269,528	209,528	69,843				
Retail	880,000	65	3,953,070	3,073,070	1,024,357				
Hotels	70,000	40	192,080	122,080	40,693				
Financial Services - direct	220,000	35	541,283	321,283	107,094				
Financial Services - agents	600,000	35	1,476,225	876,225	292,075				

Source: CLSA Asia-Pacific Markets, Discussions with airline/retail industry professionals

Figure 31

Market for services training US\$900m+

Industry demand – Estimate of market size								
	% training	Universe	Fee (Rs)	Market (Rsm)	Market (US\$m)			
Airlines	80	55,874	100,000	5,587	140			
Retail	25	256,089	50,000	12,804	320			
Hotels	50	20,347	100,000	2,035	51			
Financial Services - direct	50	53,547	100,000	5,355	134			
Financial Services - agents	75	219,056	50,000	10,953	274			
Vocational training market				36,734	918			

Source: CLSA Asia-Pacific Markets

Figure 32

Market for English language and communications training c. US\$450m

De	Demand for English-language training									
Ag	е	Total (m)	Urban (m)	Rural (m)	Urban tutoring (%)	Rural tutoring (%)	Total (m)	Average fee (Rs)	Market (Rsm)	Market (US\$m)
20-	-24	105	31	73	2.0	0.5	0.99	5,000	4,969	124
25-	-29	94	28	66	4.0	1.0	1.79	5,000	8,936	223
30-	-34	83	25	58	2.0	0.5	0.79	5,000	3,943	99
Eng	glish	training	g market	t					17,847	446

Source: CLSA Asia-Pacific Markets, United Nations Population database

### An urban phenomenon

### 11. Child skill enhancement

Urban parents are spending more on augmenting basic math and language skills of their children from an early age. Skill enhancement services such as mental mathematics, memory and speed reading are catching on in India, especially among the more affluent sections of society. UC Mas has 900 centres in India that teach mental mathematics and memory skills, and Aloha has another 600 centres. SIP Academy, started in 2002, has grown to 450 centres, and other players are expanding as well (Smart Brain has 110 centres). The target segment for this market is children in Grades 1-8. Most mental mathematics courses have 10 modules, with a fee of Rs1,400 per module. We have assumed an average of four modules, and the market size totals to a respectable near US\$800m. In our view, out of the 90m children in India's private schools, about 6m form the target segment for such courses, or about 6.7% of the total private school enrolment.

Figure 33

Child skill enhancement - Estimate of market size								
	Students (m)	Urban (%)	Target universe (m)	Tutoring (%)	Market (m)	Annual fee (Rs)	Market (Rsm)	Market (US\$m)
Grades 1-4	125	30	37	5	2	5,600	10,458	261
Grades 5-8	123	30	37	10	4	5,600	20,622	516
Market							31,080	777

 $Source: \ CLSA \ Asia-Pacific \ Markets, \ United \ Nations \ Population \ database$ 

### 12. IT training and e-learning

Supply of quality manpower is still crunched

India generates more than 450,000 engineering graduates every year, but poor quality of education and lack of updated skill sets implies that just 50-55% can enter a job immediately after graduation. The lack of adequate quality supply has driven the need for IT training, one of the oldest market segments in education in India. However, while our focus is on estimating the market size for the domestic (within India) segment, we note that a larger part of IT training and e-learning comprises exports. China is a big market, for example.



Graduate courses from public universities threaten private trainers

Growth in the IT training market is hampered by the advent of university-based Bachelor and Master degrees in information technology. India's IT companies have a marked recruitment preference for graduates from universities over those emerging from privately offered IT courses offered by NIIT and Aptech. Some recruiters insist that they hire only from institutes registered with the All India Council for Technical Education (AICTE), which private IT trainers are not. That said, the buoyancy of the Indian IT job market has lifted growth rates in IT training as well, and growth rates above 20% YoY have been seen in the last three years.

Figure 34

Figure 34	
IT training and e-learning	
Total training market (Rsm)	26,260
Total market (US\$m)	657
Retail (%)	36
Domestic within retail (%)	85
IT training market incl e-learning – retail (US\$m)	201
IT training - Corporate	
Corporate (%)t	64
Domestic, within corporate (%)	12
IT training market incl e-learning – corporate (US\$m)	50
Total domestic market	251
Domestic market, retail + corporate+ e-learning (%)	38
E-learning (within IT training)	
Overall e-learning % of total market	19
Assumed:	
E-learning in retail (%)	7
E-learning in corporate (%)	25
E-Learning – Retail (US\$m)	14
E-Learning – Corporate (US\$m)	13
Total e-learning market (US\$m)	27
	·

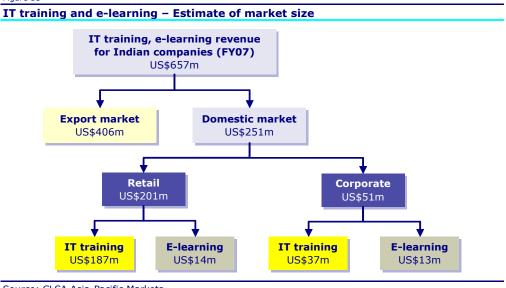
Source: CLSA Asia-Pacific Markets, Dataquest

Market slanted towards exports

Dataquest estimates the annual retail market here at US\$201m, with corporate IT training worth US\$50m. Interestingly, while 85% of Indian IT training revenue comes from the domestic market, only 12% of the reported corporate IT training revenue is from India. Overall, Dataquest estimates that IT training and e-learning revenue for Indian companies was US\$657m in FY07, but only 38% of this came from India. Our interest is the smaller domestic Indian market.

Figure 35 breaks out the domestic and export segments of the IT training and e-learning market.

Figure 35



Source: CLSA Asia-Pacific Markets



### 13. Other emerging segments

Teacher training and finishing schools for IT and business process outsourcing (BPO) are some of other segments within Indian education. However, these are in an initial stage of development, with our estimate of total market size in the US\$40-45m range. The teacher training market, despite the obvious lack of trained teachers in India, is only about US\$15m annually. This is due to low spending propensity among school management. With the average private school teacher's base pay being Rs10,000-12,000 per month, management are unwilling to pay more than Rs1,000 for teacher training per head. In public schools, 97% of government budgetary outlay for education has been going into salaries, leaving little surplus for activities such as teacher training.

Training cost per teacher equivalent to 6-10% of monthly salary

Figure 36

Teacher train	ning – Estin	nate of i	market size				
	Teachers (m)	Urban (%)	Trained target (%)	Target	Cost per teacher (Rs)	Mkt size (Rsm)	Mkt size (US\$m)
Primary	2.16	50	20	216,100	1,000	216	5
Upper primary	1.59	50	20	158,900	1,000	159	4
All secondary	2.08	50	20	208,300	1,000	208	5
				583,300		583	15

Source: CLSA Asia-Pacific Markets

Finishing schools in early stages of development

Figure 37

II and BP	IT and BPO finishing schools							
	Annual output	Unemployable (%)	Target per year	Finishing (%)	Effective target		Market (Rsm)	
Engineers	430,868	50	215,434	5	10,772	30,000	323	8
Graduates	3,157,354	80	2,525,883	1	25,259	30,000	758	19
							1,081	27

Source: CLSA Asia-Pacific Markets, NASSCOM

### Private-sector education on track as a US\$68-70bn market by 2012

### **Expect 16% Cagr over next five years**

Growing at a 16% Cagr, we estimate opportunities in India's private-sector education market could reach US\$68-70bn by 2012. Of this, about 11% is the increase in volume and penetration of education and training offerings, while we have assumed 5% price inflation. By 2012, we expect K-12 to become a US\$29bn market (13-14% Cagr), tutoring US\$9bn (16% Cagr) and private professional colleges US\$12bn (17% Cagr). Preschools and vocational training would also achieve meaningful scale (see Figure 38).

Dynamic market - New niches emerging India's education space is evolving and new niches have emerged in the past few years. For example, vocational training, finishing schools, child-skill enhancement and e-learning are all recent phenomena. Market contours are very likely to change over the next five years - our analysis is by no means exhaustive. We see growth driven by the increasing propensity of the middle class to spend on education and more aggressive initiatives by private entrepreneurs. We make the following assumptions for 2012:

### Key assumptions to 2012

- □ Some 40% of urban children will be in some form of pre-schooling, up from 11.5% currently.
- □ We expect a total of 90,000 private K-12 schools by 2012, up from about 75,000 currently.
- □ Tuition fees will trend upwards. In 2005, only 15,000 (private) schools in the private sector had fees of more than Rs1,250 a month. We expect 35,000 such schools by 2012, as fees rise in the Rs700-1,000pm segment.
- ☐ Demand for test preparation will likely continue at a 15% Cagr.



- We expect 800 more private engineering colleges to open by 2012, 60 medical colleges and 300 MBA colleges. However, recent government statements indicate 400+ new engineering college applications and 100+ approvals to date for the current fiscal year. There is upside risk to our assumptions given this trend of new applications.
- ☐ For tutoring, we have assumed 25% of children in Grades 5-8 and 66% in Grades 9-12 will use some form of out-of-the-school tutoring by 2012, up from 15% and 40% respectively as of now.
- ☐ Growth in textbooks is likely to be driven by increasing numbers of schools, enrolment and use of new books. We assume 10-15% of rural children will buy new books in 2012, from 5-10% currently.
- ☐ Growth in education stationery is dependent on rising usage, as well as enrolments. The former is a function of income growth. We assume usage of 25 notebooks per year for private school students in 2012, up from the current 20, and seven for public school students, up from five.
- □ For vocational training, we have reduced the annual growth of the recruiter businesses to about 20% annually, though from a large base. In 2012, we expect 1.2m youths to be candidates for some form of skill/vocational training, from 0.5-0.6m currently.

Market size and Cagr - Now and then

3,	,			
Figure 38				
Market size - Current and	after five years			
Segment	Current market	2012 market	Volume Cagr	Pri ri

Segment	Current market (US\$m)	2012 market (US\$m)	Volume Cagr (%)	Price rise (%)	Market size (%)
K-12	19,655	28,885	8.0	5.0	13.4
Tutoring (Grades 5-10)	5,351	8,747	10.3	5.0	15.8
Educational books	1,949	2,554	5.6	5.0	10.8
Educational stationery	1,326	1,960	8.1	5.0	13.5
Preschools	985	3,426	28.3	5.0	34.7
Educational CD ROMs	117	351	24.6	5.0	30.8
Multimedia in schools	30	405	67.9	5.0	76.3
Private professional colleges	7,054	11,888	11.0	5.0	16.6
Engineering	5,850	9,750			
Medical	473	<i>675</i>			
MBA	731	1,463			
Test prep	1,664	3,328	14.9	5.0	20.6
Engineering	1,000	2,000			
UPSC (Civil service)	120	240			
MBA	104	207			
Medical	420	840			
GRE/GMAT/SAT	20	41			
Services training	1,365	2,904	16.3	5.0	22.1
Child skill enhancement	777	2,331	24.6	5.0	30.8
IT-training - Retail	187	376	15.0	5.0	20.8
IT-Training - Corporate	38	140	30.0	5.0	36.5
e-learning – Retail	14	147	60.0	5.0	68.0
e-learning - Corporate	13	132	60.0	5.0	68.0
Teacher training	15	153	60.0	5.0	68.0
IT/BPO finishing school	27	283	60.0	5.0	68.0
Total market	40,565	68,011	10.9	5.0	16.4

Source: CLSA Asia-Pacific Markets



PPPs successful in some sectors

### **Opportunities in public-private partnerships**

New initiatives are rising across the gamut of public/private partnerships (or PPP), with ICT (Information & Communications Technology) at schools an early success story. Policy planners are beginning to emphasise PPP (see comments from the National Knowledge Commission in Section 3 of the report), and we think this could create revenue-generating models for the private sector. We see numerous opportunities, including:

- □ Relocate or build new schools, colleges, universities or job centres and provide facilities management for the new buildings/campuses. Projects might involve land swaps or enable the private sector provider to generate a third party revenue stream from the extant infrastructure.
- Build facilities for education institutions with the potential for third-party income generation, such as sports or academic/conference facilities.
- ☐ Refurbish existing assets and/or provide facilities management.
- □ Provide information systems that ensure the continued availability of hardware and software over a period of time, or allocate to the private sector some administrative functions. There may be opportunities for third-party income generation by selling excess capacity.

Institutions have varying requirements and the private sector may be able to offer innovative solutions that offer quality services and value for money.

#### 16,000 schools wired, more than 25,000 to be bid this year

### Computer literacy in public schools

State governments outsource the installation and maintenance of IT hardware, content and training within public schools to a private party. The business, called ICT (Information and Communication Technology), is tender-based and functions under the build/own/operate/transfer (BOOT) model. Central government has been funding this initiative under the *Sarva Shiksha Abhiyaan* (SSA) and ICT@Schools programmes. In the past three years, some 16,000 schools have become involved. With planned government outlay for education expected to increase substantially in the next five years (per Planning Commission data), we expect that by March 2013 about 200,000 public schools will offer computer training to a material number of students.

Figure 39

ICT installations by vendors						
	Current	Yr ago				
Educomp	6,004	2,808				
Everonn	3,156	900				
NIIT	3,828	3,906				
All others (assumption)	3,012	1,386				
Total	16,000	9,000				

Source: CLSA Asia-Pacific Markets, Company disclosures

We estimate ICT inflows to private-sector vendors will approach US\$1bn by March 2012. This is based on the assumption that the hardware for schools is bought by the vendor. In some cases, such as the recent Gujarat ICT programme, hardware has been bought by the government. This approach may reduce revenue opportunity while improving cashflow.



ICT market could grow 10x in five years

Figure 40

ICT – Estimate of market size						
	FY08	FY09	FY10	FY11	FY12	FY13
Start of period schools, wired	9,000	16,000	36,000	66,000	106,000	156,000
New bids	7,000	20,000	30,000	40,000	50,000	50,000
End of period schools, wired	16,000	36,000	66,000	106,000	156,000	206,000
Inflow per month per school (Rs)	20,000	20,000	20,000	20,000	20,000	20,000
Annual revenue to providers (Rsm)	3,840	8,640	15,840	25,440	37,440	49,443
Annual revenue providers (US\$m)	96	216	396	636	936	1,236
Chg YoY (%)		125	83	61	47	32

Source: CLSA Asia-Pacific Markets

### Upgrade of industrial training institutes

New thinking ongoing in managing ITIs

India's finance ministry has proposed financial support for the upgrade of 1,396 industrial training institutes (ITIs) to so-called centres for excellence in specific trades and skills through PPP. State governments will continue to regulate admissions and fees, with private management receiving academic and financial autonomy. The role of the central government is to provide seed capital. The government aims to upgrade 300 ITIs a year, with Rs7.5bn allocated for this purpose. Interest has come from the likes of Hero Honda, ITC, Larsen & Toubro, Ashok Leyland, Bharat Heavy Electrical, Coca Cola, HCL, Wipro, Kirloskar and Tata. Some of the upgrade programmes for ITIs are also being funded through World Bank grants.

### School transformation and quality improvement

Some examples of PPP in public school upgrade and management

IL&FS Education and Technology Services (IETS), in public-private partnership with the Pimpri-Chinchwad Municipal Corp and Science and Technology Park will be upgrading and transforming 156 schools, run by the Pimpri-Chinchwad Municipal Corp. The transformation project includes providing integrated solutions for enhancement of the quality of school education by upgrading IT infrastructure. This includes setting up of web-enabled MIS systems that will improve administrative functions and enhance classroom processes through the use of ICT tools. The major input comprises Marathi computer-aided learning materials to supplement the syllabus.

State governments adopting new PPP tools

Under Sarva Shiksha Abhiyaan, the Jharkhand government has rolled out a computer education and computer-aided education programme to access satellite-delivered education at the local level. The programme is being jointly implemented by the Jharkhand Education Project Council, the Jharkhand Agency for Promotion of Information Technology and Core Projects, which has developed a total solution that tracks funds allocated by the central government for different aspects of the programme, including financial, civil work. In addition to this, the solution helps administrators track the individual progress of each student and the performance of teachers. The project covers 22 districts and 440 schools.

Poor infrastructure at public schools is driving PPP initiatives

There are about 950,000 schools in India run by governments/local bodies. The infrastructure in a majority of these schools is in a very poor state and needs urgent upgrades. Despite the proposed increase in outlay for education, the government has limited scope to ensure proper use of these funds. We believe PPP is the way forward for upgrade of public schools. We expect more initiatives in coming years.



### Case study: Private participation in vocational training

Tata Steel has signed MOUs with the Jharkhand government to upgrade polytechnics and ITIs. Before this bid, Tata Steel has a track record for supporting vocational training institutes. Shavak Nanavati Technical Institute (formerly known as Jamshedpur Technical Institute), is located in Jamshedpur. Set up in 1921, this institute is operated by Tata Steel. It offers courses in

metallurgy, advanced electrical and mechanical engineering, telecommunication, accounting, first aid, safety, computerisation of accounts and practical training. Its flagship program is a three-year residential program for students who have passed Grade 10. Students receive free accommodation and a monthly stipend. On graduation, they can apply to Tata Steel for a job.

### Case study: Charter schools in US an example of PPP

Charter schools are publicly funded elementary or secondary schools freed from some statutes that apply to public schools. They operate as for-profit or non-profit entities and operational control resides in private managements despite the public funding that supports these schools. Charter schools are prevalent in US, with 40 states having charter-school laws. First set-up in US in 1991, currently there are

3,940 charter schools in the US with total enrolment of 1.15m students. Edison Schools is a leader in management, with at least 127 schools under its umbrella through alliances with local education authorities in the US and UK, serving almost 80,000 students. Mosaica Education has at least 76 charter schools in seven states and the District of Columbia, serving more than 14,000 students.

### Case study: PPP in Canada

In 1997, the Canadian province of Nova Scotia turned to PPP for its new schools and by the end of 1998 there were 41 completed or approved schools, with a further 12 awaiting approval. The aim was to quickly boost public services with minimal impact on Nova Scotia's limited budgetary resources.

Nova Scotia's Ministry of Finance requests bids from qualified developers to provide one or several schools built to its specifications and on a turn-key basis in a designated district. The developer is required to provide a fully equipped school - desks, telephones, blackboards and computers.

Prospective qualified bidders compete on price, with the cost of the project converted into a 20-year lease with annual rent payments equal to 85% of the capitalised cost. During periods when the public school system is not using the facility, the developer can rent its space to other approved and compatible organisations and businesses.

Off-hours use: Such off-hours use could include renting the facility to for- and not-for-profit

educational organisations, such as trade schools and refresher educational programs, day care, community colleges and universities, civic groups, religious organisations, local governments, political groups, and similar entities for which classroom-, meeting-, and auditorium-type space is essential.

Organisations and businesses whose purpose and activities are not compatible with a building used primarily by children are prohibited from leasing space, and such prohibitions are defined clearly in the contract.

By using the building more intensively than would be the case if its occupancy were limited to public school functions, the developer/owner would obtain more revenues and earn more profit. These extra revenues are "passed on," in effect, to the public school system in the form of below-cost rent.

Because developers must compete actively with other providers of space for off-hours revenue, they have an incentive to ensure that construction is done to high-quality standards and design.



Most of government education spending goes to salaries

### India's education sector set for a new future

Salaries consume 97% of central-government spending on education. The inability of public schools in providing elementary education, and the five decade focus on elitist higher education, has resulted in severe anomalies within India's education output. There is a section of students graduating with the best skills globally, while a large swath of population is still out of school. The private sector is set to play a larger role in bridging this gap in schooling, skill sets, training, infrastructure and capacity. Our analysis shows that both market size and market growth are good enough to attract new initiatives.

In the next section, we look at the extant players in each category, their current scale and plans. Section 3 discusses the regulatory issues surrounding Indian education, with regulatory ambiguity on profit making and state by state differences in policy having been a hindrance to the expansion of education infrastructure in India. Appendix 1 provides a wide range of data on Indian education, demographics, government spending and estimates.

Market comparable to infrastructure in 11th Five-Year Plan

Highlighting the market size, we note that the 11<sup>th</sup> Plan estimates US\$45.6bn per year investment on Power, Telecom, Airports, Roads and Ports by the government, comparable to the annual private segment education market in India. By 2012, we expect the private segment education market to grow to US\$68-70bn, comparable to the combined public and private annual investment in the above mentioned categories of infrastructure. Who are the players in the education space? What is their current scale of operations? The next section has the details.

Figure 41

Select segmental data on planned infrastructure spending							
(US\$bn)	FY08-1	2	Avg spend/	'year			
	Government	Private	Government	Private			
Power	133.5	47.8	26.7	9.6			
Telecom	26.3	52.3	5.3	10.5			
Airports	4.0	6.2	0.8	1.2			
Roads	58.6	33.1	11.7	6.6			
Ports	5.7	16.0	1.1	3.2			
Total	228.1	155.4	45.6	31.1			

Source: CLSA Asia-Pacific Markets, Planning Commission



# Private initiative in education is a structural investment theme

### **Diversity promises consolidation**

Our study of business models in India's education sector reveals a cluster of players in relatively small though fast-growing market segments. It further identifies nascent, organised efforts in the large K-12 market and its environs. Private-sector initiative remains diffused with few businesses having a national presence or even reasonable scale (eg >US\$50m in revenue). This is dichotomous compared to the market opportunity and growth, in our view, and therefore we see changes ahead. The rise of organised private initiative in education is a structural investment theme over the next five years.

# Only a handful of publicly listed companies

There are only a handful of publicly listed companies - Aptech, Core Projects, Educomp, Everonn and NIIT - and the publicly listed education and training space has a market capitalisation of US\$2.6bn on FY08 revenue of about US\$450m. This is too low given the market opportunity, in our view. Elsewhere, textbook and school-stationery players such as Navneet, Macmillan, Sundaram MultiPap and Camlin have a combined market capitalisation of US\$400m.

### Large chains run as NGOs

### Social focus for K-12 chains, shifting to private entities

Most of India's school chains are run by charitable organisations, some socially-focussed, some funded by political groups. Vidya Bharati, for example, is affiliated with the right-wing quasi-political organisation RSS. It claims to have more than 18,000 schools, though many are up to primary level only. Other significant chains are DAV, which has 667 schools, and NDMVP with 325. Delhi Public School provides 107 schools throughout India (with another 13 overseas), with enrolment of 100,000 students. City Montessori School runs schools across 20 branch campuses in Lucknow and has 32,000 students. Amity University is one of many smaller operators, with seven K-12 schools. Educomp plans to open 100 K-12 schools over three years, and 150 within four years, which would make it one of the largest organised school chains in India.

Figure 42

Private, charitable and indicative school chains in India						
	No. of schools <sup>1</sup>	Comments				
Vidya Bharati	18,749	Affiliated to right wing RSS, established in 1977, claims 2.5m students.				
Dayanand Anglo Vedic (DAV)	667	Founded in 1886.				
Nashik District Maratha Vidya Prasarak Samaj (NDMVP)	325	Founded in 1914, claims 160,000 students.				
Bhartiya Vidya Bhawan	180					
Maharshi Vidya Mandir	143	Present in 118 cities, claims 80,000+ students.				
Ramakrishna Mission	137	137 schools, of which 34 are secondary schools, and 11 are higher secondary; 110,000+ students on rolls.				
VHP - Vishwa Hindu Parishad	130	Vishwa Hindu Parishad is a right wing organization.				
DPS - Delhi Public School	120	107 schools in India and 13 abroad; Claims 100,000 students on rolls.				
Chinmaya Vidyalaya	75	Started in 1965.				
Aditya Birla Group	41					
City Montessori School	20	32,000 students on rolls across 20 branch campuses, primarily in north Indian city of Lucknow.				
Tata Steel	18	Part of Tata Group's social support efforts.				
Amity	7	Amity is primarily known for higher education, most schools in and around Delhi.				
Krishnamurti Schools	6					
Tata Chemicals	5	Part of Tata Group's social support efforts.				
Padma Seshadri Bala Bhawan	3	8,000 students.				

<sup>&</sup>lt;sup>1</sup> Unverified number supplied by school managements. Source: CLSA Asia-Pacific Markets, School web portals, media reports.



### **International examples**

### **Global Education Management Systems**

Based in the UAE, Global Education Management Systems is one of the world's largest "for-profit" providers of K-12 education. The group employs 5,800 education professionals and staff. It has an enrolment of nearly 70,000 students from 124 countries and manages 33 schools in the Middle East, seven in India, 13 in the UK and one in South Africa.

### **Nobel Learning Communities**

A US-based company with a national network of 158 private schools, it has preschools, elementary schools, middle schools and speciality high schools in 14 US jurisdictions serving 25,000 students. Nobel offers an array of supplementary educational services, including before- and after-school programmes, the Camp Zone summer programme, learning support programmes and science camps.

# Content market shifting towards online options

#### **Educational books and CD-ROMs**

The market for textbooks – worth nearly US\$2bn - is well developed, with Navneet and Macmillan being publicly listed as well. Market growth depends on increased enrolment numbers and greater intensity of use, which means lower "re-use" of books and more books per student. We estimate market growth at some 11%YoY. Educational CD-ROMs is an apparently highly-fragmented market, with many small players competing in what is a growing space.

Figure 43

Figure 43				
<b>Educational content -</b>	Select pla	yers		
	Status	History	Approx. annual revenue (Rsm)	Business model
Navneet Publications	Public	Started in 1959. Started exporting stationery in 1993.	3,268	Educational & children's books publishing. Paper and non-paper stationery products.
Macmillan India	Public	Incorporated in 1970	2,097	Publishes school & college books, reference books and atlases. Manages educational portals. Provides typesetting and originating services.
Labour India Publications	Private	Started in 1983	na	Educational CDs, e-learning, educational magazines and books. Runs a chain of three schools branded Gurukulam schools.
Algorithms India	Private	Started in 2002	5	Education and Syllabus CDs. Animated rhymes and stories for younger children.
Technology School	Private	Started in 1999	5	Educational CDs.
S Chand & Co.	Private	Started in 1930s	na	Educational books & CD-ROMs.

Source: CLSA Asia-Pacific Markets, Company disclosures

### **International examples**

### **Pearson Education**

Pearson Education, part of the Pearson group (LON:PSON), is a global leader in educational publishing and testing with revenue of £2.9bn and operating profit of £405m in FY06. It provides online learning and custom publishing for higher education, professional testing and publishing.

#### McGraw-Hill

McGraw-Hill (NYSE:MHP) offers traditional educational materials, online learning and multimedia tools. It is active in e-books, online tutoring, customised websites and subscription services.

# Usage intensity to drive growth

#### School stationery

The educational stationery market has established players, some of them in the public domain - Navneet, Camlin and Sundaram Multipap. At 14% growth on a US\$1.3bn base, this market is also dependent on increased spending intensity for its growth - greater usage of notebooks and stationery per child, consumption shift to higher-priced items. Overall, income growth and faster growth of higher-spending private schools should drive this market.



Figure 44

<b>Educational station</b>	Educational stationery –Select players						
	Status	History	Approx. annual revenue (Rsm)	Business model			
Camlin	Public	Started in 1931. Became a public company in 1987.	2,073	Manufacturer and exporter of stationery products.			
Hindustan Pencils	Private	Started in 1958	na	Manufacturer and exporter of stationery products. Markets under the Apsara and Natraj brands.			
Navneet Publications	Public	Started in 1959. Started exporting stationery products in 1993.	3,268	Educational and children's books publishing. Paper stationery and non-paper stationery products.			
Sundaram Multi Pap	Public	Started in 1995.	824	Manufactures paper products for schools and office use.			
G.M.Pens International	Private	Started in 1986.	na	Manufactures and distributes a range of writing instruments and accessories. Distributes the Reynolds brand in India.			
Rotomac Pens	Private	Started in 1992.	na	Manufactures and distributes a range of writing instruments and accessories.			

Source: CLSA Asia-Pacific Markets, Company disclosures

Largest chain has less than 4% of market

### **Preschools - Five meaningful players**

Assuming preschool sizes of 150 children each, India should have nearly 15,000 facilities. The largest chain, KidZee, has 550 schools for 3.8% of the market. Shemrock Agency has 81 schools, mostly in north India, while Apple Kids has 60, mostly in the south. Educomp, which has so far focused on organic expansion, is considering acquiring a preschool chain, possibly in 2008-09. Other notable players are EuroKids and Kangaroo Kids.

Figure 45

Preschool - Sel	ect player:	S			
	Status	History	Current network	Approx annual revenue (US\$)	Business model
KidZee	Part of the Zee Group	Started in 2003	550	na	Runs Kidzcare, a day care facility and Kidzee High, a CBSE school. Launched KidZee -ICICI Bank cobranded card. Annual fees vary from Rs6,000-36,000.
EuroKids	Private	1997: Dutch publishing company Egmont forms India JV to publish children's books. JV launches a brand for preschools, EuroKids. 2000: Egmont buys out JV partner in India. 2004: Indian management buys out EuroKids from Egmont.	337 (Target of 1,000 preschools in four years)	US\$12.5m	Charges 25-30% royalty fee on all education fees and upfront franchise fee of Rs60,000 pa.  Average annual fees of Rs18,000-20,000.
Shemrock Agency	Private	Started in 1989.	81	na	Primarily north India.
Apple Kids	Private		60	na	Primarily south India.
Kangaroo Kids	Private	Started in 1993.	27 preschools, total 57 centres including day care and child activity centres	na	Also runs schools, toddlers clubs and imparts teacher training. Annual fees of Rs28,000-30,000. Charges royalty from franchisees.

Source: CLSA Asia-Pacific Markets

### **International examples**

### **ABC Learning Centres**

ABC Learning Centres is an Australian company and one of the largest providers of early education and care services to children of 6 months to 12 years. ABC operates 2,238 childcare centres. It entered the US market through the acquisition of Learning Care Group in January 2006, giving it 1,150

centres. ABC entered the UK with the acquisition of Busy Bees in December 2006, gaining a network of 47 centres. The company has 1,084 outlets in Australia and 104 in New Zealand. In FY07, ABC reported net sales of A\$1.7bn, with net profit of A\$143m.



#### New channel of education

#### Multimedia in schools

New channels of selling "content" have emerged. Educomp's pioneering Smart Class concept – the idea of multimedia driven education inside the classroom- has caught on with more than 500 schools having adopted the model. Edurite and IL&FS Education & Technology Services (IETS) also own scalable educational content. We expect the multimedia content channel to enjoy an 80-100% Cagr over the next few years. By March 2011, for example, Educomp should have 4,000 schools signed up for Smart Class, compared to 500 as of the latest quarter (December 2007).

Figure 46

Multimedia in scho	ols			
	Status	History	Approx. annual revenue (Rsm)	Business model
IL&FS Education & Technology Services	IL&FS	Started in 1997	na	Learning content & training modules for educational institutions and government.
Educomp	Public	Started in 1994	1,246	Uses proprietary content for computer aided learning within class rooms under its "Smart Class" product. Also licenses out content for ASEAN markets. Has its own books in schools managed under the Edu Manage umbrella.
NIIT	Public	Started in 1981	na	13-14 schools are using multimedia content under pilot programmes.
Everonn	Public	Started in 1997	Na	Acquired multimedia content from Aban in 2007. Claims to own 6,000+ animations and a 26 people product development team
Edurite	Owned by Tutorvista	Started in 2000. Acquired by Tutorvista in 2007.	na	Multimedia e-learning content for school syllabus.

Source: CLSA Asia-Pacific Markets, Company disclosures

# Expanding footprint for select college chains

### **Professional colleges - Organisation opportunities**

India had, as of July 2007, 1,617 recognised engineering colleges, of which some 1,200 were private. The total number of colleges is expanding at a rate of about 100 per year, with 106 approved in FY08 out of 403 applications. Five states dominate the market - 63% of engineering colleges are concentrated in Andhra Pradesh, Tamil Nadu, Maharashtra, Karnataka and Uttar Pradesh. India has more than 300 private colleges offering MBAs and 140 private medical colleges, most operating as stand-alone institutions. A few chains have emerged, such as Amity University with 38 colleges and Manipal University with 20 colleges. The US\$7bn market, with 16-17% Cagr, is expected to reach US\$12bn by 2012. Hindrances to growth include the influx of substandard colleges, allegations of illegal fees leading to tighter regulatory controls, and allegations of political involvement.

Figure 47

<b>Private professional</b>	Private professional colleges						
	Status	History	Current network	Business model			
Amity	Private	na	38 colleges including engineering, business schools, law schools and biotechnology	Best diversified across all professional career courses. Has 2,500 faculty and 130 programmes to offer.			
Manipal University	Private	Started in 1953	20 institutions, 13 streams of education, 180 courses	Enrolment of 15,000 students, alumni base of 120,000.			
Indian Institute of Planning & Management	Private	Started in 1973	9 colleges with 5000 students	MBA schools and corporate training through management development programmes.			
IBS	ICFAI University	Started in 1995	Presence in 19 cities	MBA schools and corporate training.			
Institute of technology & Management	ITM Trust	Started in 1991	7 campuses across 4 cities	MBA schools and corporate training.			

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports



Rush to build more

Figure 48

Engineering colleges - Bre	Colleges	New applications	Approvals
	(Jul-07)	(FY08)	(FY08)
Madhya Pradesh	90	50	6
Chhattisgarh	15	10	0
Gujarat	44	10	1
Mizoram	0	0	0
Sikkim	1	0	0
Orissa	50	15	2
West Bengal	55	7	1
Tripura	1	1	0
Meghalaya	1	1	0
Arunachal Pradesh	1	0	0
Andaman & Nicobar	0	0	0
Assam	4	1	0
Manipr	1	0	0
Nagaland	1	0	0
Jharkhand	9	5	0
Bihar	6	0	0
Uttar Pradesh	125	43	15
Uttarakhand	13	2	0
Chandigarh	5	0	C
Haryana	63	20	18
Jammu & Kashmir	6	1	0
New Delhi	18	2	2
Punjab	48	3	1
Rajasthan	58	18	11
Himachal Pradesh	8	2	2
Andhra Pradesh	292	113	12
Pondicherry	6	1	1
Tamil Nadu	286	53	18
Karnataka	134	23	6
Kerala	93	1	0
Maharashtra	181	21	10
Goa	3	0	0
Total	1,617	403	106

Source: CLSA Asia-Pacific Markets, Rajya Sabha questions.

### International examples

### **Apollo Group**

Apollo Group (Nasdaq:APOL), through its subsidiaries, provides higher education to working adults. It owns and operates the University of Phoenix, Western International University, Axia College (of the University of Phoenix), the College for Financial Planning, and the Institute for Professional Development. In FY07, Apollo reported revenues of US\$2.7bn with net income of US\$409m.

The University of Phoenix, Apollo's flagship, is the largest private accredited university in the US offering undergraduate and graduate degrees. Programs are designed to accommodate the needs of working students and are available online. Apollo's Western International has joint educational agreements in China and India.

Apollo's Insight Schools operates an online high school aimed at a diverse body of students, including home-schooled children and working adults seeking to complete their high-school education. Apollo had total enrolment of 350,000 in 2007.

### Anhanguera Educacional Participações

Founded in 1994, Anhanguera Educational Participações (SAO:AEDU11)) is one of the leading private, for-profit post-secondary education companies in Brazil. It offers 48 degree programs, primarily at undergraduate level, covering business, law, engineering, health, and other applied social sciences. As of end-2006, it had 13 campuses with an average of 24,527 students, with six campuses having opened in 2007.



# Regional segmentation has increased

### **Test preparation - Attractive, but regional**

A career focus that favours engineering, business, medicine and the civil services has led to the proliferation of privately-run test preparation centres. While the size of the market opportunity (US\$1.7bn, with 20% Cagr) is substantial, it has become regionally segmented with very few national-level chains. Some consolidation has taken place in test prep for MBA examinations - Time, IMS and Career Launcher account for nearly two-thirds of the segment, with the rest of the market divided among regional players.

Brilliant Tutorials and Sachdeva College provide multiple prep streams In some cases, test preps offer a wider gamut of courses across engineering, MBA, civil services and medical entrance examinations. For example, while FIITJEE is primarily an engineering test prep brand, Brilliant Tutorials, another test prep company, provides the entire range of coaching courses, from engineering to medicine, MBA and civil services. Among the broad based coaching institutes, Sachdeva College, with 85 centres and an annual intake of 100,000, claims to be the largest. Most players are private and accurate assessments of size or revenues remain difficult. We have used media reports and company disclosures to compile our indicative summary tables.

Figure 49

Engineering, me	dical, law	test preparation -	Select players		
	Status	History	Current network	Approx. annual revenue (Rsm)	Business model
Brilliant Tutorials	Private	Late 1970s	10	na	No franchisees. Moving away from correspondence focused to classroom focused. Presence in test-prep across fields.
Vidyasagar Classes	Private	Founded in 1985	NA	200+	Coaches ~9,000 students annually.
Bansal Classes	Private	Started in 1985	Three centres	200+	Fees range from Rs30,000-60,000 annually. Focused on engineering test prep. ~8,000 students admitted every year.
Aakash Institute	Private	Started in 1988	30+	na	Medical test prep is the main focus. Also does engineering test prep.
FIITJEE	Private	Started in 1992	35	1,200	Engineering test prep focus. Employs over 300 faculty.
Career Point	Private	Started in 1993	1	na	Focussed on IIT-JEE coaching.

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports

Figure 50

MBA test preparation - Select players						
	Status	History	Current network	Approx. annual revenue (Rsm)	Business model	
TIME	Private	Started in 1992.	150+	1,000 (60% Cagr in past 5 years)	Franchisee model. Coaching for MBA/Engg/MCA entrance.	
Career Launcher	Private. Investment by Gaja Capital.	Started in 1995.	130+	690	60% revenue from owned outlets. Major revenues from test prep. Planning chain of preschools, schools and business schools.	
IMS	Private	Started in 1977.	80+	800-900	Predominantly MBA test prep, though it is now diversifying to other segments including schools.	
Professional Tutorials	Private	Started in 1993.	60+	200-250. Breaks 00 in FY08.	Operates through 40 franchisees.	
Career Forum	Private	Started in 1989.	57	120		

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports

Figure 51

rigure 51							
Civil Services Test Prep: Profiles of select players							
	Status	History	Current network	Approx. annual revenue (Rsm)	Business model		
Rau's Study Circle	Private	Started in 1953	2 (Delhi, Jaipur)	na	Charges Rs55,000, ~500 students per intake.		
Chanakya IAS Academy	Private	Started in 1993	1 (Delhi)	na	~900 students per intake.		
Vajiram & Ravi	Private	Started in 1976	1 (Delhi)	na	Charges ~Rs35,000 per student.		
Sriram IAS	Private	Started in 1985	1 (Delhi)	na	Average fees of Rs25,000.		

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports



Figure 52

Board, Chartered Accountancy Test Prep: Profiles of select players								
	Status	History	Current network	Approx. annual revenue (Rsm)	Business model			
Mahesh Tutorials	Private	Started in 1988. US\$12m investment by Helix in 2007.	100+	360m FY07. double in FY08.	Private tuitions for schools. Also present in test prep in Maharashtra.			
Chate Group	Private	Started in 1989	89 (Maharashtra)	na	Private tuitions for schools. Also present in test prep in Maharashtra.			
Sinhal Classes	Private	Started in 1981	10 (Mumbai)	na	Private tuitions for ICSE schools. Also present in test prep in Maharashtra.			
SukhSagar Institute	Private	Started in 1976	24	na	Coaching for Commerce Stream. Specialised in CA/CS coaching.			
KalraShukla Classes	Private	Started in 1993	6	na	Training for XI-XII and engg & medical entrances in Maharashtra.			

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports

Figure 53

GRE/GMAT/TOEFL/SAT Test Prep: Profiles of select players							
	Status	History	Current network	Approx. annual revenue (Rsm)	Business model		
TIME/CL/CF/IMS	Private						
Jamboree	Private	Started in 1995	6	na	Training for foreign examinations and university applications.		
Edstar	Wigan & Leigh College	Started in 1997	12	na	Foreign examinations and university.		
Dilip Oak's Academy	Private		1 (Pune)	na	Foreign examinations and university.		
Madhavi Desai Consulting	Private	Started in 1986	2	na	Foreign examinations and university.		
IMFS Global Consultants	Private	Started in 1987	4	na	Foreign examinations and university.		

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports

### **International examples**

### **Digital Daesung**

This Korea-based firm is active in three main areas - a learning centre franchise under the brand names Genex School for primary students and Daesung N School for secondary students; e-learning services providing online education under the brand name Daesung Cyber Class; and provision of content for college entrance guidebooks and other educational information. Digital Daesung reported 2006 revenue of 19.9bn won, with net income of 2.4bn won.

#### **Princeton Review**

Incorporated in March 2000, Princeton Review provides integrated, classroom-based print and online products and services.

Its test preparation division provides classroombased and online courses and tutoring.

Its K-12 division provides a range of services to schools and school districts aimed at improving academic performance.

# Segment has grown fast in the last three years

### **Services training - Emerging scale**

The US\$1bn services training market is seeing new entrants. Frankfinn is the largest with FY07 revenues of Rs750m (US\$19m) and 120 centres. Kingfisher Academy, which currently has one centre, plans to have 25 franchises by 2010. Avalon (owned by Aptech), has 35 centres and targets 50 by end-2008.

### **New initiatives from NIIT**

NIIT has also entered this space. Its IFBI initiative, in association with ICICI Bank, provides training for the financial services sector – more over 2,000 placements have reportedly taken place since the programme was launched in September 2006. The programme counts ICICI Bank, HDFC Bank, Yes Bank and ICICI Securities as partners. NIIT has also launched Imperia, a management education and training programme, with established business schools, including the Indian Institutes of Management.



### English-language training on sharp rise

Within the US\$500m English-language and communication-training market, Veta has a lead with 175 centres and annual revenue in excess of Rs800m (US\$20m, our estimates). It has 175 centres currently, with a target of expansion to 500 centres by 2010, half of which will be owned and the remainder franchised. Other players include the Institute of Communication Management and Komark, as well as the British School of Language, which is mainly in northern India – it has 20 owned and franchised centres in Delhi and its environs, and in Punjab.

# Some 6-6.5m more jobs in services to 2012

Services-sector growth is the key driver for this segment. Job opportunities in private-sector financial services, airlines, retail chains and hotels are expected to expand dramatically in coming years. We estimate organised retail will need 2.5m more people by 2010, 4m by 2012. Financial services will need 2m additional staff by 2012, and airlines will need another 50,000. Hotels are expected to generate demand for 200,000 additional jobs by 2012, of which 35,000 will come from the five-star hotel category. These metrics form the base of current investments in the space. Our estimates suggest that, by 2012, 1.2m people will be undergoing training in one of the service industries, and provision of English language training will double across India.

Figure 54

	Status	History	Current network	Approx. annual revenue (Rsm)	Business model
Frankfinn	Private	Started in 1993	120	700-750	Aviation/hospitality training. 15,000-17,000 students.
Avalon	Aptech	Acquired by Aptech in 2006.	36	40-50	Aviation/hospitality training.
Air Hostess Academy	Private	Started in 1997	40	na	Aviation/hospitality training. 9,000-11,000 students.
IFBI	NIIT	Sep06. NIIT, ICICI Bank partnership	15 cities	na	Training and reskilling for banking jobs. Has placed 2,000.
Imperia	NIIT	Started in 2007 in alliances with IIMA, IIMC, IIMI, IIFT, and IMT	na	na	Management education for working professionals and corporates. Programmes range from 3-10 days to upto 12month courses.
ICA	Private	Started as software training institute but built focus on finance. Has trained 100,000 students.	300 (50 owned)	Claims 100% Cagr in last 4 years	Focus on training chartered accountants for finance department roles within corporates.
Kingfisher Training Academy	UB Group	Started in 2007.	1. 25 centres by Dec08.	na	250 students.

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports

Figure 55

English language training – Select players						
	Status	History	Current network	Approx. annual revenue (Rsm)	Business model	
Veta	Private	Started in 1981. Investment of US\$10m by SAIF partners in 2007.	175. Plans 500 centres by 2010.	~800+	English language training. Retail & corporate. Has trained 2.1m students.	
British School of Language	Private, owned by Satinka Lifestyle Services	Founded by 1975, main presence in New Delhi, franchisees in Punjab, near-Delhi.	20	na	Claims to have trained 1.5m students.	
English Centre	Subsidiary of Institute of Communication Management	Started in 1995	~30	~100	English language training. Retail & corporate.	
Komark	Private	Started in 1996	na	na	English language training. Retail & corporate.	

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports



### **International examples**

#### **Navitas**

Navitas (ASX:NVT), formerly IBT Education, is a global education service provider of university programs, English language, workforce training and student recruitment. It was the first educational institution to be listed on the Australian Stock Exchange. Navitas has partnerships with 19 universities and is the largest provider of English language training in Australia. It has 27,000 students from more than 90 countries. Revenue for FY07 was A\$282.7m, with net income of A\$36.7m.

### **BPP Holdings**

BPP Holdings (LON:BPP) is a UK-based company engaged in professional training and academic

education, supporting individual clients in developing and managing their careers. It serves the financial, legal and business communities, as well as offering tutoring Grade 12 students sitting GSCE A-levels. Revenue for year ended December 2006 was  $\pounds 129.7m$ , with net income of  $\pounds 22.4m$ .

#### **SmartPros**

US-based SmartPros provides training for the financial, legal and engineering professions, as well as the pharmaceutical, banking, securities, insurance and technology industries. It offers training in corporate governance, ethics and compliance for the general corporate market.

# Urban, upper middle class phenomenon

### Child skill enhancement - Niche market, niche players

Child skill enhancement is a new segment aimed at mostly urban households. India forms a ripe market, with education, and especially mathematics education, forming priority – and mental mathematics is accordingly the most attractive segment of the business. The urban and middle to upper middle class focus of the offering provides pricing power, and fee of Rs1,400 per "module" is normal. Both UC MAS and Aloha, two of the largest players in the space, started off in Malaysia in the early 1990s.

Figure 56

gu. c 50								
Child skill enhancement - Select players								
	Status	History		Approx. annual revenue (Rsm)	Business model			
UC Mas	Private; based out of Malaysia	Indian operations started in 1999.	900	na	Franchise. Mental arithmetic & memory training programs for ages 4-20.			
Aloha	Private	Started in 1993 in Malaysia. Indian subsidiary started in 2002.	600+	150-175	Charges Rs500-750pm. Franchise. Mental arithmetic programs for ages 4-14.			
Smart Brain	Private	Started in 2003 in India.	110	10				
SIP Academy	Private	Started in 2002 in India.	450					

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports

# IT training market growth stunted by competing degree alternatives

## IT training - Consolidation done? The US\$225m demostic IT training marks

The US\$225m domestic IT training market has emerged from the post-2001 shakeout, with NIIT and Aptech the dominant players. Both have a large presence outside India - this has not been included in our market size calculations. For example, NIIT has about 450 centres in India, and 170 in China, with global coverage of nearly 750 (including Asean/Africa).

Graduate courses in IT are the biggest threat

The growth of this market segment has remained stunted for various reasons. The post-2001 slowdown hit growth for several years, even as the rise of under-graduate courses in IT (BSc/MSc) within universities removed some of the attractiveness of a private IT course. The segment has revived since 2005 (as the supply crunch in the IT sector worsened), but remains threatened by graduate preference among the larger Indian IT vendors.

Mid-segment of IT industry lacks in-house training infrastructure

There are significant opportunities for IT training in the mid-segment of the industry. The larger vendors have invested large sums into training - Infosys spends US\$140m a year. However, smaller vendors lack comparable training



infrastructure, be it real estate space or faculty, and IT training vendors could step in to fill the gap. Koenig, for example, organizes boot camps to attract trainees, and claims to charge 50% less than comparables for training costs in Europe. Broadly, IT-training vendors need to organize around on-going training needs of vendors, rather than hope to depend on placements alone, to generate future growth. There is money to be made in reskilling initiatives for example, and in training activities post recruitment of fresh engineers.

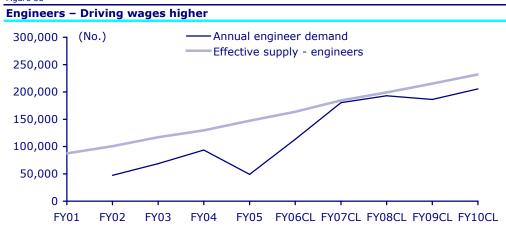
Figure 57

IT traini	ng - Sele	ect players			
	Status	History	Current network	Revenue (Rsm)	Business model
NIIT	Listed	Started in 1981	450	1,484	Hardware/networking/software training. Runs core IT diploma programmes such as GNIIT as well as re-skilling programmes.
Aptech	Listed		360 (plus 120 Arena centres)	230	Hardware/networking/software training. Arena Multimedia provides training in multimedia animation and is a pioneer in the field.
JetKing Infotrain	Listed	Started in 1990	85+	860	Hardware/networking training.
CMS Computers	Private	Started in 1976	60	230	Hardware/networking/software training. Also provides IT solutions.
Koenig	Private	Started in 1993	Delhi	NA	Conducts boot camps across Delhi, Dehra Dun, Himalayas, and Goa – mixing IT training with fun in some cases. Claims 100 participants per boot camp and 50% lower costs compared to equivalent training providers in Europe.
SQL Star	Listed	Started in 1990	8	150	Hardware/networking/software training. Also provided IT solutions.

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports

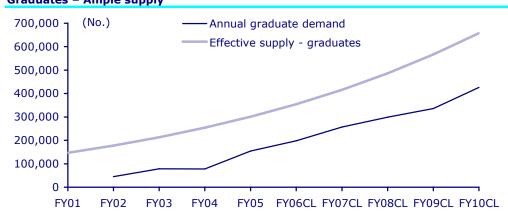
Just 50% of India's 465,000 engineer output "employable"

Figure 58



Just 15-20% of India's 3.5m graduate output "employable"

Graduates - Ample supply



Source: CLSA Asia-Pacific Markets, NASSCOM



### **International examples**

### **Learning Tree**

Learning Tree International (Nasdaq:LTRE) is a global provider of training and education to managers and IT professionals in business and government. In the fiscal year ended 28 September 2007, Learning Tree provided training to more than 11,500 organizations in 40 countries. In FY07, the company reported revenue of US\$167.2m, with net income of US\$17m.

### **Xpertise**

Xpertise (LON:XPG) is a UK-based training provider of information technology (IT), professional and soft skills training in the United Kingdom. It has a nationwide network of training centres located in London, Thames Valley, Leeds, Manchester, East Midlands, and Tyne and Wear. These centres have 42 equipped training rooms offering a capacity of 482 delegate places. Training is also carried out at customer locations. During the year ended December

31, 2006, the Company carried out approximately 58,000 training days for 16,000 delegates. Xpertise offers over 400 technical training courses and programmes for IT professionals and developers, Training Services, a division of Xpertise, offers clients a bespoke training for re-skilling projects.

### **Prosoft Learning**

Prosoft Learning focuses on job-specific education and training in computer programming, programming languages and operating systems, and has created a library of classroom and e-learning courses. Prosoft distributes its content worldwide through its ComputerPREP division and offers more than 1,000 courses, including three certification programmes. It counts more than 2,800 active customers in 60 countries, including the US, Canada, Germany, Australia, Japan, India and China.

# Online testing portals and study help

### E-learning, tutoring, teacher training - New initiatives

New businesses are emerging within e-learning, tutoring and teacher training. E-learning has focused on augmenting classroom study with revision modules on the Internet (for K-12). Some portals such as Studyplaces.com and Pragati Infosoft are functioning as information exchanges for Indian education. 100percentile.com provides online examinations and analysis, while mathguru.com has solved questions on the CBSE Mathematics curriculum. The e-learning market in India is by our estimates worth about US\$15m each for retail and corporate. We see e-learning as a suitable force multiplier in a package of educational products, while the segment as a whole will take some years to emerge in scale.

# Broadband penetration critical

E-learning's growth is linked to broadband penetration. By end-2007, India had about 3m broadband subscribers, and was adding 0.25m per quarter. At this rate, the Indian market would become scalable for e-learning only after at least three-to-five years, when the user base reaches 8-10m. As of now, e-learning models are likely to target the upper-most segment of India's student population. Is this meaningful? Recall that:

- 90m children study in India's private schools.
- 18m study in private schools with monthly fee above Rs1,250.
- □ Assuming only those above Grade 6 use e-learning in any meaningful way, the broader market is about 9m students.
- □ A 10% penetration into this segment would yield 900,000 e-learning subscribers. If each of these pay Rs15,000 annually for e-learning, the market can grow to US\$300-350m at the upper end.
- ☐ We are assuming the e-learning for the retail segment grows to less than half this number, or about US\$150m, by 2012. This corresponds to a 5% penetration in the Grade 6 and above, or about 500,000 students.
- ☐ This implies the largest company's revenue in e-learning, five years out, would be limited to US\$30-50m, depending on levels of consolidation. Clearly, e-learning is interesting, but very much a market of the future.



Figure 60

E-learning - Sel	E-learning - Select players						
	Status	History	Business model				
Extramarks.com	Cleaveglobal E-services Ltd	Launched in 2007	Online learning & revision for school students. Offers free registration. Plans to charge Rs1200 a year going ahead for specialised services.				
Studyplaces.com	Private	Launched in 2007, VC funding by KPCB, Sherpalo ventures, Infoedge Ltd	Education Search. Online forums for information exchange.				
Mathguru.com	Educomp	Launched in 2006	Charges Rs18,000 pa and provides online solutions to math textbook problems. More than 30,000 subscribers.				
Pragati Infosoft (National Network o Education)	Private. Jalan Group. f	Launched in 2000	46 education portals. State portals aggregating information on various colleges/educational news/exams.				
100percentile.com	Private. Owned by Hundred Percentile Education	Launched in 2007. Tied up with Vidyamandir Classes	Online examination and performance analysis.				
Excel Soft Technologies	Private	Started in 2001	Develops e-learning systems and content. Estimated revenue of Rs500m.				

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports

## Tutoring a much fragmented market

While tutoring is a US\$5bn market, most of the organised initiative here is in the online tutoring space. There is no real chain providing bricks-and-mortar tuition across the high school and secondary levels. Most of the tutoring market is currently in the hands of teachers who run tuition classes specific to a city or locality. Within online tutoring, TutorVista started as an export market business model, but has recently refocused on the domestic market.

### **International examples**

#### K12 Inc

Founded in 2000, K12 (NYSE:LRN) is a technology-based US education company providing proprietary curriculum and educational services to students in the K-12 segment. K12 uses online delivery through virtual public schools.

### **Noah Education Holdings**

Noah Education Holdings (NYSE:NED) is a provider of interactive education content in China. It develops

and markets interactive, multimedia learning materials to complement prescribed textbooks used in China's primary and secondary school curriculum.

It has 28,000 courseware titles corresponding to printed textbooks or textbook topics licensed from domestic and international educational publishers. In July 2007, it began offering after-school tutoring programs.

Figure 61

Online tutoring	Online tutoring - Select players							
	Status	History	Current network	Approx. annual revenue (Rsm)	Business model			
Tutorvista	Private. Pvt Equity funding by Sequoia Capital.	Launched in 2005	50,000+ registered students.	na	Online tutoring for college and graduate level programs in over 30 subjects. Employs over 600 tutors. Charges US\$99/month for unlimited tutoring.			
Growing Stars	Private	Started in 2001		na	Charges US\$15-20/hr. ~60 tutors.			
learninghour.com	Educomp owns 76% stake	Started in 2006. In 2007 Educomp acquired 76% stake in ThreeBrix e- Services, the parent company of learninghour.com	~5,000 registered students.	na	Online tutoring for school and test prep.			
Studyloft.com	Private	na	na	na	Online tutoring for school and test prep.			

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports



Teacher training, despite obvious necessity, has scalability issues

**Teacher training** is taking off, but scalability issues remain. Educomp claims to have more than 80% of the organised teacher-training business. Despite its small size, this revenue stream has been growing 35-40% YoY for Educomp, which supports our view that the current market of US\$15m is too small to drive independently viable or scalable teacher training businesses. Also hindering growth is average teacher pay - Rs10,000-12,000 per month. This in turn implies that schools are willing to pay only Rs800-1,000 per teacher per month for training. Further, only about 10% of all teachers in India, or about 600,000, get training.

Figure 62

Teacher training - Select players						
	Status	History	Current network	Approx annual revenue (Rsm)	Business model	
Educomp	Listed	Teacher training in association with Intel Foundation, Azim Premji Foundation	>150 master trainers	220 (FY08)	Will train 300,000 teachers in FY08.	
Academy of Creative teaching	Private	Started in 2004	1 centre in Bangalore		Consulting for schools, teacher training, workshops.	
International Academy for Creative Teaching	Jain group of institutions		1 centre in Pune		Consulting for schools, teacher training.	
The Teacher Foundation	Managed by Shraddha Trust	Started in 2001	Offices in 3 cities.		Teacher training, consultancy.	

Source: CLSA Asia-Pacific Markets, Company disclosures, Media reports

# Strong surge in investment

### Private-equity money flowing into education

There have been at least nine private-equity deals in education in the past 12 months, with total investment of more than US\$90m, compared with three deals in the whole of 2006 and investment of US\$17.5m. We expect capital-market involvement in education to increase as opportunity and growth are better understood. Some consolidation is expected, with the emergence of organised chains or national-level players, in test preparation, tutoring, private professional colleges and K-12 school management.

Figure 63

Private equity deals in education (Jan-06 to date)								
Private Equity Firm	Target	Stake (%)	Deal size (US\$m)	Period				
WestBridge Capital Partners (Now Sequoia Capital)	Brainvisa		5.5	Jan-06				
Sequoia Capital	Tutorvista		2.0	Jun-06				
Lightspeed Venture Partners & Sequoia Capital	Tutorvista		10.0	Dec'-6				
IDFC Private Equity	Manipal Universal Learning	10	31.0	May-07				
Manipal Education & Medical Group (HSBC Private Equity Asia)	Meritrac	70	18.0	May-07				
Helix Investments	Mahesh Tutorials	30	12.0	Aug-07				
SAIF Partners	ICA			Oct-07				
Gaja Capital	Career Launcher		8.3	Oct-07				
Helion Ventures	Hurix Systems		5.1	Oct-07				
SAIF Partners	VETA		10.0	Dec-07				
KPCB, Sherpalo Ventures & Infoedge	StudyPlaces		3.0	Jan-08				
Aditya Birla Group	Core Projects	5	3.5	Jan-08				

Source: CLSA Asia-Pacific Markets, www.mergermarket.com, Media reports



#### Liberalisation debate set to heat up in education

### Regulatory clarity can catalyse growth

India's education sector is one of the last theatres for the liberalisation debate. Planners and educationalists are confronted with the failure of public initiatives to achieve universal coverage - 142m children out of school - and a lingering historical "non-profit" approach that works against greater involvement of the private sector. Change is coming, albeit slowly. There is greater private participation in the provision of higher education, which should spread through all levels of education. There is an urgent need for greater clarity of regulation, which would reduce the need for current complicated structures of ownership and encourage greater public-private participation in this vital sector.

No regulatory body for K-12 in India; no uniform laws across states In India, higher education has several regulatory bodies, including AICTE (All India Council for Technical Education) and UGC (University Grants Commission), but there is no umbrella regulation of K-12 schools, nor a uniform law for schools. The charitable and missionary character of some of India's earliest "private" schools, and the socialistic model of governance for much of the first few decades of independence, has led to a mindset that education cannot be "commercialised". Education, which is covered by the "Concurrent List" of the Indian Constitution, is by implication regulated at both the central and state government levels. Regulation differs, sometimes radically, from state to state. For example, the state of Delhi frowns on "commercialisation" of education, while Maharashtra, Haryana and Gujarat permit "for profit" schools.

Figure 64								
Key regulatory issues aro	und Indian education							
Segment	Profit making allowed?	Regulatory body?	Fee control	Market Size (US\$m)				
Preschools	Ambiguous; "reasonable surplus" not defined	No	Ambiguous	985				
K-12	Ambiguous; "reasonable surplus" not defined	No	Ambiguous	19,655				
Test Prep	Yes	na	No	1,664				
Private professional colleges	Yes	Yes	Partly regulated	7,054				
IT-training-Retail	Yes	na	No	187				
IT-Training-Corporate	Yes	na	No	38				
E-Learning - Retail	Yes	na	No	14				
E-Learning - Corporate	Yes	na	No	13				
Tutoring	Yes	na	No	5,351				
Services training	Yes	na	No	1,365				
Child skill enhancement	Yes	na	No	777				
Teacher training	Yes	na	No	15				
IT/BPO finishing school	Yes	na	No	27				
Educational books	Yes	Yes, books follow set curriculum from boards	No	2,965				
Educational stationary	Yes	na	No	1,326				

Source: CLSA Asia-Pacific Markets, Discussions with professionals in the education industry

Policy action on the anvil

In our view, the next few years will see greater private and public-private initiatives in Indian education. While some degree of regulation will be put in place for private K-12 schools (to ensure quality and accountability of fund usage), recent policy statements suggest a trend towards greater private



participation overall. The Union Government has formally come out in favour of greater foreign direct investment (FDI) in higher education, as can be seen in the Foreign Education Providers Regulation Bill. Leading politicians such as Congress President Sonia Gandhi have made statements in favour of private participation in education. The National Knowledge Commission (NKC), in its recommendations, says that it is necessary to stimulate private investment. The tide is finally turning in favour of liberalisation, but it will likely come last to the K-12 segment, which is beset by conflict among and between regulators and academics, and is the subject of litigation by various vested interests. Private players in K12 will likely remain locked in a two-tier structure, where profit is derived not from the school itself but through its consumption of hardware, intellectual property and services.

Several court judgements have left key questions unanswered

# Indian education regulations - History of ambiguity

The institutions should be permitted to make reasonable profits after providing for investment and expenditure. However, capitation fee and profiteering (is) forbidden.

This is an example of the often ambiguous language used in key judicial judgements involving private education institutions in India. Some of the key legal cases involve other issues - acquisition of land by private schools/institutions at concessional terms from the government without fulfilling the promise of enrolling a specified percentage of students from disadvantaged sections of society. In Maharashtra state, where "for-profit" private schools are permitted, schools are still structured at least on paper as non-profit trusts in order to get recognition from such bodies as the Central Board for Secondary Education.

K-12 lacks a regulator, and regulation

#### K-12 regulation in India - Unanswered questions

With no regulatory body in place for the K-12 segment, several aspects of running a private school remain unanswered or ambiguous:

- ☐ Can a school make a "profit" from its operations? What does "surplus" mean? How is the quantum of "reasonable surplus" defined?
- Is a private school allowed to set its own fee structure?
- ☐ What regulations govern the transfer of surplus funds of a school for other activities, including their use to set up other schools?
- ☐ Can a school charge a "development fee" on top of the tuition fee? If so, how large a fee can be charged?
- ☐ What are bodies such as the CBSE looking for in private-school accreditation?
- ☐ Should the acquisition of land at concessional rates from the government be linked to enrolment of students from for poorer sections of society?

US, Singapore, Australia, Brazil are more liberal in K-12 regulations There is little clarity in regulation of India's education system, least of all the level of acceptance of schools as profit-making ventures. This is, however, part of a wider global debate on the role of the private sector in the provision of K-12 education, which is generally considered to be a responsibility of the state. Figure 65 shows how the US, Singapore, Australia and Brazil allow "for profit" schools, but the UK and Korea do not. And while the UK has allowed profit-making in higher education institutes since 2004, Korea has yet to relax its restrictions. Profit would appear to be more philosophically acceptable, or



at least more pervasive, in the provision of higher education. Debate continues in the sensitive K-12 segment. Appendix 3 of this report looks at regulations around K-12 and higher education for the US, the UK, Korea, Brazil and Singapore, and identifies a common trend towards greater private involvement in education, either directly or via public-private partnerships.

Figuro 65

Figure 65		
Regulatio	n in other countries	
	K-12 Schools	Higher education
US	No restrictions on private schools on fees or in making profits.	Highly developed for-profit higher education market with large listed players like Apollo Group, Devry etc
UK	Private schools are run as charities and get certain tax-exemptions. However there is no cap on the fees charged at these schools.	Higher Education Act of 2004 allows for- profit degree-granting institutes.
Singapore	Private schools are allowed to make profits. Government does not interfere in matters of fees and profitability.	For-profit private universities allowed. Foreign universities have also been allowed to set-up in Singapore.
Korea	Private School Act allows only qualified non-profit foundations with certain amount of assets to run schools.	Private universities are strictly restricted from making profits. They also have limited autonomy in selecting students.
Australia	No formal law against profit-making schools.	For-profit private universities/colleges allowed.
Brazil	No restrictions on private schools on fees or in making profits.	No restrictions on profit-making in higher education. 2 big publicly-traded players in the space, Estacio Participacoes and Anhanguera Educacional Part.

Source: CLSA Asia-Pacific Markets, Media reports, Departments of Education of respective countries

# Some legal cases around schools have involved covenant issues

#### Delhi regulations and the Modern School judgment

In 1997, an association representing parents went to the Delhi High Court seeking a rollback of fee increases imposed by various private schools in New Delhi. Private schools were also accused of violating the terms of an agreement by the Delhi Development Authority, which provided land at concessional rates with the covenant of enrolling a certain share of students from poorer sections of society. Legal argument turned on the Delhi School Education Act, arguably the most restrictive K-12 regulation of any state in India. The Supreme Court of India handed down its judgment in 2004:

- ☐ The court upheld the terms of the land allotment and private schools were ordered to follow the conditions on enrolments (ie some share of students from weaker sections of society) when the land was allocated at reduced rates.
- □ Schools were prohibited from raising tuition fees without the prior authorisation of the Directorate of Education, Delhi Administration.
- ☐ The court ordered that 25% of students would be enrolled from weaker sections of society on scholarships.
- ☐ The court permitted the schools to charge a development fee of up to 15% of the annual tuition fee as a supplement to school funds and for the upgrade and maintenance of school infrastructure.
- ☐ The judgement was ambiguous on the question of acceptable profit margins for private schools. The court recognised the right to generate a "reasonable surplus", but condemned the "commercialization" of education.



Legal judgements have not answered key questions adequately

Figure 66 Key legal cases and judgements around private-education institutions Charging capitation fee is a denial of right to education. 1992 Mohini lain vs State Fees charged in private colleges in excess of tuition fees in of Karnataka government colleges deemed capitation fees, and capitation fees declared illegal. Reiterates illegality of capitation fees. Fees charged in private institutions above those 1993 in similar government colleges are not capitation fees. Unni Krishnan vs State of Andhra Pradesh Payment seats can be no more than 50% of total seats in professional institutions. Admission to all seats should be on merit. State to regulate and cap fees. Educational institutions run by religious and linguistic minorities given complete freedom to administer the institutions, with limited 2002 power for states to regulate. TMA Pai vs State of Karnataka State governments to advise all college managements to make provision for needy and backward students "according to local needs" State governments to constitute admission and fee fixation 2003 committees in professional colleges. Islamic Academy vs Union of India Substance of the Supreme Court judgement in TMA Pai case overruled. Trust/society running schools cannot transfer funds from one school to another. Fees have to be collected only for the school and not for the trust. 2004 Development fee not exceeding 15% of annual tuition fee can Modern School vs be charged, but should be maintained in a separate account. Union of India Schools using land awarded by Delhi Development Authority need to reserve 25% of places for economically disadvantaged students. Policy of reservation cannot be enforced in a minority/ 2005 non-minority unaided educational institution. PA Inamdar vs State of Maharashtra Every institution is free to devise its own fee structure suject to the limitation there can be no profiteering/capitation fee. All institutions must reserve places for socially/eonomically disadvantaged students. State committees will determine fees charged by all private Private Professional professional educational institutions affiliated Education Bill with a state/university. Only foreign education providers may offer foreign-run professional courses in India.

Source: CLSA Asia-Pacific Markets, Supreme Court judgement information system, www.prsindia.org

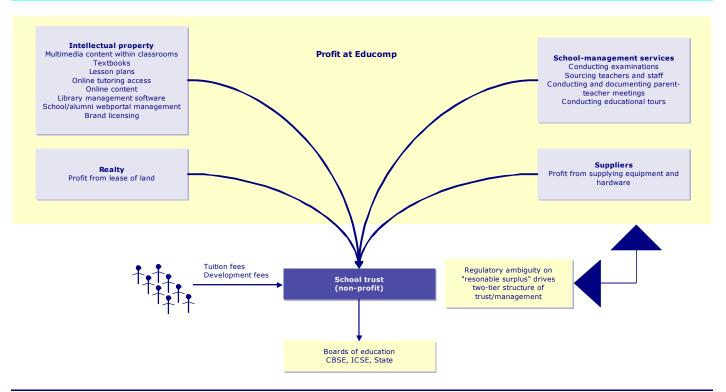
India's boards of education demand nonprofit trusts for affiliation

#### Affiliation to boards demands the creation of a trust

Under prevailing regulations, boards of education accredit only non-profit trusts. As a result, profit-making schools in India need to be structured in such a way as to present the face of a trust, while allocating profit to a range of suppliers of goods and services to the trust, such as land agents, school management and equipment. Educomp's K-12 business uses subsidiary Edu Infra to provide land and Edu Manage to supply content and services to school trusts, which on paper run the schools. The school trust makes no profit, though the suppliers do, but get no tax break on the profits earned.

Figure 67

#### Typical management structure for a school



Source: CLSA Asia-Pacific Markets, discussions with professionals running schools

Trusts have restrictions on transfer of surplus

#### Use of surplus funds for expansion

In the case of Modern School, the Supreme Court made clear that surplus funds generated by a school could only be used by that school and could not be transferred to another school within the same trust. As a consequence, each individual private school seeking to make profit is structured as a separate trust.

Though regulated, higher education space has had relatively greater clarity

#### Regulation in higher education - more benign

Profit is permitted in higher education, though fee structures are regulated. This has promoted the growth of privately-run engineering, MBA and medical colleges without the regulatory confusion that pervades the K-12 space. Tuition and other fees for a professional college are determined by a state-level committee or standing committee of the University Grants Commission. Fees are reviewed and fixed at least every three years, with half the places designated "free" as opposed to "payment". A development fee fixed every three years can be charged to cover upgrade and maintenance costs.



# Not without its share of conflicting judgements

Higher education is not, however, without its share of controversy, the courts giving often conflicting judgements:

- □ In Unni Krishnan, J P vs. the State of Andhra Pradesh (1993), the Supreme Court banned the Capitation Fee Act, 1988. Instead, it allowed a number of "paid seats" to be established in consultation with concerned state governments. The idea was to make some families pay full costs toward the education not only of their own wards but also of some others, in the name of social justice. The state governments were also allowed to administer and regulate admissions into unaided and privately promoted institutions providing professional education.
- ☐ In TMA Pai vs. State of Karnataka (October 2002), the Supreme Court reversed its position curtailing the independence of private educational institutions and permitted financially independent private and minority interests to establish higher education colleges of their choice. Although the court also warned against "commercialization" by private colleges, it was not clear what the practical impact of that warning might be.
- ☐ In its most recent related judgment of 14 August 2003, the Supreme Court again took a tough stand against capitation fees and profiteering by the private professional colleges. It threatened to "de-recognize" private colleges found guilty of charging capitation fees in any form. Again, the impact remains unclear there are reports of illegal payments to obtain placement in private professional colleges and of political involvement in setting up such colleges. The role of politicians in setting up educational institutions has been questioned in the media as the cause for "vested interests" and opacity of regulations in the sector.

AP, TN, UP, Karnataka and Maharashtra lead college proliferation

Figure 68

<b>Professional colleges in</b>	India (by sta	ate)			
	Engineering	Medical	Pharmacy	Dental	Management
Andhra Pradesh	292	32	52	20	39
Arunachal Pradesh	1				
Assam	4	3	1	1	1
Bihar	6	8	4	7	4
Chandigarh	5	1	2	1	3
Chattisgarh	15	3	4	5	
Delhi	18	5	5	1	21
Goa	3	1	1	1	1
Gujarat	44	13	25	10	14
Haryana	63	3	13	10	6
Himachal Pradesh	8	2		5	1
Jammu & Kashmir	6	4		3	2
Jharkhand	9	3	1	3	6
Karnataka	134	39	58	43	20
Kerala	93	18	21	23	8
Madhya Pradesh	90	9	48	12	11
Maharashtra	181	40	74	31	72
Manipur	1	1			1
Meghalaya	1				
Mizoram			1		
Nagaland	1				
Orissa	50	6	12	5	7
Pondicherry	6	8	1	3	1
Punjab	48	8	17	12	5
Rajasthan	58	8	22	11	10
Sikkim	1	1	1		
Tamil Nadu	286	25	39	27	40
Tripura	1	2	1		
Uttar Pradesh	125	16	30	28	27
Uttaranchal	13	3	6	3	1
West Bengal	55	9	6	4	9
Total	1,618	271	445	269	310

Source: CLSA Asia-Pacific Markets, AICTE, Dental Council of India, Medical Council of India, Rajya Sabha parliamentary questions



States enacting their own laws now As education is a joint responsibility of the Central and State governments, some states have passed separate legislations on private higher education. Chattisgarh passed a Private Universities Act in October 2002, and Uttaranchal accepted four private universities in 2002-03. There has been a proliferation of private medical and engineering colleges in the southern and western states of Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, and Maharashtra.

Five states comprise 63% of India's engineering colleges In 2001, Andhra Pradesh had 95 private self-financing engineering colleges and 303 medical colleges, compared with 11 public engineering colleges and 25 public medical colleges. In many states, there have been allegations that private universities lack adequate infrastructure and appropriate faculty, and some established colleges have raised fees sharply in conjunction with professional courses or foreign collaborations. Subsequent intervention has failed to clarify matters.

# Regulation for entry of foreign educational institutions

Entry of foreign educational institutions to India is covered by the Foreign Educational Institutions (Regulation of Entry and Operation, Maintenance of Quality and Prevention of Commercialization) Bill of 2007, which has stalled in parliament due to political opposition. Key proposals in the bill include:

- ☐ Foreign institutions be granted university status.
- ☐ Eligibility for exemption from "national treatment" on enrolments, admissions and fees.
- ☐ Restriction of surplus revenue usage within India.

☐ Investment of at least 51% of total capital required for establishing an institution in India.

Some 100,000 of India's students leave each year to study abroad, at a cumulative cost of US\$4bn. China has seen a surge in foreign educational institutions partnering with local institutions; its policies and objectives very much in line with India's views that foreign universities should not eye India as a market, but should invest adequately to set up their own campuses.

At least 20,000 private schools in India should be making a surplus

## Future of regulation in Indian education

Our model for K-12 (see Appendix 1) shows that any school charging more than Rs1,000 a month and with a one-time admission fee of Rs25,000 has a reasonable chance of making a profit, or "surplus". We believe more than 20,000 private schools in India are generating surpluses, and profit-making private schools are expanding faster than ever before. Recent policy statements from the government indicate that substantial education reform lies ahead, and increased fund infusion from the private sector is likely to be a key element of the new philosophy, albeit with some regulations. However, much of the new thinking has been focused on higher education, with only some mentions of private participation in K-12 education coming in within the National Knowledge Commission Report. However, a more progressive approach is beginning to be articulated, suggesting at a multiyear process of educational reform in India. The National Knowledge Commission Report, released in November 2007, was most revealing:

- □ Key recommendations for school education include "recognise and encourage the role of private providers".
- ☐ "In three professions engineering, medicine and management there has been a de facto privatization of education so that two-thirds to threefourths of the seats are in private institutions. But private investment in university education, where more than 70 per cent of our students study, is almost negligible. It is essential to stimulate private investment in higher



education as a means of extending educational opportunities. We must recognize that, even with the best will in the world, government financing cannot be enough to support the massive expansion in opportunities for higher education on a scale that is now essential."

- □ "Advances in ICT have had a profound impact on all areas of human pursuit including education. As a result, the concept of a classroom as learning environment with chalk, blackboard, duster, textbook, homework, exams, grades etc. will change as new methods of learning evolve. We believe we have a historic opportunity to capitalize on some of these trends and technologies to benefit teachers and students."
- □ "We need to create various collaborative models, dispelling mutual suspicions. Public-private-partnerships, academia- industry partnerships, academia-research laboratories, Public-NGOs, Public-community etc. will need to be the models rather than working in separate compartments."

Status quo to continue for sometime more

In the medium term, we expect current models for business to continue. K-12 schools will continue to be structured as trusts, and money will mostly be made in providing services to this trust, a useful - and legally more defensible - way to get around the profit conundrum. Higher education is likely to open up faster for both greater private participation as well as foreign direct investment. Vocational training services and other aspects of education remain a "normal" business activity with no philosophical or political questions around the profit motive.

Creation of a K-12 regulator- positive for long term clarity

Over time, we expect greater regulation of privately-run K-12 schools, a step that could eventually lead to clearer regulations. Given the wide range of tuition fee being charged by private K-12 schools, it is unlikely that the government will seek to even out fee structures, but fee inflation on an annual basis could come under the gamut of a regulator. For example, a law preventing more than an inflationary fee hike per year or the need for permissions if this has to be done, can be expected.

Noisy debate likely to continue

Among the risks, political debate, litigations by vested interests and media criticism of the opacity of educational laws and regulations must be expected. Socialistic voices are likely to stay loud, countered in equal measure by protests from entrepreneurs who claim to be solving India's schooling problems through private initiative.

# Media reports - Expect more debate ahead

## Protests against a PPP plan (April 2007)

The proposal to set up the State Institute of Educational Management and Training (SIEMAT) in Karnataka in partnership with Azim Premji Foundation has been opposed by several educationalists and intellectuals, including Jnanpith Award winner U.R. Ananthamurthy and the former Planning Commission member L.C. Jain.

They termed it a "dangerous" sign of the Government relinquishing the core responsibility of policy framing in the area of education in the name of public-private partnership.

Mr Jain told presspersons that education was a constitutional commitment involving every child's future, and this obligation of the State could not be minimised. The Government should place all facts on what necessitated formation of this body in private partnership before the people and reconsider the idea before going any further, he said. Giving details about implications of this partnership, advocate B.T. Venkatesh said the private partner would not only have a say in policy making, but also have the right to seek an "action taken" report from the Government on implementation.

# Strong reactions to 'modern school' judgment

# **Comments from a Senior Counsel of the** Supreme Court (2004)

Comments a senior counsel of the Supreme Court who spoke to Education World on condition of anonymity: "Though Chief Justice Khare who retired in April was a disciplinarian who restored the reputation of the judiciary, he had too many obsolete socialist hang-ups. Thus in the Islamic Academy Case last year, he led a five-judge bench of the court in diluting the judgement of the 11-bench judgement of the Supreme Court in the historic TMA Pai Foundation Case of 2002 which restored the right of self administration under Articles 30 and 19(i)(g) of the Constitution to unaided colleges of professional education. Now the majority judgement of a threejudge bench presided over by Khare in the Modern School Case deprives school administrations the right to self governance and administration. Instead of passing strictures against the Central and state governments for perpetuating abysmal standards of teaching in government schools, the Supreme Court has approved inspector raj in well-managed private schools. Of course the Supreme Court judgement was quite right in upholding the Delhi high court's orders in the Social Jurist Case which was a contractual matter. But even in this case the schools should have been given an option to pay the current value of the land allotted to them in lieu of admitting poor children on freeships (scholarships)."

Regrettably the court seems unaware of the ground reality that government officials and functionaries steeped in a time-hallowed tradition of venality are unlikely to provide the fair and just regulation of private schools mandated by the apex court.

# **Comments from school managements**

Comments Mohina Dhar principal of the four-star CBSE-affiliated Amity International School, Delhi which has 3,000 students on its muster roll and runs the parallel Amitasha afternoon school for poor and under-privileged children: "Instead of levelling down the academic standards of private schools by foisting poor children upon them, why doesn't government raise standards of teaching and improve the infrastructures of MCD (Municipal Corporation of Delhi) and government schools? It could invite corporate funding into them or do whatever. By trying to raise the poor, isn't the government levelling down standards in private schools? Moreover how fair is this to the parents of unaided school children who are paying high fees so that their children can study in better environments?"

Also in the matter of regulating tuition fees - a power which has been conferred by the Supreme Court upon the director of education of state governments - unsurprisingly the dominant opinion in unaided schools is that institutional managements together with parents' associations are the best judges of what are appropriate tuition fees. "Most of our parents appreciate that paying for quality education is an investment, not an expense.

Therefore they understand that tuition fees have to be raised periodically if we are to provide contemporary education and maintain infrastructure. This year we have raised our fees by 10 percent which is necessary because our entire curriculum is IT based and each one of our 53 classrooms has at least one computer. This is a matter for parents and teachers to resolve. It's too much to expect of government servants," says R. Sandhu principal of Delhi's CBSE-affiliated Khaitan Public School (est. 1995) which has an aggregate enrolment of 1,700 students instructed by 50 faculty.

## Comments from litigants

There's a similar lack of sympathy for the managements of elite private schools within the parents' community in the national capital. "It's quite ridiculous how private schools arbitrarily jack up their tuition fees year after year, throwing all norms of social justice to the winds. The managements of these schools are a mafia which has hapless parents and students at its mercy. They generate black money, don't pay income tax and extract donations, all of which are illegal, anti-social practices," adds Vijender Gupta, president of the Abhivavak Mahasangh, a Delhi-based parents' organisation convened in 1997.

But even as Delhi's middle class parental community is celebrating the Supreme Court's judgement in the Modern School Case, there's a possibility that their victory may be pyrrhic. Because while adjudicating this case, the court also upheld the Delhi high court's order of January 20 directing the director of education to ensure that some 1,200 unaided schools which were allotted land at concessional prices fulfil their obligation to provide scholarships to poor children up to 25% of the schools' enrolment. Most parents are not only opposed to this directive of the courts, but may well have to pay higher fees to cross-subsidise the education of poor students admitted into their children's schools.



Well-positioned stocks have generated disproportionate returns

# **Upside for the well positioned**

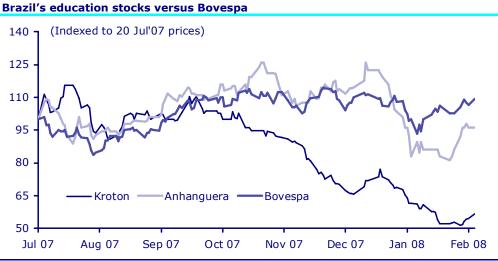
Select education stocks globally have generated disproportionate returns, while many others have performed ordinarily. Figure 69 lists the performance of those with market capitalisation well above US\$1bn. Interestingly, over fairly long periods of time, the winners have not changed materially. Raffles Education in Singapore, Mega Study in Korea, Devry in the US and, more recently, Educomp in India have comfortably trumped peers over the years. As Figure 70 demonstrates for Brazil, stocks in the same market have also diverged materially in performance. Dissecting opportunities in Indian education, and the competitive situation in each segment, we see a similar pattern. We rate Educomp and Aptech BUYs; NIIT an Outperform, and Everonn Underperform.

Figure 69

Stock returns on select education companies								
	Mkt cap (US\$m)	3M	6M	1Y	2Y	3Y	4Y	
ABC Learning Centres	647	(72.6)	(78.6)	(78.1)	(81.5)	(73.8)	(64.5)	
Anhanguera Educacional Part	1,641	(21.4)	(8.3)	na	na	na	na	
Apollo Grp	8,962	(30.2)	(9.1)	14.0	2.9	(29.6)	(33.2)	
Benesse	4,216	(8.7)	(1.9)	(8.9)	3.8	13.4	44.1	
Career Education	1,264	(50.6)	(51.8)	(53.0)	(59.5)	(58.4)	(70.6)	
Devry Inc	2,898	(29.9)	16.9	49.0	67.7	124.4	35.8	
Educomp	1,440	(15.7)	17.8	267.4	695.9	na	na	
ITT Educational Services	2,000	(51.1)	(53.8)	(36.6)	(17.7)	3.9	65.5	
Mega Study	2,253	23.2	46.8	148.2	484.2	1000.3	na	
New Oriental	2,008	(30.0)	5.5	38.0	na	na	na	
Raffles Education	1,992	(18.5)	16.3	5.2	146.5	600.6	861.8	
Strayer Edu	2,150	(17.8)	(8.1)	27.2	53.0	41.1	36.4	

Divergence in Brazil B

ire 70



Source: CLSA Asia-Pacific Markets

**Educomp - BUY** 

**We rate Educomp a BUY**, for its strong positioning in multiple high growth businesses. Educomp has beachheads into multimedia content into classrooms, K-12 school management, preschools, teacher training, elearning channels and also the public school ICT business - all coming together to deliver 90%+ EPS Cagr over the next three years. Unlike peers, Educomp's businesses are gravitating faster towards the more scalable segments of the education market. We note the forward integration into



private professional colleges, though not announced, should be the logical next step for Educomp's strategy. Educomp has also demonstrated strong execution, with profits coming 60-65% ahead of our initial assumptions for both FY07 and FY08. More importantly, Educomp has an early start in several segments, most notably Smart Class, its private-school multimedia content business, and this lead of about two years has been strengthened further through accelerating school wins.

**Everonn - U-PF** 

We rate Everonn an Underperform as we believe valuations are fully discounting its potential within the relatively less attractive public-sector ICT business and the distance-education programme. Everonn is trading at a premium to Educomp on PE multiples (7% premium on FY09, 36% premium on FY10 PEx), even though we see a number of important business differences. Everonn's 65% EPS Cagr over FY08-10 is lower than Educomp (105%), and Everonn is also disproportionately exposed to the public school ICT business – a segment that, despite its strong growth, is lower in margins, returns and higher in payment cycle. ICT also has strong competition from Educomp and NIIT, and for all three players, we do not see ICT as a key differentiator of business. Everonn's distance education segment has taken off nicely, but the scalability of this is yet unproven. In our view, Everonn may need to expand its portfolio into new segments of the market to back up current valuations.

**NIIT - O-PF** 

NIIT and Aptech have a common pedigree in IT training, but business direction has now diverged substantially. We rate Aptech a BUY and NIIT an Outperform, primarily because we see NIIT's portfolio tilted away from the domestic Indian opportunity. By acquiring Element K, a US-based corporate-training business, NIIT has taken a 56% revenue and 27% Ebitda exposure to the corporate-training market, currently characterised by single-digit growth and margins. The business, in our view, is also vulnerable to shifts in human-resource budgets, where training spend originates, especially in a challenging macroeconomic environment. NIIT has ramped up nicely in services training - IFBI is ramping up well, other initiatives also in play - and its IT training brand remains strong, but even with assumptions of near-perfect execution, we see financials trailing peers on many counts. In NIIT's favour are its inexpensive valuations (17x Mar09), visible success in new vocational-training initiatives, and at least an improving trend of currently inferior financials.

Aptech - BUY

Aptech, by contrast to NIIT, has an India-and-China focused portfolio. It is the market leader in IT training in China, with some 32% market share (NIIT is number three with 8% market share). While NIIT has a 56% revenue exposure to the international corporate training business, Aptech's exposure is less than 6% and heading down. Aptech has also scaled up in new retail initiatives. It has pioneered multimedia training via its Arena Multimedia brand, while Avalon, its aviation services training venture, has scaled up to 35 centres and will have 50 by December 2008. Aptech and NIIT trade at similar PE multiples (17x Dec08/Mar09), but Aptech's financials look better with higher revenue Cagr, better return ratios, lower capex intensity, and stronger EPS Cagr (50%+, compared with 43% for NIIT). We rate Aptech a BUY.

Core Projects - No rec

Core Projects has some unique public-private partnership structures upcoming, and its joint venture with IETS (IL&FS Education and Technology Services) provides the necessary grounding in financing and content, but the model is still unproven in India. We have no rating yet on Core Projects,



which is an export-focused technology business with school/college/university specific software systems - library management, online testing software and the like. Core is shifting focus to India and could be bidding to takeover, upgrade and run public schools for specified periods. Greater clarity on its rollouts under public-private partnerships could drive upside to the stock.

# Current and potential segments in focus

## **Diverging directions visible in portfolios of listed players**

- □ **Educomp:** K-12 and its adjacent markets are a clear differentiator. In our view, no peer has a comparable strategy yet. Educomp's approach of consolidating all suppliers to schools helps it earn profits on annuity revenue streams of school tuition and admission fee. While market coverage maps do not reveal it fully, Educomp also has an 18-24 month lead in multimedia within schools, its K-12 programme. Educomp has more than 500 schools here, NIIT has pilots in 12-15 schools only, and Everonn is working on it. Interestingly, Educomp now has its own books being used in the few schools it manages.
- **Everonn:** Services training through ViTELS is the key differentiator. We are intrigued with the somewhat-delayed ramp-up class coverage has stayed at c. 325 for quite some time now.
- **NIIT & Aptech:** Both track nearly identical markets, but NIIT's portfolio is skewed with its US-centric corporate training business, while Aptech's is not. Within the India opportunity, Aptech seems more clearly focused.
- □ **Core Projects:** Largely focused on public private partnerships, Core is a model that is currently evolving.
- □ **Future potential:** Higher education, tutoring for Educomp; K-12 schools for Everonn, and greater multimedia in schools for NIIT and Everonn.

Figure 71

<b>Current and potential market</b>	Current and potential market presence (scaled)								
Segment	Mkt size (US\$m)	Cagr (%)	EDSL	Everonn	NIIT	Aptech	Core		
K-12	19,655	13	•	$\Diamond$					
Private college (Engg, Medical, MBA)	7,054	17	$\Diamond$						
Tutoring (Grades 5-10)	5,351	16	$\Diamond$						
Textbooks	1,949	11	•						
Test prep	1,664	21							
Vocational training	1,365	22		•	•	•			
Educational stationery	1,326	14							
Preschool	985	35	•						
Child skill enhancement	777	31							
IT-training (Retail)	187	21			•	•			
Educational CD-ROMs	117	31							
IT Training (public schools)	90	67	•	•	•				
IT-Training (corporate)	38	37			•	•			
Multimedia	30	76	•	$\Diamond$	0				
IT/BPO finishing school	27	68			•				
Teacher training	15	68	•						
E-Learning - Retail	14	68	•		•	•			
E-Learning - Corporate	13	68			•	•			
Public private partnerships	?	?					•		

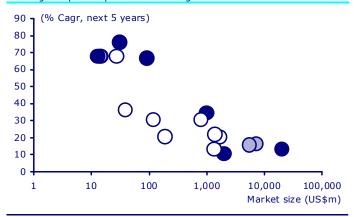
Notes:  $\bullet$  Existing presence,  $\odot$  New areas where scale up is possible/announced.



Figure 72

#### Educomp - BUY

Strongest positioning in larger market segments (K-12 and adjacent markets); as well as emerging high growth spaces such as IT in public schools, and multimedia in private schools. Potential for expansion in tutoring and private professional colleges.



#### Figure 73

#### **Everonn - Underperform**

Two key businesses – services training, with a distance education channel choice, and IT in public schools. Scale and presence in private K-12 opportunity missing. Beginnings made in school management, and have acquired content from Aban.

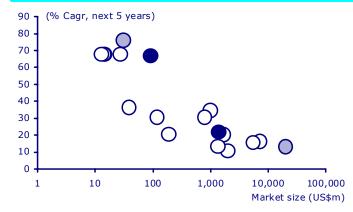


Figure 74

#### NIIT - Outperform

Nice ramp in services training, IT training business has also revived. Potential for greater initiative in multimedia in schools segment, but corporate training skews the portfolio away from India. NIIT looks a much better portfolio without Element K.

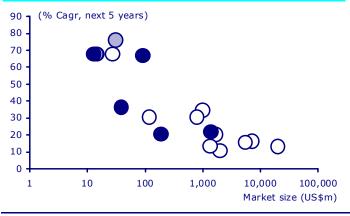
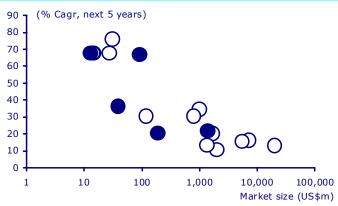


Figure 75

#### Aptech - BUY

Map reveals roots similar to NIIT, but Aptech is still more "Chindia" focused. Aptech has concentrated on a few initiatives, where it has consistently achieved scale (China IT training, Arena Multimedia, Avalon).



Source: CLSA Asia-Pacific Markets, Discussions with companies

# Educomp tops most financial metrics

## **Financials reveal differences**

Educomp tops revenue and earnings Cagr by a wide margin. Educomp makes the highest operating margin, and has the highest (and improving) return on equity. NIIT makes the lowest operating margins (though improving) and has the lowest EPS Cagr forecast, despite our assumptions on strong growth and profitability improvements ahead. Everonn, despite impressive EPS Cagr, is the most expensive stock in education today, and the valuation premium given its current services portfolio, seems unjustified, in our view.

Aptech looks good on several parameters

Aptech has sharply improving return on invested capital, and return on equity similar to Educomp, and well ahead of Everonn and NIIT. Notably, Aptech has EPS Cagr slightly lower than Everonn, but trades at 17x 09 PEx, compared with 46x for Everonn. Stripping out earnings inflow from its 25% stake in NIIT Technologies, we find NIIT's education business trading at 25x FY09.



Figure 76

Valuations of education Company	B'berg	Loc	Fiscal	Mkt cap	Pe	rf	PE (	v١	EV/Ebit	da (v)	РВ	(v)	Ebit
Company	B berg	ссу	end	(US\$m)	3M	6M	+2Y	+3Y	+2Y	ua (x) +3Y	+2Y		% +2Y
US					314	01-1						131	
American Public Education	APEI US	US\$	Dec	525	(31.2)		45.1	29.1			13.2		19.3
Apollo Grp	APOL US	US\$	Aug	8,962	(30.2)	(9.1)	15.8	14.3	8.7	7.6	8.1	6.1	25.3
BlackBoard	BBBB US	US\$	Dec	817	(31.8)	(30.9)	40.6	22.0	13.6	8.3	4.7	4.7	
Bright Horizons	BFAM US	US\$	Dec	1,174	18.6	11.3	22.8	19.6	10.1	8.9	3.7		10.7
Capella Education	CPLA US	US\$	Dec	916	(25.8)	6.6	32.0	25.2	15.0	11.6	5.4	4.5	14.8
Career Education Corp	CECO US	US\$	Dec	1,264	(50.6)	(51.8)	15.6	15.0	5.3	4.7	1.4	1.5	6.4
Corinthian Colleges	COCO US	US\$	Jun	653	(56.2)	(46.2)	15.8	13.5	5.3	4.5	1.7	1.8	5.2
Devry Inc	DV US	US\$	Jun	2,898	(29.9)	16.9	19.3	15.2	11.1	8.8	3.2	2.7	16.1
ITT Educational services	ESI US	US\$	Dec	2,000	(51.1)	(53.8)	11.7	10.0	6.2	5.6	30.2	12.1	27.8
Evci Career	EVCI US	US\$	Dec	1	(81.4)	(93.3)							
Lincoln Educational Services	LINC US	US\$	Dec	321	(14.8)	(9.8)	18.0	15.0	6.8	6.5	1.8		9.0
K12 Inc	LRN US	US\$	Jun	654			58.8	36.7	19.3	13.2	1.3	1.1	5.8
Learning Tree	LTRE US	US\$	Sep	242	(45.2)	(4.6)	12.2		4.7				
Noah Educational Holdings	NED US	US\$	Jun	188	(41.7)		9.4	6.3	2.6	1.8	1.0	0.8	19.9
New Horizons Worldwide	NEWH US	US\$	Dec	17	(20.0)	(3.0)							
Nobel Learning Communities	NLCI US	US\$	Jun	133	(7.0)	(9.3)	15.4	13.3	6.4	5.9			
SmartPros	PED US	US\$	Dec	27	(10.2)	(12.9)							
Peoples Education	PEDH US	US\$	May	12	(4.8)	(29.4)	16.4						
Princeton Review	REVU US	US\$	Dec	230	7.4	16.6	81.6		18.7				
Strayer Edu	STRA US	US\$	Dec	2,150	(17.8)	(8.1)	28.0	23.6	15.4	13.2	12.2	9.9	30.6
Universal Technical Institute	UTI US	US\$	Sep	316	(30.6)	(30.7)	17.3	19.9	4.7		2.1		6.8
India		•	•			,							
Educomp	EDSL IN	Rs	Mar	1,440	(15.7)	17.8	50.7	24.7	21.7	10.7	17.5	10.2	45.4
NIIT	NIIT IN	Rs	Mar	438	(29.6)	(29.8)	15.2	12.5	12.4	9.8	3.6	2.9	8.0
Aptech	APTR IN	Rs	Dec	217	(51.5)	(45.1)							
Everonn Systems	ESIL IN	Rs	Mar	229	19.2	(0.0)	43.8	25.8			12.2	8.2	25.7
South Korea						()							
Mega Study	072870 KS	won	Dec	2,253	23.2	46.8	36.2	27.3	25.5	19.5	10.5	7.9	36.1
Credu Corp	067280 KS	won	Dec	553	(20.6)	53.3	30.7	22.2	22.0	15.9	6.4	5.1	23.2
Daekyo Co	019680 KS	won	Dec	656	(16.7)	(21.6)	9.5	9.2	3.9	3.8	1.2	1.1	9.9
Digital Daesung	068930 KS	won	Dec	44	(8.9)	(32.8)							
Others					(515)	(====)							
BPP Holdings	BPP LN	GBP	Dec	526	(11.9)	(4.1)	15.8	13.1	7.8	6.8	1328.7	1204.3	15.9
Anhanguera Educacional	AEDU11 BZ	BRL	Dec	1,641	(21.4)	(8.3)	27.8		19.0		5.4		19.4
Estacio Participacoes	ESTC11 BZ	BRL	Dec	511	(25.9)	(49.7)	7.2	5.0	5.8	4.3	1.7	1.3	9.7
ABC Learning Centres	ABS AU	A\$	Jun	647	(72.6)	(78.6)	3.7	3.0	5.6	5.0	0.3	0.3	15.7
Navitas Limited	NVT AU	A\$	Jun	605	(8.3)	(13.8)	14.7	12.1	9.3	8.0	6.5	6.2	18.0
Benesse Corporation	9783 JP	Υ	Mar	4,216	(8.7)	(1.9)	19.2	18.1	7.6	7.3	2.0	1.9	9.6
New Oriental	EDU US	US\$	May	2,008	(30.0)	5.5	33.2	23.5	27.4	17.6	5.3	4.1	24.6
Raffles Education	RLS SP	S\$	Jun	1,992	(18.5)	16.3	22.0	17.4	18.4	14.2	8.7	7.7	49.0
Kroton Educacional	KROT11 BZ	BRL	Dec	494	(6.4)	(33.8)	14.5	8.2	16.9	8.4	1.7	1.5	17.1

Source: CLSA Asia-Pacific Markets, Bloomberg

# Indian education map Segmental presence of extant vendors

	Pre- schools	K-12	Test Prep	Private professional colleges	IT-training - Retail	IT-training - Corporate	IT-training - Public schools	E-Learning - Retail
Current market size (US\$m)	985	19,655	1,664	7,054	187	38	90	14
Expected 5 year Cagr	34.7	13.4	20.6	16.6	20.8	36.5	67	68
.00percentile.com Nakash Institute								
Academy of Creative teaching								
Air Hostess Academy								
Algorithms India								
Aloha								
Amity								
Apple Kids								
Aptech Avalon								
Aviva Educare								
Bansal Classes								
Brilliant Tutorials								
Camlin								
Career Forum								
Career Launcher								
Career Point								
Chanakya IAS Academy Chate Group								
Classteacher.com								
CMS Computers								
Core Projects								
Dilip Oak's Academy								
dstar								
ducomp				1				
English Centre								
EuroKids Everonn				1				
Excel Soft Technologies				<del> </del>				
Extramarks.com								
TITJEE								
Frankfinn								
G.M.Pens International Pvt Ltd								
Growing Stars								
Hindustan Pencils								
BS								
CCA Discoveri								
L&FS Education & Technology Services								
MFS Global Consultants								
MS								
Indian Institute of Planning & Management								
Institute of Technology & Management								
International Academy for Creative Teaching								
Perform								
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Kangaroo Kids								
KidZee								
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Madhavi Desai Consulting								
Mahesh Tutorials  Mbdalchemy.com								
lavneet Publications	1							
VIIT				1				
Professional Tutorials								
lau's Study Circle								
Rotomac Pens Pvt Ltd								
Chand				1				
Shemrock Agency Sinhal Classes				<del> </del>				
SIP Academy								1
Smart Brain				1				
QL Star				1				
Friram IAS								
Studyloft.com								
Studyplaces.com								
SukhSagor Institute								
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idyasagar Classes			-	_				

E-Learning - Corporate	Tutoring (Classes 5-10)	Services training	Child skill enhancement	Teacher training	Educational books	Educational stationery	Educational CD ROMs	Multimedia in schools	Public private partnerships
13 68	5,351 15.8	1,365 22.1	777 30.8	15 68	1,949 10.8	1,326 13.5	117 30.8	30 76.3	?
68	15.8	22.1	30.8	68	10.8	13.5	30.8	76.3	?
	·						·		
									1



# **Company profiles**

Aptech	53
Core Projects	61
Educomp	63
Everonn.	73
NITT	81

All prices quoted herein are as at close of business 7 March 2008, unless otherwise stated

## **Financial summaries**

Stock Year end	Aptech Dec	Educomp March	Everonn March	NIIT March
Revenue Cagr (FY08-10CL) (%)	28.8	120.6	68.2	20.8
EPS Cagr (FY08-10CL) (%)	<b>51.6</b>	104.6	65.1	42.6
ROAE (%)	31.0	104.0	05.1	42.0
FY08CL/CY07CL	25.5	34.4	17.8	21.1
FY09CL/CY08CL	36.2	45.4	12.9	25.9
FY10CL/CY09CL	30.6	62.7	12.7	29.8
ROIC (%)	55.5	02		
FY08CL/CY07CL	33.3	47.3	18.2	8.7
FY09CL/CY08CL	61.5	44.8	17.2	12.6
FY10CL/CY09CL	69.2	44.9	15.4	16.7
ROACE (%)				
FY08CL/CY07CL	25.0	21.9	19.8	8.4
FY09CL/CY08CL	37.9	33.0	16.3	13.8
FY10CL/CY09CL	43.3	53.7	16.7	18.5
EBIT margins (%)				
FY08CL/CY07CL	14.0	38.7	23.0	4.9
FY09CL/CY08CL	20.2	41.7	24.2	7.2
FY10CL/CY09CL	24.2	47.6	22.7	9.2
PE (x)				
FY08CL/CY07CL	33.3	91.0	80.4	24.8
FY09CL/CY08CL	17.1	42.8	45.9	17.1
FY10CL/CY09CL	14.5	21.7	29.5	12.2
EV/Ebitda				
FY08CL/CY07CL	31.6	52.9	53.8	47.7
FY09CL/CY08CL	16.7	22.5	36.1	28.2
FY10CL/CY09CL	11.1	10.9	25.4	18.7
PE/G				
FY09CL/CY08CL	0.33	0.41	0.71	0.40
FY10CL/CY09CL	0.28	0.21	0.45	0.29
Current price (Rs)	201	3,384	670	108
Target (Rs)	305	7,000	680	150
Target PE on Mar10/Dec09	22.0	45.0	30.0	17.0
Target PE/G	0.43	0.43	0.54	0.48
Upside/Downside (%)	52	107	2	39
Recommendation  Source: CLSA Asia-Pacific Markets Bloom	BUY	BUY	U-PF	O-PF

Source: CLSA Asia-Pacific Markets, Bloomberg



# **Aptech**

Rs200.8 - BUY

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#### **Nimish Joshi**

(91) 2266505054

14 March 2008

# **India**

# **Education**

Reuters Bloomberg APTA.BO APTR IN

Priced on 7 March 2008 India Sensex @ 15,975.5

**12M hi/lo** Rs448/139

12M price target Rs305 ±% potential +52% Target set on 9 March 2008

Shares in issue 43.8m Free float (est.) 68.0%

Market cap US\$217m

**3M average daily volume** Rs103.2m (US\$2.6m)

#### **Major shareholders**

Promoters & Promoter Group 32.0%

#### Stock performance (%)

1M

3M 12M

Absolute	2	(17.6)	(51.5	5)	2.9
Relative		(9.9)	(39.4	1)	(15.9)
Abs (US	\$)	(19.5)	(52.9	9)	12.6
500 <b>¬</b>	(Rs)		(9	%) r	- 220
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400 -		A.		M	- 180
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Source: B	loombe	rg			

www.clsa.com

# Steady growth

Aptech focuses on India and China, and the business has demonstrated an ability to scale up, be it in information-technology (IT) training in China, Arena Multimedia, or Avalon aviation training. Aptech is moving away from the public school IT business and overall the firm should deliver a 52% earnings Cagr over the next two years, at a significantly lower capex-intensity than its peers. We maintain our BUY recommendation and a Rs305 target price that implies 52% upside.

## Retail forays have achieved scale

Aptech conducts IT training at around 650 centres in 35 countries and it leads the pack in China, one of the fastest growing markets, with more than a 30% share. Given China's position in the IT services lifecycle, demand for IT education should remain relatively steady through industry demand cycles. Meanwhile, Aptech is consolidating its leadership in multimedia training, with 40-50% YoY growth expected over the next three years. The continued lack of trained manpower in India's aviation and hospitality sectors is expected to drive strong growth in its Avalon business, which is next only to Frankfinn and AHA in scale and coverage. The retail business constitutes 72-75% of Aptech's revenue and we expect a 31% revenue Cagr over FY07-10.

# Changing focus of institutional business is a positive move

Aptech's exposure to the international corporate training market is less than 6% of total revenue, but its focus on the Indian market is growing. This is backed by a lack of qualified trainers in India, amid strong service-sector growth, where training services are in greater demand. Aptech has ramped up from 35 to 100 trainers and its acquisition of Synergetics adds content libraries as well. Aptech is also exiting the loss making government-school IT business (due to its unfavourable terms). We like the India centricity of the new strategy and forecast a 22% Cagr in institutional revenue over FY07-10. Ebitda for the segment should reach 8% in two years (from -5% currently).

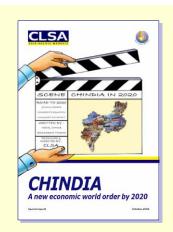
## Strong financial metrics support rerating potential

Aptech's business model is the least capital intensive of India's leading education companies. While it is mapped into nearly the same segments as its peer NIIT, it does not suffer from the same drag posed by the US-centric corporate-training market, and seems better placed to exploit growth options at home and in China. A 52% 08-10CL EPS Cagr, superior return ratios and 17x 08CL PE make the stock a BUY. Consistent performance could drive multiple expansion - our target price of Rs305 implies 22x 09CL earnings.

## **Financials**

Year to 31 Dec	06A	07CL	08CL	09CL	10CL
Revenue (Rsm)	1,755	2,282	3,007	3,786	4,887
Ebitda (Rsm)	372	491	798	1,131	1,469
Net profit (Rsm)	169	277	541	638	874
EPS (Rs)	4.2	6.03	11.8	13.9	19.0
EPS (% YoY)	(133.5)	43.5	95.3	17.8	37.1
PEx (@Rs200.8)	47.8	33.3	17.1	14.5	10.5
ROAE (%)	20.2	25.5	36.2	30.5	30.7
Price/book (x)	8.0	6.9	5.0	3.8	2.8
EV/Op Ebitda (x)	22.9	18.9	11.4	7.8	5.6





Exiting the government business

# A Chindia story

Aptech is building a stake in the rising spend on training (retail and corporate) in India and China. The current business is split almost evenly between India and the rest of the world and is divided into two key segments.

Segmenta	I revenue sp	lit
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Percentage of total (%)	FY07CL	FY08CL	FY09CL	FY10CL
Retail Total	71.5	72.7	75.9	75.8
India IT training	10.5	10.4	10.4	10.1
China IT training	40.0	39.5	39.8	38.5
ROW IT training	10.5	10.4	10.7	10.5
Arena (multimedia training)	10.0	11.4	13.1	14.2
Avalon (aviation/hospitality training)	0.5	1.1	1.8	2.5
Institutional total	28.5	27.3	24.1	24.2
Government schools (India)	11.0	7.6	1.8	0.0
Synergetics (acquired, India))	4.0	4.9	5.8	6.5
Learning solutions (global)	6.0	5.7	5.7	5.5
Training & testing	7.5	9.1	10.8	12.2

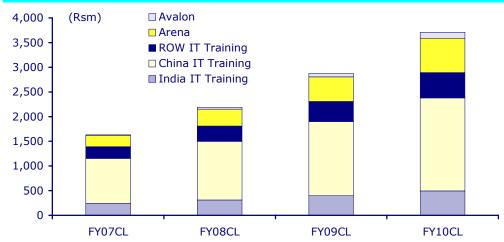
Source: CLSA Asia-Pacific Markets

# **Retail segment**

The retail segment includes all forms of training in which a customer walks into an Aptech owned/franchised centre to be trained. It contributes almost 72% of Aptech's revenue and its contribution is expected to rise to almost 75% by FY09, aided in part by Aptech's decision to exit the government-schools segment, currently classified as "institutional". Revenue streams in the segment are relatively more stable and predictable and should increase at a 31.5% FY07-10CL Cagr. Capital intensity in the business is very low as most capital investment is done by the franchisee.

Stable revenue growth of 31.5% over FY07-10CL

## **Proportion of revenue from Avalon and Arena to increase**



Source: CLSA Asia-Pacific Markets

Retail IT training in India estimated to be a US\$190m market IT training ex-China contributes around 20% to Aptech's revenue and is expected to deliver a 28% Cagr over FY07-10CL. The firm owns and operates 10 centres in India. In addition, there are almost 350 franchisee and 110 fixed-royalty centres through which students can enrol in IT courses run by Aptech. Franchisees pay 15-30% of fees charged as a royalty. To maintain tighter control over franchisees and to stop leakages at the franchisee end, Aptech has implemented a central automation system through which all



Aptech's internal systems are connected with the franchisee outlets. Aptech also plans to "web-enable" the system which will allow it to move the data from server at franchisee location to a common Aptech server and help to increase data security. Besides India and China, Aptech is present in 33 other countries with major presence in Vietnam, Nigeria, the Middle East, Malaysia and South Africa. The company has recently started training in hardware and networking under the *N-Power* brand.

Aptech will continue to lead the market in China

Aptech operates in China via a 50:50 joint venture with a Beijing University affiliate. The venture operates through almost 250 centres in 57 cities and is a clear market leader with an estimated market share of 32%. The JV was formed in 2000 and is valid for a 99 year period. This segment contributes almost 40% of Aptech's revenue. IDC has predicted a 23% Cagr over FY07-11 in the Chinese IT training market. Given Aptech's market leadership and alliances, we expect this segment to see a 27% Cagr over FY07-10CL. We also believe that the Chinese IT training market is likely to stay steady through demand cycles, given its early stage of growth.

Growing market and limited competition driving strong growth Aptech conducts multimedia training through the *Arena* brand. *Arena* is present in 11 countries with 130 centres including 15 outside India. Revenue growth in this segment is expected to remain strong with a Cagr of 45% over FY07-10CL.

Investments in 2006-07 should pay off

Aptech entered the aviation/hospitality training segment through its acquisition of Avalon in 2006. Avalon was acquired mainly for its content, and payments are subject to achieving an earnings threshold over a five-year period. Post acquisition, Aptech has scaled Avalon from two centres to a network of 35 centres. Aptech expects to expand this network to 50 centres by December 2008. It has already tied up with over 35 airlines. It also plans to get into the hospitality training segment. The boom in India's aviation and hospitality sectors and the shortage of trained manpower is expected to drive demand for services offered by Avalon and we expect a 119% revenue Cagr over FY07-10CL for Avalon.

# **Institutional segment**

The institutional segment contributes about 28% to Aptech's revenue, which is set to enjoy a 22% Cagr over 07-10CL.

Exit from government schools will drive margin expansion

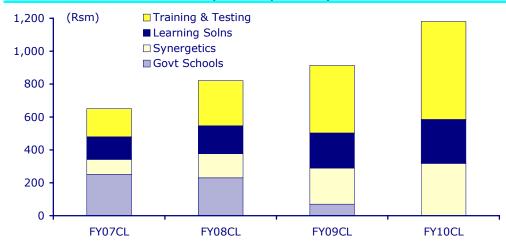
Aptech operates 900 schools in Delhi and Orissa. While the ICT and computer-literacy segment contributes around 11% of revenue, it plans to exit this business given the heavy losses it continues to suffer. The contract to operate 600 schools in Delhi will expire in October 2008 and the company's profitability will improve substantially after this. The contract for 300 schools in Orissa will expire in 2009. After FY09 we do not expect any further revenue from this segment. It appears that Aptech picked up this business in the past at deeply unfavourable terms - current players in the ICT segment make Ebitda margins of 25%+ in newly awarded contracts, though long cash-collection cycles remain a hindrance. In any case, Aptech's strategy on exiting the business seems more certain than peer NIIT's ambivalence on the same - NIIT had earlier announced a reduced focus on the business but seems to be bidding for contracts again.

Aggressive hiring of trainers indicates orderbook strength Aptech's acquisition of Synergetics in 2006, marked its entry into the software-developer training and consultancy segment which primarily deals with induction training, laterals training and open workshops for the IT



industry. It employs close to 110 trainers in this space, up from about 22 when it acquired Synergetics. The segment should deliver a 51% Cagr over FY07-10CL. Risks to this business arise from a slowdown in hiring and cuts in training budgets at IT companies.

#### Government schools business complete ramp down by FY10



Source: CLSA Asia-Pacific Markets

**Estimated market of over US\$1.3bn** growing at 22% each year

Training and testing comprises corporate training for all segments other than IT. Aptech has seen early success by signing up marquee clients like Pantaloon Retail and HDFC Standard Life. The lack of skilled manpower in retail and financial-services sectors should increase demand for Aptech's services. Testing solutions are offered under the Attest brand through 45 franchisee test centres. It has tied up with institutions of higher learning to conduct exams for distance learning. The company administered close to a million of these in 2007, up 100% YoY. This segment contributes about 7% of Aptech's revenue and will deliver a revenue Cagr of 51% over FY07-10CL.

Potential softness from an impending US slowdown

Learning services caters mainly to clientele in the US and Europe and provides customised/proprietary content. We are cautious on this business for 2008 given the looming slowdown in the United States, which could drive discretionary spending cuts in 2008. The segment contributes about 6% of Aptech's revenue and should see a 25% Cagr over 07-10CL, albeit from a low base. Aptech's corporate-training revenue is just 2.5% of NIIT's revenue base.

Steady growth in the retail business

**Growth in institutional** segment hurt by exit from government schools

YoY growth	FY08CL	FY09CL	FY10CL
Retail Total	34.0	31.4	29.1
India IT training	30	27	25
China IT training	30	27	25
ROW IT training	30	30	27
Arena	50	45	40
Avalon	200	100	75
Institutional total	26.2	11.3	29.2
Government schools	(8)	(70)	(100)
Synergetics	60	50	45
Learning solutions	25	25	25
Training & testing	60	50	45
Total	31.8	25.9	29.1



Stable margins in retail business to continue

Institutional business could break even only in FY09

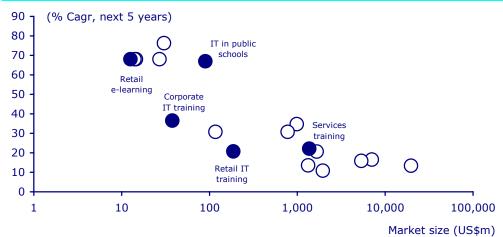
Segmental margin estimates

	FY08CL	FY09CL	FY10CL
Retail Total	38.3	38.7	37.1
India IT training	35	35	33
China IT training	35	35	33
ROW IT training	35	35	33
Arena	60	60	58
Avalon	(5)	7	15
Institutional total	(4.7)	2.2	8.0
Govt schools	(10)	0	0
Synergetics	(5)	0	5
Learning solutions	(5)	0	7
Training & testing	0	5	10
Total	26.5	29.9	30.1

Source: CLSA Asia-Pacific Markets

# Fragmentation ensures opportunity

## Aptech's positioning in the Indian education and training space



Source: CLSA Asia-Pacific Markets

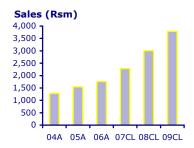
# More than twenty years in the game

# Company background

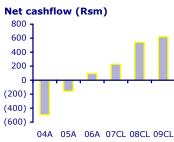
A brie	f history of Aptech - Fits and starts
Year	Event
1986	Started in 1986 as an IT training and education company.
1992	Incorporated as a public limited company under the name Aptech Information Systems Ltd.
1993	First education and training company in Asia to receive ISO 9001 quality certification. Launched multimedia training under the <i>Arena</i> brand.
2000	Entered China through a JV locally known as Aptech Beida Jadebird Company.
2001	Aptech's training business de-merged from the company and the residual software business merged with the group company, Hexaware Technologies.
2003	SSI bought Aptech from erstwhile promoter Atul Nishar and merged its own training business with Aptech.
2004	Aptech started a university in the state of Chattisgarh.
2005	Rakesh Jhunjhunwala and group bought out SSI's stake in Aptech. Supreme court ordered closure of private universities in Chattisgarh. Aptech University closed down.
2006	Acquired Synergetics and Avalon.
2007	Launched hardware and networking training under the N-Power brand.

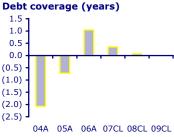


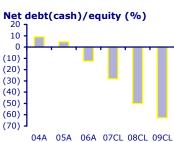
# Risks & drivers













# **Investment by numbers**

Aptech's focus is on India and China, which contribute 85% of revenue. The firm imparts IT training through 650 centres in 35 countries and is a market leader in China with 30%+ share. IT training contributes 60% of revenue with China contributing 40%. Aptech continues to consolidate its lead in the multimediatraining business under its Arena Multimedia brand. This a high-growth, widemargin segment makes up 10% of revenue. Aptech has ramped up its Avalon training centres, through which it imparts aviation/hospitality training. While this segment is a minor contributor to overall revenue, it is also the fastest growing.

Aptech has 100 trainers in the developer-training segment, up from 35 a year ago. This area has a rich customer base including leading tech firms like Wipro, L&T Infotech, Accenture and ITC Infotech. Aptech has also signed up marquee customers like HDFC Standard Life and Pantaloon Retail in its non-IT corporate-training business. Aptech provides testing and assessment services under the ATTEST brand and conducted more than one million tests in 2007. Aptech is set to exit the loss-making government schools business, which should boost margins.

A 28%+ FY07-10CL revenue Cagr and margin expansion should drive a 47% earnings Cagr. Low capex and superior return ratios could expand multiples.

#### Risks to our view

Softness in the learning solutions business driven by an impending slowdown in US/Europe is a risk. While Aptech has ramped up its corporate trainers to 100, reduced hiring by Indian IT companies and smaller training budgets could pose a big risk to both revenue growth and margins.

With increased penetration of IT training in schools and colleges in India, demand for Aptech's retail IT business could be at risk driving revenue downsides. Competitors like NIIT are getting aggressive in the multimedia training business in which Aptech enjoys market leadership. This could be a threat to Aptech's revenue growth as well as margins given the 60%+ margins Aptech currently enjoys in the segment.

The boom in Indian services sectors has led to Aptech's expansion of Avalon centres and increased training staff in its non-IT corporate training segment. Any slowdown in hiring and cost-cutting in these services segments could adversely affect the fortunes of Avalon and Aptech's services training business.

# **Key earnings drivers**

Year to 31 De	ecember		2005A	2006A	2007CL	2008CL	2009CL
Segmental	Ebitda margin	(%)					
Retail						38.3	38.7
Institutional						(4.7)	2.2
<b>Segmental</b>	Revenue grow	rth (%)					
Retail						34.0	31.4
Institutional						26.2	11.3
Govt schools	revenue share	(%)			11.0	7.6	1.8



# **Summary financials**

Year to 31 December	2006A	2007A	2008CL	2009CL	2010CL	
Revenue	1,755	2,282	3,007	3,786	4,887	
Operating Ebitda	372	491	798	1,131	1,469	
Operating Ebit	214	320	606	915	1,228	
nterest income	14	20	34	58	92	
nterest expense	(25)	(13)	(7)	(2)	0	
Other items	0	(15)	(25)	(20)	(15)	
Profit before tax	204	311	608	952	1,305	A 47% earnings Cagr
axation	(35)	(34)	(67)	(314)	(431)	over 07-10CL, 52% ov
Inorities and other	0	0	0	0	0	08-10.
Profit	169	277	541	638	874	
Summary cashflow forecas	t (Rsm)					
perating Ebit	214	320	606	915	1,228	
Depreciation/amort	158	171	192	216	242	
Vorking capital - trade	47	(20)	8	18	(17)	
Other operating items	(155)	(15)	(25)	(20)	(15)	
perating cashflow	264	456	781	1,128	1,437	
let interest/taxes/other	(46)	(27)	(40)	(258)	(339)	Very low capex intensi
Cashflow	218	428	742	871	1,099	
Capital expenditure	(124)	(200)	(200)	(250)	(250)	
cq/inv/disposals	Ó	Ó	Ó	Ó	Ó	
ree Cashflow	94	228	542	621	849	
Ord div paid/Other items	58	0	0	0	0	
Decrease in net debt	152	228	542	621	849	
Summary balance sheet for	recast (Rsm)					
ash & equivalents	345	496	938	1,509	2,357	
Debtors - trade	477	620	782	946	1,222	
nventories - trade	29	29	29	29	29	
Other current assets	192	192	192	192	192	
ixed assets	537	566	574	609	617	
ntangible assets	30	30	30	30	30	
Other term assets	0	0	0	0	0	
otal assets	1,611	1,935	2,546	3,316	4,448	
hort-term debt	0	0	0	0	0	
reditors - trade	411	534	704	887	1,145	Expect it to be a debt-
ther current liabs	24	24	24	24	24	free company unlike its
ong-term debt/CBs	227	150	50	0	0 <	sector peers.
Other long-term liabs	0	0	0	0	0	Sector peers.
/linorities/other equity	2	2	2	2	2	
Shareholder funds	947	1,224	1,766	2,403	3,277	
otal liabs & equity	1,611	1,935	2,546	3,316	4,448	
latio analysis						
Levenue growth (%)	13.7	30.0	31.8	25.9	29.1	Margin expansion led b
p Ebitda growth (%)	15.1	31.9	62.7	41.7	30.0	a turnaround in the
Op Ebit growth (%)	185.9	49.1	89.6	51.0	34.2	institutional business.
p Ebitda margin (%)	21.2	21.5	26.5	29.9	30.1	
Op Ebit margin (%)	12.2	14.0	20.2	24.2	25.1	
let profit margin (%)	9.6	12.1	18.0	16.8	17.9	
vividend payout (%)	0.0	0.0	0.0	0.0	0.0	
ax rate (%)	17.2	11.0	11.0	33.0	33.0	
bitda/net int exp (x)	36.1	(71.9)	(29.4)	(20.0)	(16.0)	
let debt/equity (%)	(12.4)	(28.2)	(50.2)	(62.7)	(71.9)	
Gross debt/equity (%)	23.9	12.2	2.8	0.0	0.0	
let debt/op Ebitda (x)	(0.3)	(0.7)	(1.1)	(1.3)	(1.6)	
Gross debt/op Ebitda (x)	0.6	0.3	0.1	0.0	0.0	
eturn on equity (%)	20.2	25.5	36.2	30.6	30.8	Steady return on equit
OCE (%)	27.0	35.6	66.0	100.7	133.3	Steady Tetal II off equit
		33.0	00.0	100./	100.0	



Notes Notes



# **Core Projects**

**Rs187 - No rec** 

# **Bhavtosh Vajpayee, CFA**

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#### **Nimish Joshi**

(91) 2266505054

14 March 2008

# **India**

# **Education**

Reuters Bloomberg CORE.BO CPTL IN

Priced on 7 March 2008 India Sensex @ 15,975.5

12M hi/lo Rs604/119

12M price target NA ±% potential NA Target set on

Shares in issue 82.5m Free float (est.) 30%

Market cap US\$385m

**3M average daily volume** 269.9m (US\$6.7m)

**Major shareholders** 

Promoters & Promoter Group 50.1%

#### Stock performance (%)

1 M

3M

12M

			LIVI	314		1214	
Absolu	ite	(13	.6)	(53.1)	)	61.1	
Relativ	/e	(5	.0)	(33.2)	)	37.1	
Abs (U	IS\$)	(15	.7)	(61.2)	)	68.9	
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Mar 06 Sep 06 Mar 07 Sep 07 Mar 08							
Source:	Source: Bloomberg						

www.clsa.com

# **Exciting opportunity**

Core Projects began as an IT-services export business and education has become its prominent client segment over time. It is now focused on the domestic opportunity in public private partnerships. The ICT@Schools programme and overall policy focus is opening up avenues for private players in managing, upgrading and profiting from schools, colleges and vocational training institutes. Core's 50-50 JV with IL&FS Education and Technology Services gives it a headstart in this relatively new space.

## Public spending booster; private players welcome

Core Projects has an array of technology products that assist in school operations. While public schools in five states in the US have already adopted most of these products, Core has achieved early success in India through a successful pilot implementation (440 schools) in the state of Jharkhand. The increased budgetary outlay for Sarva Shiksha Abhiyan and Core's tieup with IL&FS Education & Technology Services Ltd (IETS) keep it well positioned to take advantage of increased state government spending on IT in education. Core estimates the market opportunity for IT in education in India at Rs7bn (US\$175m). Education services contribute about 65% of Core's revenue, with close to 70% coming from the US and the rest from the UK.

## **Business evolving within PPP framework**

There are opportunities to upgrade and manage public schools for fixed durations to address the infrastructure gap in public schooling in India. Industrial Training Institutes (ITIs) are slowly being opened up to private players for management rights - 244 approvals are already in place. Overall, policy planners including the Planning Commission and the National Knowledge Commission seem to agree that the future of India's public education will be bleak if left entirely to government initiatives.

## Core's portfolio can shift away from IT services

Apart from clients in education (65% of revenue), Core also provides a range of IT solutions to customers in diverse industries with a special focus on healthcare, financial services and logistics. Core has implemented projects for GSK and J&J in healthcare; American Express and GE Capital in financial services; and Balmer Lawrie and Reliance in logistics. This segment contributes about 35% to Core's revenue. We believe that the rise of PPP revenue streams could reduce this business within the overall portfolio.

## **Binary potential ahead**

Core's market positioning is yet unsubstantiated by meaningful success, except the 156 schools managed by its JV partner, IETS and the 440-school pilot in Jharkhand state. But the beginnings of a potentially big opportunity are visible and Core seems well placed to ride the growth of PPP in India.

#### **Financials**

Year to 31 Dec	04A	05A	06A	07A
Revenue (Rsm)	45.7	88.1	867.2	1996.6
Ebitda (Rsm)	8.8	31.3	125.7	392.3
Net profit (Rsm)	8.4	30.6	110.3	322.2
EPS	nm	nm	33.2	23.9
PE @Rs187	nm	nm	5.6	7.8
Price/book (x)	nm	nm	65.0	14.6
EV/Op Ebitda (x)	nm	nm	122.0	39.0



Notes



# **Educomp Solutions**

Rs3,383.7 - BUY

# **Bhavtosh Vajpayee,CFA**

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#### **Nimish Joshi**

(91) 2266505054

14 March 2008

# **India**

# **Education**

Reuters Bloomberg EDSO.BO EDSL IN

Priced on 7 March 2008 India Sensex @ 15,975.5

**12M hi/lo** Rs5,650/890

 12M price target
 Rs7,000

 ±% potential
 +107%

 Target set on
 10 Jan 08

Shares in issue 17.2m Free float (est.) 9.6%

Market cap US\$1,438m

**3M average daily volume** Rs193.5m (US\$4.9m)

Major shareholders Promoters 56.1% FIIs 32.8%

## Stock performance (%)

	1M	3M	12M		
Absolute	(12.6)	(15.7)	277.3		
Relative	(4.4)	5.4	208.2		
Abs (US\$)	(14.6)	(18.1)	312.9		
6,000 7 (	Rs)	(%)	<b>7</b> 50		
5,000	Educom	p (LHS)	- 650		
4,000	Rel to S	ensex	- 550		
3,000 -		JAN	<b>-</b> 450		
· ·		J.W.	350		
2,000 -	<b>A</b>		- 250		
1,000 -	<b>ال</b> ناب السال		- 150		
0	Prod/"	-	- 50		
Mar 06	Nov 06	Jul 07 Mar	- 08		
Source: Bloomberg					

www.clsa.com

# **Uninterrupted growth**

An aggressive K-12 strategy, an early lead in the multimedia-in-schools market and a multiplicity of India-centric high-growth segments set Educomp apart and will drive a sector-leading 93% profit Cagr over FY08-11CL. Execution is also sound. Its Smart Class and ICT business ramp-ups are ahead of schedule and 60 finalised sites for K-12 schools provide visibility on its targets. Profit is almost doubling annually, which should allay valuation concerns. BUY towards our Rs7,000 target price.

## Early identification of market opportunities

Educomp's plays are India-centric. Its multimedia-in-schools offering now reaches more than 650 private schools and adoption is accelerating. K-12 school management, a new segment, is set to ramp up to 100 schools over the next three years (150 in four years). IT in public schools, although a fairly narrow-margin business (25-30% Ebitda versus c.60% in other areas), augments this portfolio. Around these businesses are a slew of other niche offerings - teacher training, online tutoring and e-learning, and preschools. In many segments, Educomp enjoys a 12-24 month lead over new entrants.

## Portfolio to drive strong growth for several years

Educomp will have 4,000 multimedia-enabled schools in its Smart Class programme by end-FY11; the current target base is at least 15,000 schools with monthly fee above Rs1,250/month. Its 100-K-12 schools under management will still be only partially billed in FY11, leaving good scope for growth from higher utilisation. The growth prospects for Educomp appear to be more secular and stretch further into the future than those of its peers.

#### **Execution differential**

Profit over FY07-08 should be 60-65% ahead of our first estimates made in February 2006. Educomp has resolved the key bottleneck of land acquisition for K-12 via synergistic alliances with realty players and it has already secured 60 school sites. Its sales team services 75 Indian towns and the medium-term target is 100. Management has been structured into business units with significant senior personnel expansion over the past two years.

#### Profit growth will answer valuation concerns

Educomp seems expensive, but earnings are set to grow sevenfold over FY08-11 and the stock price needs to be seen in this context. Our target price of Rs7,000 is based on a discounted cashflow model that assumes a 13% weighted-average cost of capital and 5% terminal growth. Non-linear growth, potential operating leverage as sales and product-development expenses even out, and the potential to expand into adjacent spaces (higher education, for example) provide further boost to the stock.

## **Financials**

Year to 31 Mar	06A	07A	08CL	09CL	10CL
Revenue (Rsm)	555	1,065	2,499	5,749	12,164
Ebitda (Rsm)	267	503	1,187	2,874	6,265
Net profit (Rsm)	139	283	704	1,499	2,950
EPS (Rs)	8.7	17.7	37.2	79.1	155.8
EPS (% YoY)	42.3	103.2	109.9	112.7	96.8
PEx (@Rs3,383.7)	388.2	191.0	91.0	42.8	21.7
ROAE (%)	24.80	27.70	34.10	40.40	50.00
Price/book (x)	60.3	47.4	21.5	14.4	8.7
EV/Op Ebitda (x)	200.1	106.8	52.9	22.5	10.9



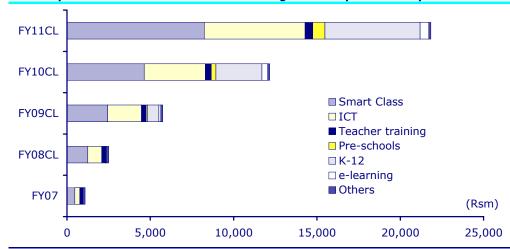
Look for 106% revenue, 93% EPS Cagr in FY08-11

In FY10, K-12 revenue to beat total FY08 revenue

# Uninterrupted growth

In FY10, revenue from Educomp's K-12 school initiative will exceed the company's total revenue for the current fiscal year. At the same time, the existing Smart Class and ICT businesses continue to run ahead of plans. Putting together the pieces, we forecast a 106% revenue Cagr over FY08-11, even as revenue is set to grow by 100% YoY in FY08.

#### Educomp's revenue stack - K-12 starts adding materially from next year



Notes: Business Segment Index:

Smart Class - Multimedia Education in private schools; billed to each student monthly. ICT - Computer Labs in public schools; billed to state governments, quarterly. K-12 - School management under brand alliances plus owned "Millennium School" brand. Pre-Schools - Pre-primary schools; located in residential neighbourhoods. Teacher training - Target 300,000 teachers trained in FY08 in alliances with NGOs. elearning - www.mathguru.com launched and others in the pipeline, Others - Includes tutoring and some retail sales (legacy business, going down). Source: CLSA Asia-Pacific Markets

# 60 K-12 sites finalised

# already

**Educomp takes over** school management as a supplier

## K-12 growth bolsters the next five years

Educomp's K-12 initiative (managing K-12 schools) is taking off. The real revenue and profit boost from this initiative should start to appear in FY09, but even more strongly over FY10-11, when K-12 school numbers will have reached material scale. The critical success factor in the process is land acquisition, where Educomp seems comfortably placed. A total of 60 sites are in the bag, and we believe that in coming months all of the land acquisition/leasing plans for the 100 school/FY11 target will be in place. Management has begun to articulate the 150 schools/four-year target more loudly, underlying its growing confidence in the ramp-up. Assuming fairly low utilisation numbers in the initial stage of school launch, we still see the K-12 revenue stream exceeding the entire FY08 Educomp topline by FY10.

K-12 is Indian education's largest segment and makes up US\$20bn of annual tuition-fee inflows. Educomp is unique in that it is the first organised initiative around generating profits from the immense opportunity in private school K-12 expansion. Educomp's school initiative provides a unique option to accelerate the growth of India's private schools. By taking over land acquisition, infrastructure management, intellectual-property inputs and overall school management, Educomp has located its business where it can legally profit, rather than in the still-confused space surrounding profits at the level of school trusts.

Appendix 1 looks at a K-12 school model in greater detail.



# School sites generate confidence in forecasts

## School sites being finalised swiftly

	No. of sites
Operational schools	2
Sites from DLF	8
Sites from other realty player(s)	17
Open market plus smaller numbers from realty players	5
Total "hot" sites (stage 1 of expansion)	32
Other sites finalised (work not yet begun; stage two of expansion)	28
Total sites in place	60
CLSA forecast for end March 2009	25
CLSA forecast for end March 2010	<b>65</b>
CLSA forecast for end March 2011	100

Source: CLSA Asia-Pacific Markets

# K-12 a strong boost from FY09

## K-12 forecasts

	FY08CL	FY09CL	FY10CL	FY11CL
Eop number of schools	5	25	65	100
Billable schools (functioning)	2	7	33	72
Students per school in steady state	2,300	2,300	2,300	2,300
Fee per student per month (Rs)	3,000	3,000	3,000	3,000
Capacity utilisation in schools set up last yr (%)	90	90	90	100
Capacity utilisation in new schools (%)	50	50	60	60
Average capacity utilisation (%)	80	79	83	96
Admission fee per student (Rs)	30,000	30,000	30,000	30,000
Total collections from admissions	-	690	2,346	3,795
Annual revenue (Rsm)	132	1,145	4,606	9,525
Gross profits (Rsm)	79	687	2,764	5,715

Source: CLSA Asia-Pacific Markets

#### Educomp consolidates all school suppliers under Edu Manage and Edu Infra

## Steady state-supplier surplus

	(Rsm)
Steady state revenue per year, per school	120.0
Steady state EBIT (surplus) per year per school (%)	60
Fee to supplier (Edu Manage), per month per student	
IPR related fees	650
Technology related services	250
School management services	600
Multimedia education product inside the classroom	150
Total fee per month per student	1,650
Total fee	43
% of school collections	36
Fee to leaser (Edu Infra)	
Lease rental = 14.5% of capex	21
Fee revenue = 4.5% of collections	5
Total payment to leaser	26
% of school collections	22
Total payment to suppliers (%)	58
Surplus left in school trust (%)	2



Intellectual property Multimedia content within classrooms Textbooks Profit at Educomp School management services Conducting examinations Sourcing teachers and staff Lesson plans Online tutoring access
Online content
Library management software Conducting and documenting parent-teacher meetings Conducting educational tours School/alumni webportal management Brand licensing Suppliers Realty Profit from supplying equipment and hardware Profit from lease of land Tuition fees Regulatory ambiguity on Development fees resonable surplus" drives two-tier structure of School trust (non-profit) trust/management Boards of education CBSE, ICSE, State

Educomp's K-12 management space - Consolidation of suppliers generates profits for Educomp

Source: CLSA Asia-Pacific Markets

# Smart Class adoption accelerating

# **Smart Class and ICT - Accelerating growth**

Educomp will add nearly twice as many schools in FY08 to its Smart Class business as it added in the previous year. In March 2006, Educomp had just 91 schools under Smart Class; by March 2008, it will have 800+ (management guidance is 825). The numbers indicate accelerated acceptance of the Smart Class proposition. With more schools joining in, Smart Class as a concept is becoming better known. At the same time, Educomp has expanded its sales team to over 100 people and now reaches out into nearly 75 Indian towns and cities. Given the Rs150 per month per student fee for Smart Class, we see over 15,000 private schools in India with a monthly fee that exceeds Rs1,250 as the immediate target segment, and Educomp will have tapped less than a quarter of this market even three years from now.

Smart Class guidance now at 825 schools for March 2008

# **Smart Class forecasts**

	FY07	FY08CL	FY09CL	FY10CL	FY11CL
No of schools, end of period	331	800	1,500	2,500	4,000
Net additions	240	469	700	1,000	1,500
Number of schools, average	211	519	1,010	1,900	3,100
Classes per school	25	25	25	25	25
Students per class	45	45	45	45	45
Charge per student (Rs/M)	128	150	150	150	150
Revenue (Rsm)	365	1,050	2,045	3,848	6,278

Source: CLSA Asia-Pacific Markets

ICT – Educomp is number one by a margin

Educomp is also now the biggest in ICT (computer labs in government schools), ahead of its peers Everonn and NIIT. A sustained focus on this segment (NIIT seemed to look elsewhere last year, but has refocused), Educomp's content library (parts of which are provided to the schools as added value) and regional language conversion of content differentiate



Educomp. We expect 25,000 ICT schools by March 2010. Like other forecasts, Educomp has driven upgrades to assumptions in this business as well.

#### **ICT forecasts**

	FY07	FY08CL	FY09CL	FY10CL	FY11CL
# Schools, end of period	2,808	8,000	15,000	25,000	40,000
Net addition	2,108	5,192	7,000	10,000	15,000
Number of Schools, average	1,122	3,846	9,400	17,000	28,000
Revenue per school p.m.	22,379	18,000	18,000	18,000	18,000
Revenue (Rsm)	301	831	2,030	3,672	6,048

Source: CLSA Asia-Pacific Markets

The ICT market could grow tenfold in five years

#### **ICT** market size estimate

	FY08	FY09	FY10	FY11	FY12	FY13
Start of period schools, wired	9,000	16,000	36,000	66,000	106,000	156,000
New bids	7,000	20,000	30,000	40,000	50,000	50,000
End of period schools, wired	16,000	36,000	66,000	106,000	156,000	206,000
Inflow per month per school (Rs)	20,000	20,000	20,000	20,000	20,000	20,000
Annual revenue to providers (Rsm)	3,840	8,640	15,840	25,440	37,440	49,443
Annual revenue to vendors (US\$m)	96	216	396	636	936	1,236
% YoY		125	83	61	47	32

Source: CLSA Asia-Pacific Markets

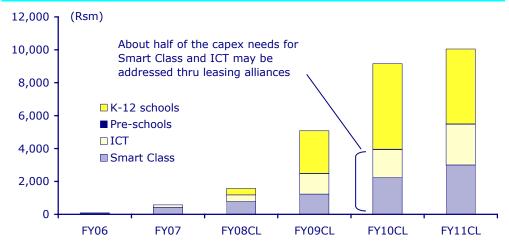
K-12 to dominate capex

# Capex shifting to assets with longer depreciation lives

Educomp's capex pattern is changing. We see two trends in play. First, capex needs in the Smart Class and ICT businesses are expected to be lower than school additions may demand. This is driven by two factors. More Smart Class schools are buying the hardware themselves (about 10%), a trend also seen in some ICT deals (eg, the Gujarat order). Educomp has also entered into a leasing agreement with ICICI Bank for a total of Rs1bn (so far), under which equipment is leased from ICICI at a 10.6% lease rental, shifting down capex needs and converting these into operating costs. Secondly, most of the capex in coming years will flow into the K-12 school expansion. Each school demands Rs120-140m in capex and depreciation will be up to 40 years. Over FY08-11, we expect US\$450m+ in capex from Educomp. This funding is nearly secured, including a line of credit from an SBI-led consortium, two convertible issuances already done (our EPS is fully diluted) and internally-generated funding.

Leasing reduces Smart Class and ICT capex requirements

#### Educomp's capex needs exclude leasing alliances





Adjacent businesses contribute 15-18% of revenue and growth

## **Expansion into adjacent businesses**

While the growth in Smart Class, ICT and now K-12 seem to dwarf other business initiatives, there are several in play. For example, e-learning via www.mathguru.com has doubled subscriptions between the Sep07 and Dec07 quarters to more than 30,000, and we expect it to do so again in FY09 to exceed 60,000. Apart from some revenue contribution (at margins above 80%), this initiative also pulls more students under the Educomp umbrella. The preschool initiative could receive a boost from an acquisition - we understand that Educomp is looking to acquire a 60-80 school chain in the preschool segment. Licensing of Smart Class content in international markets should stay at 6-8% of total revenue.

Revenue mix - Percentage of Educomp's total

(%)	FY08CL	FY09CL	FY10CL	FY11CL
Smart Class India	42	36	32	29
ICT	33	35	30	28
K-12	1	12	23	26
Smart Class Global	8	7	6	9
Preschools	1	1	2	3
E-learning	2	2	3	2
Teacher training	9	5	3	2
Others	5	2	1	1

Source: CLSA Asia-Pacific Markets

Building stakes in tutoring

Educomp is aggressively pursuing the tutoring market. It acquired a 76% stake in 3-Bricks e-services, which owns an online tutoring portal called www.learninghour.com and www.threebrix.com. Over 250 tutors provide online tutoring at an hourly cost of Rs400, with the Middle East and Dubai the primary markets as of now. Over time, this initiative could expand beyond the online channel to include brick-and-mortar tutoring as well. Educomp has also acquired a 51% stake in AuthorGen Technologies, which owns technology platforms on the Web 2.0 domain for online learning. AuthorGen owns a portal, www.wiziq.com, which connects students and teachers on any web browser and operating system. It also has a 70% stake in Canadian e-learning company, Savvica, which builds online communities around e-learning.

Placed well – where the profit lies

## **BUY for visible multi-year growth**

Looking back at our map of the Indian education opportunity, we note that Educomp has a presence in both the larger as well as some of the fastest-growing segments. Over the years, Educomp will retain the option of expanding into the higher-education space. Still, its current portfolio alone should be enough for more than 100% revenue growth until FY11 and we suspect more than 50% growth for some years after that as well. For example, our model bills only 72 K-12 schools (and these only partially) in FY2011, versus the new targets of 150 schools in four years.

Less cyclical revenue streams

More importantly, we find less cyclicality in Educomp's revenue streams. The typical duration of a Smart Class win is five years. School leases and management contracts run for over 30 years. IT projects in public schools, though a business less to our liking, also run over five years. From the consumer's perspective, Educomp is strong in segments where spending is more compulsory than it is discretionary.

Operating leverage ahead?

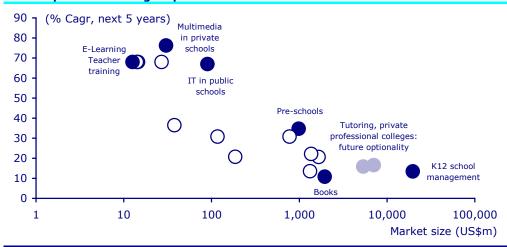
Over time, operating leverage benefits will kick in. Educomp's 400-strong development team does not need to grow at the same pace as revenue. The company has been investing heavily in sales expansion lately, but with 75



towns mapped already in India (25 more to go), this investment is also expected to even out over the next 12 months. Improved utilisation of school infrastructure and greater licensing revenue streams as Smart Class penetrates Southeast Asian markets provides further opportunities to defend and expand profitability.

# Educomp is very well positioned

#### Educomp has the strongest portfolio in Indian education



Source: CLSA Asia-Pacific Markets

Our target price of Rs7,000 is based on a DCF valuation. Educomp's 43x FY09 valuation looks expensive (although lower than Everonn), but needs to be seen in the context of its 93% EPS Cagr until FY11. Moreover, we note that while education has been an increasingly active investment play worldwide, only select stocks have delivered consistent returns over the years. Raffles in Singapore, Devry in the US and MegaStudy in Korea are some examples of stocks that have done remarkably better than their peers. While Indian education's opportunities are immense, the positioning of its publicly-listed players across market segments are not entirely optimal. Educomp is the exception.

# Educomp stands out from its peers

#### **DCF ranges for Educomp**

						WACC				
		12.0%	12.5%	13.0%	13.5%	14.0%	14.5%	15.0%	15.5%	16.0%
	3.0%	7,391	6,786	6,258	5,793	5,382	5,017	4,690	4,398	4,134
	3.5%	7,643	6,995	6,432	5,939	5,505	5,121	4,779	4,473	4,199
	4.0%	7,926	7,228	6,625	6,100	5,640	5,235	4,876	4,556	4,269
<b>Terminal</b>	4.5%	8,247	7,490	6,841	6,279	5,789	5,360	4,981	4,645	4,345
growth	5.0%	8,614	7,780	7,084	6,479	5,956	5,499	5,098	4,743	4,429
	5.5%	9,037	8,127	7,359	6,704	6,141	5,653	5,226	4,851	4,520
	6.0%	9,531	8,519	7,674	6,960	6,350	5,825	5,369	4,971	4,620
	6.5%	10,115	8,977	8,037	7,251	6,587	6,019	5,529	5,103	4,731

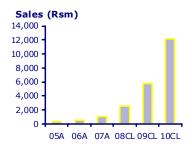
Source: CLSA Asia-Pacific Markets

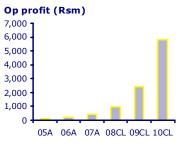
#### **Recommendation history - Educomp Solutions EDSL IN**

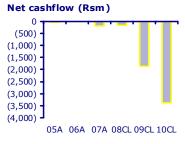
Date	Rec	Closing price	Target
10 January 2008	BUY	4,359.80	7,000.00
24 July 2007	BUY	2,140.60	3,500.00
04 June 2007	BUY	1,875.80	2,200.00

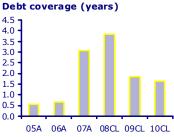


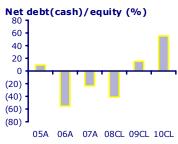
# Risks & drivers













# **Investment by numbers**

Educomp has scaled up in multiple segments of the Indian education space, some being large markets and others among the fastest growing. 42% of its FY08CL revenue come from Smart Class, a multimedia content offering within classrooms. Educomp has 500+ schools signed up as of last quarter and the adoption of this unique proposition is expanding as more schools accept the viability and positive results out of multimedia education. It targets 825 schools by March 2008, and we estimate 2,500 by March 2010.

Educomp implements IT training within public schools under BOOT contracts. 6,000+ schools have signed up, making Educomp nearly 2x as large as its nearest competitors, Everonn and NIIT. The government's spend on education is increasing, and over 25,000 schools are expected to be bid in CY2008. This business is about 33% of FY08 revenues.

Educomp has also entered the highly lucrative school-management space for K-12 schools. By consolidating suppliers to schools - lessors, intellectual property or school management - Educomp can tap into annuity revenue streams with 50%+ operating margins. It is set to manage 100 schools in three years, and 150 in four years. We estimate a 93% earnings Cagr over FY08-11, easily beating peers.

#### Risks to our view

Execution and regulatory ambiguity around aspects of K-12 schools are the biggest risks to Educomp. With revenue set to enjoy a 100% Cagr, and multiple revenue streams expanding at this pace, Educomp has beefed up its top management team and structured itself around independent business units.

The Indian regulatory environment for education continues to struggle between a largely failed public education approach (142m children out of school) amidst old socialistic hang-ups that frown at the "commercialization" of education. Court judgements contain conflicting remarks on allowing a "reasonable surplus" in private schools, without specifying what a reasonable surplus implies, and at the same time condemning the commercialization of education. However, some of this is changing. Working through recent policy documents and statements, we find a growing acceptance of an increased private sector role in education, starting with higher education, but also encompassing public private partnerships for K-12 schools as well. In the interim, businesses like Educomp have structured themselves as school management consultants, supplying land for lease, and providing a wide gamut of services and intellectual property to schools.

# Key earnings drivers

Year to 31 March	2006A	2007A	2008CL	2009CL	2010CL
Smart Class schools, EOP	91	331	800	1,500	2,500
Classes per school	15	25	25	25	25
Monthly fee per student	137	128	150	150	150
Students per class	50	45	45	45	45
ICT schools, EOP	700	2,808	8,000	15,000	25,000
Monthly ICT fee (Rs)	25,000	22,379	18,000	18,000	18,000
K-12 schools			5	25	65
Initial utilisation in K-12			50	50	60
Capex (Rsm)	116	639	1,219	3,842	7,186



# **Summary financials**

Year to 31 March Revenue Operating Ebitda Operating Ebit Interest income Interest expense Other items Profit before tax Taxation Minorities and other	2006A 555 267 211 0 (6)	2007A 1,065 503 406	2008CL 2,499 1,187	2009CL 5,749	2010CL 12,164	
Operating Ebitda Operating Ebit Interest income Interest expense Other items Profit before tax Taxation	267 211 0 (6)	503	•		12,164	
Operating Ebit Interest income Interest expense Other items Profit before tax Taxation	211 0 (6)		1 187			
Interest income Interest expense Other items Profit before tax Taxation	0 (6)	406	1,10,	2,874	6,265	
Interest expense Other items Profit before tax Faxation	(6)		967	2,399	5,796	
Other items  Profit before tax  Faxation		0	0	0	0	
Profit before tax Faxation		(13)	(18)	(36)	(198)	
Taxation Taxation	14	49	158	269	177	
	219	442	1,107	2,632	5,775	
1inorities and other	(79)	(159)	(399)	(947)	(2,079)	
	(1)	0	(4)	(186)	(746)	N L LU C CU
Profit	139	283	704	1,499	2,950 <	Near doubling of profit each year ahead.
Summary cashflow forecast (	Rsm)					each year ariead.
Operating Ebit	211	406	967	2,399	5,796	
Depreciation/amort	56	97	220	476	469	
Vorking capital - trade	(74)	(25)	(117)	(492)	(931)	
Other operating items	42	26	116	256	554	
Operating cashflow	235	504	1,185	2,639	5,888	
let interest/taxes/other	(70)	(124)	(259)	(714)	(2,100)	
Cashflow	165	380	927	1,924	3,788	Capex intensity will
Capital expenditure	(162)	(572)	(1,092)	(3,598)	(6,417)	reduce with leasing
Acq/inv/disposals	(26)	(49)	(158)	(269)	(177)	arrangements in place
ree Cashflow	(23)	(241)	(323)	(1,943)	(2,806)	a. a. gements in place
Ord div paid/Other items	544	11	1,290	40	(612)	
Decrease in net debt	521	(230)	968	(1,902)	(3,418)	
Summary balance sheet forec	nact (Dam)					
Cash & equivalents	609	1,432	4,795	2,893	2,175	
•	260	496	981			
Debtors - trade				2,275	4,719	
nventories - trade	0 68	0 115	0 244	536	1 114	
Other current assets	252	727			1,114	Debtor days will reduce
ixed assets			1,599	4,721	10,670	with the shift away fro
ntangible assets	1	1	1	1	1	government business.
Other term assets  Total assets	21	21 <b>2,792</b>	7, <b>641</b>	21	21	
	1,210			10,447	18,699	
Short-term debt	0	0	0	0	0	
Creditors - trade	81	292	659	1,461	2,974	
Other current liabs	106	197	442	991	2,122	
ong-term debt/CBs	110	1,163	3,558	3,558	6,258	
Other long-term liabs	18	0	0	0	0	
Minorities/other equity Shareholder funds	0 895	1,141	2,982	0 4,437	7,344	
otal liabs & equity	1,210	2,792	7,641	10,447	18,699	
• •	_,	_,	2,0.2			
Ratio analysis Revenue growth (%)	67.1	91.8	134.7	130.0	111.6	
Op Ebitda growth (%)	70.6	88.1	136.0	142.1	118.0	Expect 100%+ revenu
Op Ebit growth (%)	100.4	92.5	138.1	147.9	141.6	growth even in FY10.
Op Ebitda margin (%)	48.2	47.2	47.5	50.0	51.5	growth even in F110.
Op Ebit margin (%)	38.0	38.2	38.7	41.7	47.6	
Net profit margin (%)	25.1	26.6	28.2	26.1	24.3	
Dividend payout (%)	17.2	10.8	5.4	2.5	1.3	
ax rate (%)	36.1	36.0	36.0	36.0	36.0	
bitda/net int exp (x)	45.0	37.8	66.0	79.8	31.6	
				79.8 15.0	55.6	
Net debt/equity (%)	(55.7)	(23.6)	(41.5)			
Gross debt/equity (%)	12.3	101.9	119.3	80.2	85.2	
let debt/op Ebitda (x)	(1.9)	(0.5)	(1.0)	0.2	0.7	From a set 11
Gross debt/op Ebitda (x)	0.4	2.3	3.0	1.2	1.0	Expect the return ratio
Return on equity (%)	24.8	27.8	34.2	40.4	50.1 <	to improve.
ROCE (%)	69.8 17.1	71.9 14.1	86.0 13.5	77.9 16.6	72.3 20.2	



Notes



# **Everonn Systems**

# Rs669.6 - UNDERPERFORM

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14 March 2008

# **India**

# **Education**

Reuters Bloomberg EVSI.BO ESIL IN

Priced on 7 March 2008 India Sensex @ 15,975.5

12M hi/lo Rs1,235/140

12M price target ±% potential Target set on Rs680 +2%

9 March 2008

Shares in issue Free float (est.) 13.9m 25.8%

**3M** 

12M

Market cap US\$229m

**3M average daily volume** Rs102.7m (US\$2.6m)

(03

**Major shareholders** Promoters 31.1% Other locked-in shares 43.1%

# Stock performance (%)

Absolute	е	(13.0)	) 1	9.2		0	
Relative		(4.9	) 4	8.9		0	
Abs (US	\$)	(15.0	) 1	5.8		0	
1,300 -	(Rs)			(%)	<b>Г</b> 800		
1,100 -			M		700		
900 -			N	١.	600		
700 -	/A		M	Maril	- 500		
	M.	M	N.	·	- 400		
500 -	70	20	MI		300		
300 -	_		ronn (LH	-	200		
100 -		Rel	to Sense	ex	100		
Jul	07 O	ct 07	Dec 07	Mar	. 08		
Source: Bloomberg							

www.clsa.com

# Portfolio expansion needed

Everonn's distance-education and public-school IT businesses are driving a 65% EPS Cagr over FY08-10. Yet valuations at 46x FY09CL and 30x FY10CL diluted earnings seem to factor this in, making it the most expensive education stock in our coverage. Longer term, its current business only covers a small part of the market, and commoditisation of the public-school IT business and scalability in distance learning are risks. We maintain an Underperform call.

# IT in public schools: Growing, but getting more competitive

While Everonn's public-school IT business is worth a segment of a larger portfolio, we find it difficult to assign valuation premiums given the risk of commoditisation in the L1 bidding process. This segment comprises 65% of the company's revenue, where Educomp and NIIT are its competitors. We expect Everonn to add 3,500 schools per year over the next two years, which should drive a strong revenue growth. However, from a valuation perspective, we do not consider this a unique positioning for any of the players in the field.

# Distance learning: Niche segment, nice positioning

Its Virtual & Technology Enabled Learning Solutions (ViTELS) initiative is unique and differentiates it from peers. Setting up learning centres in schools and colleges (325 on last count), Everonn beams its lectures via VSATs. At a 45% Ebitda margin, this is the more attractive segment of its business, but we see ramp ups beginning to trail earlier expectations. The company's coverage has not changed materially since its initial public offering in July 2007. We are assuming a 150-centre addition each year going forward. A potential alliance with an international player can help rejuvenate the expansion and add expertise on its course coverage.

# Growth in new segments a risk to our view

Everonn has articulated expansion plans into school management as well as vocational training. These may create discontinuities in its future growth model, as these segments are not yet included in our estimates. The company manages one school in Cochin, and plans to expand into schools in industrial townships.

# **Expensive valuations given market coverage**

On current earnings, Everonn is 7% more expensive than Educomp on FY09 earnings, but due to its lower earnings-per-share (EPS) Cagr, it is 36% more expensive on FY10 EPS. While Educomp is also an expensive stock on current fiscal-year multiples, we believe Everonn's portfolio will need to widen into larger market spaces to justify current valuations and give confidence in multi-year secular growth. Its current portfolio is exposed to both commoditisation and scalability risks. We rate the stock an Underperform.

# **Financials**

· manciais					
Year to 31 Mar	06A	07A	08CL	09CL	10CL
Revenue (Rsm)	309	430	818	1,429	2,314
Ebitda (Rsm)	144	176	299	565	913
Net profit (Rsm)	49	49	115	231	360
EPS (Rs)	4.8	4.7	8.3	14.6	22.7
EPS (% YoY)	224.8	(1.0)	76.6	75.9	55.4
PEx (@Rs669.6)	140.2	141.7	80.4	45.9	29.5
ROAE (%)	31.3	17.7	17.7	12.8	12.6
Price/book (x)	38.2	18.8	10.0	4.0	3.5
EV/Op Ebitda (x)	49.2	39.9	30.7	17.4	11.3

Source: CLSA Asia-Pacific Markets



Won 3,156 schools so far

# Valuations need further backing

# IEIS - Institutional education & it infrastructure services

Everonn signs three- to five-year agreements with state governments to install and run computer classes in public schools, mostly on a Boot (build-own-operate-transfer) basis. This business is tender-based and Everonn currently operates 3,156 schools in nine states, compared to 6,004 for Educomp and 3,828 for NIIT. ICT contributes 65% to Everonn's revenue.

India has almost 950,000 schools and more than 200,000 government schools (the cream of the public-school network) are expected to come up for tendering over the next five years. Everonn is one of three players (along with Educomp and NIIT) pursuing the opportunity in this segment. We expect Everonn to add around 3,500 schools each year over the next two years.

ICT market may grow 10x in five years

### **ICT** market-size estimate

	FY08	FY09	FY10	FY11	FY12	FY13
Start of period schools, wired	9,000	16,000	36,000	66,000	106,000	156,000
New bids	7,000	20,000	30,000	40,000	50,000	50,000
End of period schools, wired	16,000	36,000	66,000	106,000	156,000	206,000
Inflow per month per school (Rs)	20,000	20,000	20,000	20,000	20,000	20,000
Annual revenue to providers (Rsm)	3,840	8,640	15,840	25,440	37,440	49,443
Annual revenue to providers (US\$m)	96	216	396	636	936	1,236
YoY %		125	83	61	47	32

Source: CLSA Asia-Pacific Markets

While ICT is a high-growth segment, the high debtor days (upwards of 150) and heavy capex intensity (without commensurate operating leverage) makes this business unattractive compared to more lucrative segments available in India's education space. We find this the less-attractive business segment for its peers NIIT and Educomp as well. However, Everonn has a disproportionate exposure (65% of total revenue) to this segment versus peers, and this needs to change to defend its current valuations.

Capex of Rs1,050m required in ICT in each of the next two years High growth and capex intensity

	FY08CL	FY09CL	FY10CL
No. of schools EOP	3,156	6,656	10,156
No. of schools added	1,237	3,500	3,500
ICT revenue (Rsm)	534	840	1,523
Capex/school (Rsm)	na	0.4	0.4
Capex (Rsm)	na	1,050	1,050

Note: Our key assumption is that 75% of schools added will be on a Boot model with upfront capex paid in equal monthly instalments through the period of the contract. In the remaining 25%, we have assumed that the government will take care of the capex. Source: CLSA Asia-Pacific Markets

Only mainstream player in the space

# Virtual and technology enabled learning solutions (ViTELS)

ViTELS is the more attractive and unique segment of Everonn's portfolio. It provides education and training solutions through satellite-based very-small-aperture terminal (VSAT) technology. Everonn has set up technology-enabled virtual classrooms, ie, Everonn Learning Centres, in more than 300 schools and colleges in India. It also has four studios in Chennai (three more studios are under construction) through which teachers deliver lectures by using VSATs to students sitting in Everonn learning centres. The company employs close to 50 teachers in Vitels.

Everonn invests close to Rs0.25m in setting up one learning centre. If colleges or schools invest a part of the capex, then Everonn shares 15-20% of its revenue with the institution; else, Everonn typically shares 10% of its



revenue with the institution. The average monthly realisation per school student varies from Rs120 to Rs180 and Everonn has a school-student roster of almost 20,000. The absence of quality content has hindered it from making inroads into schools. Thus, the company has now acquired content for schools from ABAN (with more than 6,000 animations) along with a 26-member content team, which should help it penetrate into more schools in the future.

Multimedia in schools is a new wave

### **Multimedia in schools**

Current market (US\$m)

# ChannelsSchools with fees above Rs1,250 per year15,000No. of classes wired per school25No. of students per class45Payment per student per month (Rs)150Market potential (Rsm)30,375Market potential (US\$m)759Current base of schools600

Everonn can extract a pie of this opportunity

Source: CLSA Asia-Pacific Markets, Discussions with professionals in the education industry

International partnerships are likely in vocational training

Everonn runs vocational-training/employability-enhancement courses in more than 190 colleges with a current enrolment of about 4,500 students. Course duration ranges from one to ten months and fees per course may vary from Rs800-Rs25,000, depending on the nature of the course. While the government has increased its focus on vocational training, the real booster for Everonn may come from the government's decision to set up vocational-training centres in government schools/colleges in a public-private partnership (such as ICT). We understand that some of the global education players such as Apollo Group and Raffles Education, which provide vocational education, are keen on entering India, preferably through partnerships with Indian companies. Given Everonn's beachheads in the segment, it may be a potential candidate for such a tie up.

Government participation may result in positive surprises

ViTELS may drive growth but scale up is critical

(Rsm)	FY08CL	FY09CL	FY10CL
No. of classrooms	325	475	625
Average revenue per old classroom		1.35	1.35
Average revenue per new classroom		1.0	1.0
Revenue from ViTELS (Rsm)	284	589	791
Investment per school classroom		0.25	0.25
No. of classrooms added		150	150
No. of studios added		1	2
Investment per studio		15	15
Capex in ViTELS		46	61

Source: CLSA Asia-Pacific Markets

Execution capability will need to be watched

# **Early-stage expansion into newer segments** Schools management

Everonn is aggressively looking to enter the schools business by taking over the management of public schools in operation. It manages a school in Kochi and expects to add two to three more schools to its portfolio. Also, it plans to target schools run in public sector undertaking townships (Sail/Isro) for children of resident-township employees.

# Testing and alliance partner services (Taps)

Everonn designs and delivers customised and standardised testing and assessment services to individuals, educational institutions and corporations.

30



It has tied up with Educational Testing Services (ETS) to administer tests such as TOEFL and GRE. With about 85,000 students taking either one of GRE/GMAT/SAT tests each year, we estimate the test-preparation market size for this segment at US\$20m, out of an overall US\$1.7bn test-preparation market in India. Scalability remains a challenge unless Everonn expands beyond the current repository of tests into more lucrative segments.

We have not factored in contributions from new businesses

Overall, we have not assumed material contributions from new businesses to the revenue over the next two years. We believe this is justified given the lack of visibility on plans as of now. However, this remains a risk to our view.

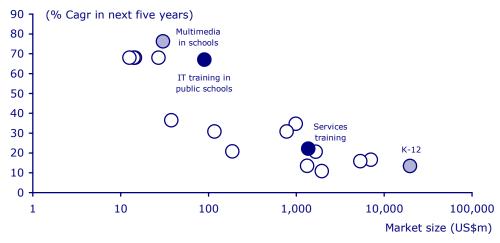
# Mapping within Indian education opportunity could improve

# Everonn's opportunity canvas needs to widen

Currently mapping about US\$1.5bn worth of market segments in the US\$40bn Indian-education market, Everonn has a decent presence in some fast-growing areas such as IT training in public schools and reasonably large areas, eg, vocational and services training. It also intends to get into school management and multimedia education in schools, areas in which we maintain a very positive view.

US\$1.5bn of segments mapped out of a US\$40bn pie

# Everonn's coverage in the Indian-Education space



Source: CLSA Asia-Pacific Markets

High capex intensity is worrying

However, Everonn's high capex intensity stemming from IEIS continues to be an overhang and limits its ability to invest in other areas in our view. Also, it will have to raise capital to meet our 50%+ YoY revenue growth number for the next two years. This makes Everonn's financial metrics inferior to some of the other players in the segment. While upsides may come from increased operating leverage in ViTELS, we will wait for proof of execution before factoring in this. Overall, Everonn's plans need to translate into visible rampups before financial projections can be valued in its new ventures.

ViTELS may drive a positive surprise but current investment thesis looks suboptimal

We rate the stock an Underperform with a target of Rs680, based on the same PE/G as Educomp, which implies a 46x FY09CL/30xFY10CL PE. Though the stock is present in some good segments and attempts to get in a few highly scalable businesses, its expensive valuations without commensurate portfolio coverage, discontinuous earnings growth and execution track record are hindrances to a positive call. Among the risks to our view are:

Joint venture with international players for vocational training, which may reduce capex burden on the company while strengthening its offering.



- □ Ability to raise a large amount of capital at lower rates than our expectations, coupled with increased school wins under IEIS.
- Better-than-expected pick up in ViTELS, leading to high operating leverage and better profitability metrics.

# Financial metrics may lag behind peers

# **Everonn versus peers**

Everonn versus peers	Aptech	Educomp	Everonn	NIIT
Year ending	December	March	March	March
Revenue Cagr (FY08-10CL) (%)	28.8	120.6	68.2	20.8
EPS Cagr (FY08-10CL) (%)	51.6	104.6	65.1	42.6
ROAE (%)				
FY08CL/CY07CL	25.5	34.4	17.8	21.1
FY09CL/CY08CL	36.2	45.4	12.9	25.9
FY10CL/CY09CL	30.6	62.7	12.7	29.8
ROIC (%)				
FY08CL/CY07CL	33.3	47.3	18.2	8.7
FY09CL/CY08CL	61.5	44.8	17.2	12.6
FY10CL/CY09CL	69.2	44.9	15.4	16.7
ROACE (%)				
FY08CL/CY07CL	25.0	21.9	19.8	8.4
FY09CL/CY08CL	37.9	33.0	16.3	13.8
FY10CL/CY09CL	43.3	53.7	16.7	18.5
Ebit margins (%)				
FY08CL/CY07CL	14.0	38.7	23.0	4.9
FY09CL/CY08CL	20.2	41.7	24.2	7.2
FY10CL/CY09CL	24.2	47.6	22.7	9.2
PE (x)				
FY08CL/CY07CL	33.3	91.0	80.4	24.8
FY09CL/CY08CL	17.1	42.8	45.9	17.1
FY10CL/CY09CL	14.5	21.7	29.5	12.2
EV/Ebitda (x)				
FY08CL/CY07CL	31.6	52.9	53.8	47.7
FY09CL/CY08CL	16.7	22.5	36.1	28.2
FY10CL/CY09CL	11.1	10.9	25.4	18.7

Source: CLSA Asia-Pacific Markets

# **Company background**

### A brief timeline of Everonn's history

Everonn: A brie	Everonn: A brief timeline of events						
2000	Formation of Everonn Systems.						
2000	Contract for 332 government schools in Tamil Nadu.						
2002	Partnered with Hughes Net Global Education for bringing management education through virtual classrooms.						
2004	Launched Zebra Kross, a branded virtual-classroom network.						
2005	Test launch of virtual learning at schools and corporations.						
2007	Initial public offering.						

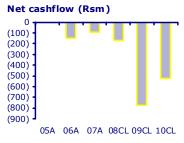
Source: CLSA Asia-Pacific Markets

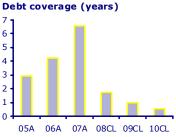


# Risks & drivers













# **Investment by numbers**

Everonn sets up computer labs in government schools under its IEIS unit, which constitutes 65% of FY08CL revenue. At 3,156 schools won, Everonn competes in this space with Educomp (6,000+ schools) and NIIT (3,800). Given that more than 25,000 schools should come up for bids in the coming year, the market is large enough for all players, but economics are weaker owing to intense competition, the price-based bidding process and higher debtor days. We have estimated an addition of 3,500 schools every year for the next two years and Everonn should require at least Rs1,050m of capex per year to fund this expansion.

Everonn's ViTELS initiative is unique, and offers distance-learning lectures via VSAT links into more than 325 centres. We are factoring in a 67% revenue Cagr for ViTELS through FY08-10CL and a 400bp margins expansion in the same the period on the back of higher operating leverage and an addition of 150 Everonn Learning Centres each year.

With new business segments in play, Everonn plans to expand into school management for example, and also into vocational training, possibly in an alliance with an international player. However, we are awaiting proof of concept before assigning this into our forecasts.

# Risks to our view

Everonn has articulated expansion plans into school management and vocational training, which are not part of our estimates. A positive booster from these may propel its growth, thanks to the demand in both spaces. In school management, Everonn plans to take over schools in industrial townships, while in vocational training, an alliance with an international player can kick-start growth with some early credibility.

Everonn may be a beneficiary of the Indian Govenrment's high focus on vocational training in public schools/colleges given its presence in this segment. A better-than expected pick-up in ViTELS can lead to a much better margin profile and profitability metrics. While the recent expansion of the ViTELS footprint seems to have slowed down, there is still a strong demand for the offering, and the group has been articulating greater success in the school segment - current centre mix is 190 colleges, 125 schools and 15 retail centres.

Finally, we have assumed 3,500 ICT wins per year in our numbers. Greater success in this tender-based bidding process may change our forecasts.

# Key earnings drivers

Year to 31 March	2007A	2008CL	2009CL	2010CL
IEIS Schools EOP	1,919	3,156	6,656	10,156
ViTELS installations EOP	-	325	475	625
Capex in IEIS (Rsm)	_	_	1,050	1,050
Capex in ViTELS (Rsm)	_	_	46	61
Revenue/IEIS Schools pm (Rs)	_	_	16,250	16,250
Revenue/ViTELS centre (Rs '000)	-	_	1,350	1350
Total capex (Rsm)	-	350	1,106	1,121



# **Summary financials**

Year to 31 March	2006A	2007A	2008CL	2009CL	2010CL	
Revenue	309	430	818	1,429	2,314	
Operating Ebitda	144	176	299	565	913	
Operating Ebita	98	92	188	345	526	
Interest income	0	0	13	46	52	A 77% earnings Cagr
Interest expense	(16)	(23)	(32)	(36)	(36)	over the next two years
Other items	0	2	0	(10)	(5)	EPS Cagr lower at 65%
Profit before tax	83	71	170	345	537	due to our assumptions of capital raising,
Taxation	(33)	(22)	(54)	(114)	(177)	without which meeting
Minorities and other	0	0	0	0	0	growth targets may be
Profit	49	49	115	231	360	difficult.
						difficult.
Summary cashflow forecast		0.3	100	245	F26	
Operating Ebit	98	92	188	345	526	
Depreciation/amort	46	84	111	220	387	
Norking capital - trade	(35)	(113)	10	(118)	(149)	
Other operating items	(22)	8	0	(10)	(5)	
Operating cashflow	87	<b>71</b>	308	(104)	759	Highly capex-intensive.
Net interest/taxes/other	(24)	(35)	(127)	(104)	(161)	
Cashflow	(217)	(120)	181	(1.106)	598	
Capital expenditure Acg/inv/disposals	(217) 0	(129) 0	(350) 0	(1,106) 0	(1,121)	
Free cashflow	<b>(153)</b>	<b>(93)</b>	<b>(169)</b>	<b>(774)</b>	<b>(523)</b>	
Ord div paid/Other items	1	139	450	1,500	0	
Decrease in net debt	(152)	46	281	726	(523)	
		40	201	720	(323)	
Summary balance sheet for	ecast (Rsm)					
Cash & equivalents	30	42	403	1,129	606	
Debtors - trade	173	280	409	686	1,065	
inventories - trade	3	3	3	3	3	
Other current assets	55	59	59	59	59	
Fixed assets	320	365	605	1,491	2,225	Debtors will remain high
intangible assets	0	0	0	0	0	due to IEIS business.
Other term assets	2	0	0	0	0	
Total assets	584	749	1,478	3,368	3,958	
Short-term debt	0	0	0	0	0	
Creditors - trade	80	74	213	371	601	
Other current liabs	10	20	20	20	20	
ong-term debt/CBs	269	235	315	315	315	
Other long-term liabs	44	54	0	0	0	
Minorities/other equity	0	0	0	0	0	
Shareholder funds	180	366	931	2,662	3,022	Equity dilution necessary
Total liabs & equity	584	749	1,478	3,368	3,958	to finance capex plans.
Ratio analysis						
Revenue growth (%)	59.2	39.2	90.0	74.8	61.9	
Op Ebitda growth (%)	44.3	22.7	69.3	89.3	61.6	
Op Ebit growth (%)	140.2	(6.3)	104.5	83.7	52.4	
Op Ebitda margin (%)	46.5	41.0	36.5	39.5	39.4	
Op Ebit margin (%)	31.7	21.3	23.0	24.2	22.7	
Net profit margin (%)	15.9	11.3	14.1	16.2	15.5	
Dividend payout (%)	0.0	0.0	0.0	0.0	0.0	
Tax rate (%)	40.5	31.5	32.0	33.0	33.0	
Ebitda/net int exp (x)	9.2	7.5	16.3	(58.0)	(57.6)	
Net debt/equity (%)	132.6	52.8	(9.4)	(30.6)	(9.6)	Poor return on equity.
Gross debt/equity (%)	149.1	64.3	33.8	11.8	10.4	Tool recult on equity.
let debt/op Ebitda (x)	1.7	1.1	(0.3)	(1.4)	(0.3)	
Gross debt/op Ebitda (x)	1.9	1.3	1.1	0.6	0.3	
Return on equity (%)	31.3	17.8	17.8	12.9	12.7	
ROCE (%)	30.7	19.3	26.8	24.9	22.8	
Return on assets (%)	11.3	7.3	10.4	9.5	9.8	



Notes



# Rs106.6 - OUTPERFORM

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14 March 2008

# **India**

# **Education**

Reuters Bloomberg

NIIT.NS NNIIT IN

### Priced on 7 March 2008 India Sensex @ 15,975.5

12M hi/lo Rs173/80

12M price target ±% potential Target set on

Rs150 +41% 9 March 2008

**Shares in issue** Free float (est.)

164.6m 69.9%

Market cap

US\$433m

3M average daily volume

Rs139.1m

(US\$3.5m)

# Major shareholders

Promoters 30.1% FIIs 43.7%

Foreign s'holding 43.7%

# Stock performance (%)

4 54

	1M	3M	12M
Absolute	(10.4)	(30.6)	16.9
Relative	(2.0)	(13.2)	(4.5)
Abs (US\$)	(12.5)	(32.6)	27.9
190 <b>)</b> (Rs)		(%)	r <sup>350</sup>
170 -		n A	300
150 -		(1.11. A)	- 250
130 -	6.A	/ W M/ 1	- 250
110 -		, III	200
90 -		γ '	- 150
70 -			

NIIT (LHS) Rel to Sensex Jul 07

Mar 08

Source: Bloomberg www.clsa.com

Nov 06

Mar 06

# Over the hump?

NIIT has done well to ramp up new retail initiatives in services training while maintaining a strong IT-training brand. However, exposure to the US-centric corporate-training market (56% of revenue, 27% of Ebitda) is a risk that will drag the firm's financials for the foreseeable future. Balancing this, are cheaper valuation multiples than peers and likely revival of the school learning business. We maintain our Outperform rating and Rs150 target price, which implies 41% upside.

# New initiatives are going strong, IT training has recovered

New businesses, including its financial-services training initiative (backed by ICICI Bank and HDFC Bank, among others) should contribute c.8% of all revenue by FY10 and see improved profitability towards a high-teen Ebitda margin range by FY10. These are positive moves made in the past two years while the IT training business has recovered to 25-30% growth after the protracted post-2001 slump. Together, these businesses contribute 60% of Ebitda and remain the key future growth drivers.

# Corporate training skews the portfolio away from India

NIIT acquired US-based Element K in August 2006, moving into US corporate training. At 5-8% YoY growth and a 5-8% Ebitda margin, this market remains vulnerable to discretionary-spending cuts. Independent researchers estimate that financial services have the highest cost per person for training but it is difficult to foresee a smooth spending environment in CY08. At 56% of revenue (27% of FY08 Ebitda) and with 94% US exposure, corporate training has left NIIT's portfolio thinly spread within the domestic-education space. This is the key reason for NIIT's lower rating than peers Aptech and Educomp.

# IT in public schools, back in focus after a period of ambivalence

NIIT seems to be back to bidding aggressively for ICT projects in public schools, after a phase of ambivalence when the segment was de-emphasised due to its 'low margins and high debtor days'. After a net loss of 78 schools last year, we expect 2,500 additions in each of FY09 and FY10, with the potential in Andhra Pradesh the first trigger (1,500-2,000 schools).

# Long-term story needs further strengthening

At 17x FY09 and 12x FY10 PE, NIIT is cheaper than its sector peers. While its financials look weaker and may continue to do so into FY10, the trend is upwards. Ebitda margins should expand from 10% in FY08CL to 14-15% in FY10, along with improvement in return ratios. The firm's patchy execution record will need to be addressed before we formulate a longer-term thesis on the stock, although on a 12-month view, it is an Outperform.

# **Financials**

Year to 31 Mar	06A	07A	08CL	09CL	10CL
Revenue (Rsm)	4,507	7,951	9,968	11,906	14,545
Ebitda (Rsm)	611	774	1,029	1,487	2,089
Net profit (Rsm)	400	573	719	1,043	1,470
EPS (Rs)	2.8	3.7	4.4	6.3	8.8
EPS (% YoY)	20.1	33.3	18.0	44.2	40.5
PEx (@Rs106.6)	38.5	28.9	24.5	17.0	12.1
ROAE (%)	15.90	19.70	21.10	25.80	29.80
Price/book (x)	5.8	5.3	4.8	4.0	3.3
EV/Op Ebitda (x)	28.9	26.4	20.6	14.5	10.3

Source: CLSA Asia-Pacific Markets



A strong portfolio of services training

# **Needs to be more India-centric**

NIIT's portfolio of services has improved, but there is room for further improvement. Over the past two years NIIT has ramped up vocational financial-training services (IFBI), management education (Imperia), finishing schools (Edgeineer) and recently acquired Evolv (an English language and communications training firm). On top of these positive moves, the IT-training business has recovered. However, NIIT's portfolio is not taking full advantage of the opportunities in the Indian education space. The corporate-training exposure in the US is one of our primary concerns.

Element K has made NIIT too US-centric . . .

The acquisition of Element K in August 2006, has skewed NIIT's portfolio away from India. Corporate training will contribute 56% of revenue in FY08, with 94% of that coming from the US market. About 60% of the business involves creating custom content and within this, 60% of the work is technology-content development. The remaining 40% of the business includes services like sourcing trainers and induction training. NIIT paid US\$40m for Element K. When acquired, Element K's revenue was US\$80m and the business' Ebitda margin loss stood at 7-8%. Margins have now improved and the corporate-training business should realise a positive 5% Ebitda margin in FY08.

. . . at a time when the best growth opportunities are domestic

### Revenue mix

% of total revenue	FY07	FY08CL	FY09CL	FY10CL
Individual learning	31.1	32.3	33.8	34.5
School learning	10.6	8.9	10.1	12.5
Corporate learning	57.3	55.8	50.5	44.6
New businesses	0.9	3.0	5.7	8.4

Source: CLSA Asia-Pacific Markets

Segmental revenue growth

YY revenue growth (%)	FY07	FY08CL	FY09CL	FY10CL
Individual learning	48	30	25	25
School learning	(28)	5	35	51
Corporate learning	175	22	8	8
New businesses	na	311	125	80
Total	76.5	25.4	19.4	22.2

Source: CLSA Asia-Pacific Markets

Element K brings in the second largest content library in the US (only the merged SkillSoft-NetG entity is bigger) within the NIIT fold. It had 40-50 people maintaining its learning platform in the US and a 30-40 member team in India for content development. Rationalisation of the team, which has included some layoffs in the US, has helped to improve profitability. In FY08, corporate learning should deliver revenues of around US\$135m, of which, US\$95m would come from Element K and the remainder from NIIT's extant corporate training business.

Our research indicates a big education opportunity within India

# Corporate training vulnerable to spending cuts

Our research on the sector indicates a large education opportunity within India, but the Element K acquisition ensures a wider footprint for NIIT outside the domestic market. This portfolio weighting is not ideal, especially given the lacklustre growth of the US market. The most bullish independent estimates put market growth at 8-10% YoY and some are as low as 5%. Moreover, corporate-training budgets come out of human-resources spending, an area



that we would classify as discretionary and therefore vulnerable to spending cuts in a challenging macroeconomic environment.

Will growth continue through a challenging year?

In our view, lacklustre growth in this important segment of NIIT's portfolio is likely to continue, pulling its overall numbers down. While the rest of its businesses could grow at 30% or above over the next two years, corporate training is expected to grow by just 8% YoY and that does not even factor in US economic woes. Indeed, single-digit growth is vulnerable to spending cuts. Some studies indicate that finance and insurance sectors offer the highest per-person training spend at more than US\$1,000 (versus just US\$400-500 for retail). This is especially worrying given the financial sector's current problems in the US.

SME segment growing faster

Apart from overall growth and vulnerability to discretionary budget cuts, there are other challenges. One study indicated that within the overall pie, training outlays at small and medium-sized enterprises grew by 6.5% YoY last year, while large enterprises saw only 3% YoY growth. This indicates that players like NIIT will need to shift some focus into the SME segment, which may demand sales expansion and investments in new technology platforms. Self-study e-learning formed 20% of learning hours last year, up from 15% the year before and much of the increase was driven by smaller organisations with 100-999 employees. NIIT will need to reposition its corporate-learning business within a slow growth and structurally evolving marketplace.

Scattered market drives down margins

We are intrigued that a business that depends on content development (arguably an intellectual property) and training services should deliver only single-digit Ebitda margins. Even assuming a 200bp margin improvement over the next two years, corporate learning's profitability is likely to stay sub-10%, and in our view, this is symptomatic of a challenging competitive dynamic in the space. Some studies indicate that the largest player in the market has a low single-digit market share. Fragmentation, the rise of small and medium-sized clients, increasing use of technology and rapid commoditisation of generic content seem to be discontinuous market trends.

**Segmental Ebitda margins** 

(%)	FY07	FY08CL	FY09CL	FY10CL
Individual learning	17.5	20.0	20.5	21.0
School learning	11.7	14.2	15.7	17.0
Corporate learning	7.8	5.0	6.5	8.0
New businesses	(124.7)	(6.0)	12.5	17.0
Total	10.0	10.3	12.5	14.4

Source: CLSA Asia-Pacific Markets

Several new moves within services training are positive

# New initiatives going strong - IFBI most scalable

NIIT has made some aggressive moves into services and vocational training, and among these, its IFBI initiative is the most interesting.

# Institute of finance, banking and insurance (IFBI)

IFBI addresses the manpower needs of financial-services space in India, where at least two million new jobs are likely to be created between now and 2012. IFBI started in September 2006 and offers a postgraduate diploma in banking operations which includes an internship and placement alliance with ICICI Bank. Since October 2007, IFBI has also allied itself with HDFC Bank. Yes Bank and ICICI Securities are also partner organisations for the business, and we think that the backing of well known names in banking and financial services should draw students under the IFBI umbrella.



High growth in finishing schools

# **Finishing schools**

NIIT offers a six-month programme for engineering graduates. This is a new market that is worth an estimated US\$30m and is growing by 65-70% YoY.

### **Evolv**

Acquisition of English training business

NIIT acquired English-training company Evolv in January 2008. Evolv has a repository of 50 courses. We estimate this market is worth US\$400-500m currently, with competition coming from players such as Veta (175 centres, expanding to 500 by 2010).

### Imperia

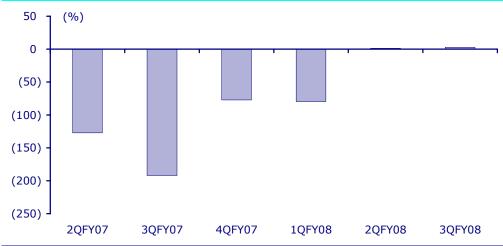
Management education

Imperia provides management education for organisations and working professionals. Some of India's leading MBA institutes such as IIM Ahmedabad and IIM Calcutta are partners and these conduct live classroom sessions for Imperia students. We are less convinced on the scalability of this business, given that the placement track record is unproven. On the other hand, more than 2,000 placements seem to have taken place in the IFBI initiative.

New businesses to form 8% of FY10 revenue We expect new businesses to ramp up to 8% of revenue by FY10, versus 3.2% as of the latest quarter. We also expect Ebitda margins in new businesses to improve to 12.5% in FY09 and 17% in FY10, as the business scales up. Total registrations in IFBI and Imperia totalled 8,600 by end-2007, with more than 85% of these being in IFBI.

# Improving margins in new businesses

New businesses have made positive Ebitda for the past two quarters



Source: CLSA Asia-Pacific Markets

# IT training is growing steadily now

### IT training is recovering

NIIT has a strong presence in IT training worldwide and the market in India has recovered in the last three years since the post-2001 slump and shake-out. IT training revenue will deliver a 25-30% Cagr over the next two years, at Ebitda margins of near 20%. NIIT also has a presence in e-learning. However, our scan of the market indicates that this segment can not become a "game changer" for NIIT, given the size of the domestic market (US\$225m) and NIIT's relatively weaker position in places like China, where Aptech has done very well. Student sentiment around placement prospects from NIIT also waxes and wanes along with sector hiring trends, where the increased propensity of companies to hire from IT graduate courses is a threat to the private diploma that NIIT offers. Nonetheless, the business is healthier than it was and offers consistent growth at stable margins.



# Individual learning, capacity and distribution

	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	3Q08
Total capacity in India (Seat Years)	144,648	150,864	150,696	164,584	167,160	177,240	184,016
Utilisation in India (%)	59	61	47	52	52	66	46
No of centres	725	742	743	757	763	785	796
Owned centres	49	51	51	52	52	52	52
No of centres in India	446	446	442	443	448	469	473
No of centres in China	132	147	152	155	155	159	166

Source: CLSA Asia-Pacific Markets

# NIIT seems to be bidding again for public school projects

# School learning solutions - Ambivalence over?

Over the past 12-18 months, NIIT lost its leading position in ICT (computer labs in public schools) to Educomp. While Educomp added 3,196 schools in the last one year, NIIT was down 78. Management indicated that this was a strategic decision and NIIT claimed that it was moving out of the business owing to its relatively lower margins and higher debtor days. We agree that ICT is not the most attractive business in Indian education and our optimism is based more upon its private sector expansion than it is on the public school space. However, the business does provide scale, it makes 25-30% Ebitda margins, and while debtor days are high, the incidences of bad debt have been low – the long invoicing cycle is natural when working with government.

# Note the Educomp catch-up last year

### **ICT** installations by vendors

	Current	Previous year
Educomp	6,004	2,808
Everonn	3,156	900
NIIT	3,828	3,906
Others	2,012	1,386
Total	15,000	9,000

Source: CLSA Asia-Pacific Markets

In our view, the market for IT in public schools is likely to grow nearly tenfold over FY08-12, and NIIT needs to return to the space more aggressively. The process may already be underway. We hear of a potential 1,500-2,000 school win in Andhra Pradesh state, for example, and this should help to rejuvenate the business after falling behind last year.

# ICT market could grow 10x in five years

### **ICT** market size estimate

	FY08	FY09	FY10	FY11	FY12	FY13
Start of period schools, wired	9,000	16,000	36,000	66,000	106,000	156,000
New bids	7,000	20,000	30,000	40,000	50,000	50,000
End of period schools, wired	16,000	36,000	66,000	106,000	156,000	206,000
Inflow per month per school (Rs)	20,000	20,000	20,000	20,000	20,000	20,000
Annual revenue to providers (Rsm)	3,840	8,640	15,840	25,440	37,440	49,443
Annual revenue to providers (US\$m)	96	216	396	636	936	1,236
%YY		125	83	61	47	32

Source: CLSA Asia-Pacific Markets

Private school business needs to shift away from hardware alone NIIT's school learning business also includes private schools. In the last quarter, about 28% of school learning revenue came from private schools. NIIT has coverage of 940 private schools, but its focus on these has also been on setting up computer labs and (some) multimedia training, in contrast to a more scaled rollout of multimedia inside hundreds of classrooms, a space where Educomp has taken the lead. NIIT has 12-15 pilots running where it is providing similar multimedia services. This business would need a greater management push to make up lost ground and to scale into the more profitable segments – computer labs are a 25-30% margin business, but



multimedia inside classrooms can generate more than 60% Ebitda margins. Challenges include developing enough content to prove a viable counterpoint to the incumbent – potentially an 18-24 month job. Overall, NIIT seems to have realised this and greater efforts are underway in the private-school segment.

School learning solutions for NIIT

Checks - ICT business	FY07	FY08CL	FY09CL	FY10CL
Public schools, end of period	3,906	3,828	6,328	8,828
Additions during the year		(78)	2,500	2,500
Operating margin on older public schools (%)	10	12	12	12
Operating margin on newly-won schools (%)			20	20
Ebitda, private schools (%)	16	19	20	20
Revenue from private schools (%)	29.9	30.5	26.8	22.0

Source: CLSA Asia-Pacific Markets

Stock is at 25x FY09, pure education earnings (ex-NIIT tech)

# 25% stake in NIIT Technologies

NIIT Technologies contributes nearly 49% of FY08 NIIT net profit. At US\$161m market cap for NIIT Tech, this contributes Rs9.8 per share to NIIT's value. Removing the NIIT Tech impact on the stock price and profits, we note that education profits are being valued at 25x FY09 PE already, versus the 17x multiple on consolidated profit. On the positive side, a stake sale in NIIT Tech should help to generate cash for future capex. For example, NIIT would need US\$30m in capex for FY09-10 if it wins 2,500 ICT schools per year and the NIIT Tech inflow could help to fund this. NIIT will also need to expand its footprint in new initiatives by opening more centres – across the IFBI, Imperia, finishing schools and Evolv (English training) segments.

# **NIIT minus NIIT Tech**

Market cap (US\$m)	
NIIT	433
NIIT Tech	c. 161
NIIT's stake in NIIT Tech (%)	25
Value for NIIT	40
Per share value (Rs)	9.8
Current share price for NIIT (Rs)	107.8
Share price ex-NIIT Tech (Rs)	98
Market cap of NIIT ex-NIIT Tech (Rsm)	16,170
FY09 net profits, ex-NIIT Tech, (Rsm)	658
FY09 PE, ex-NIIT Tech (x)	24.6

Source: CLSA Asia-Pacific Markets

# NIIT's map across the opportunity space

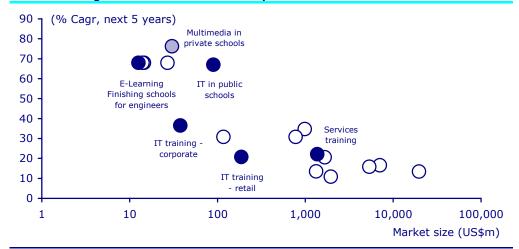
Mapping within India's education opportunity is still sub-optimal

In our view, NIIT currently maps just US\$2bn of India's US\$40bn education market. On the positive side, it has a presence in some fast-growing areas, such as ICT in public schools. It is also involved in E-learning and finishing schools, as well as in reasonably large services and vocational training opportunities. While NIIT's return ratios, growth and margins are likely to trail sector peers given the drag from corporate training in the US, the direction is likely to be upward. We expect ROAE to improve from 21% in FY08CL to around 30% in FY10, ROIC to reach 17% (versus 8-9% in FY08) and margins to improve as well.



# NIIT has exposure to just US\$2bn of the US\$40bn pie

# NIIT's coverage of the Indian education space



Source: CLSA Asia-Pacific Markets

NIIT's financial metrics could lag peers

# **NIIT** versus peers

Year end	Aptech Dec	Educomp March	Everonn March	NIIT March
Revenue Cagr (FY08-10CL) (%)	28.8	120.6	68.2	20.8
EPS Cagr (FY08-10CL) (%)	51.6	104.6	65.1	42.6
ROAE (%)				
FY08CL/CY07CL	25.5	34.4	17.8	21.1
FY09CL/CY08CL	36.2	45.4	12.9	25.9
FY10CL/CY09CL	30.6	62.7	12.7	29.8
ROIC (%)				
FY08CL/CY07CL	33.3	47.3	18.2	8.7
FY09CL/CY08CL	61.5	44.8	17.2	12.6
FY10CL/CY09CL	69.2	44.9	15.4	16.7
ROACE (%)				
FY08CL/CY07CL	25.0	21.9	19.8	8.4
FY09CL/CY08CL	37.9	33.0	16.3	13.8
FY10CL/CY09CL	43.3	53.7	16.7	18.5
EBIT Margins (%)				
FY08CL/CY07CL	14.0	38.7	23.0	4.9
FY09CL/CY08CL	20.2	41.7	24.2	7.2
FY10CL/CY09CL	24.2	47.6	22.7	9.2
PE (x)				
FY08CL/CY07CL	33.3	91.0	80.4	24.8
FY09CL/CY08CL	17.1	42.8	45.9	17.1
FY10CL/CY09CL	14.5	21.7	29.5	12.2
EV/Ebitda				
FY08CL/CY07CL	31.6	52.9	53.8	47.7
FY09CL/CY08CL	16.7	22.5	36.1	28.2
FY10CL/CY09CL	11.1	10.9	25.4	18.7
PE/G				
FY09CL/CY08CL	0.33	0.41	0.71	0.40
FY10CL/CY09CL	0.28	0.21	0.45	0.29

Source: CLSA Asia-Pacific Markets, Bloomberg



YTD stock correction provides rebound options

# Set to Outperform

NIIT's 30%+ correction this year makes the stock a candidate for a rebound, and it remains a well-recognised brand. Still, NIIT's long-term value creation thesis appears weaker than those of some of its peers and we rate the stock an Outperform, a notch lower than our ratings on Educomp and Aptech.

Our forecasts assume nearly all of the guidance from the company on financial improvements, including continued growth in corporate training, together with margin expansion in the business, revitalisation of the public-school ICT business at better profit margins, continued growth in IT training with slightly improving margins and explosive expansion of the new businesses with improving profitability. These remain risks, especially in light of NIIT's mixed execution record. Among the positive factors that could improve long-term fundamentals, we would include the following:

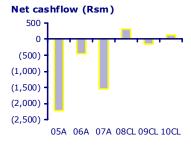
- □ **Demerger of the corporate-training business.** This could allow investors an opportunity to invest in a more "India centric" growth story, and remove a potentially cyclical business component, which is also the lowest-margin segment in the portfolio currently.
- □ Sale of 25% stake in NIIT Tech. If this happens at a substantial premium to current prices it could help NIIT to raise cash for faster expansion. The cash infusion could accelerate centre expansion for services training, for example.
- □ **Faster expansion in new businesses.** This could drive better profitability. Among these, IFBI is the biggest candidate for a positive surprise, given that brand names in the space (ICICI Bank, HDFC Bank, Yes Bank among others) have lent formal support to the initiative. This could also draw more students into the fold.
- □ **Faster win rate in ICT.** Given that tens of thousands of schools are currently under bids, NIIT can win a larger share than our current assumption of 2,500 per year.

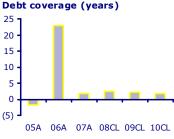


# Risks & drivers



# Op profit (Rsm) 1,600 1,400 1,200 1,000 800 600 400 200 05A 06A 07A 08CL 09CL 10CL









# **Investment by numbers**

NIIT has moved beyond its IT training roots to encompass corporate training (56% of revenue, 94% from US, 5-6% Ebitda margins), vocational training (financial services through IFBI, MBA through Imperia brands, and IT finishing schools through Edgeineers). It has also acquired a stake in Evolv, an English-language training and communications training business. These new initiatives are set to ramp up to 8% of total revenue by FY10CL. Ebitda break-even in new businesses happened two quarters ago and we expect margins to improve at the Ebitda level from 2-3% currently to 12.5% in FY09 and 17% in FY10.

In IT training, NIIT has a long standing and well known brand in India. It operates via 796 centres, of which 473 are in India, 166 in China and the others spread across ASEAN, Africa and other regions. NIIT is #1 in IT training in India and #3 in China with an 8% market share in the latter.

NIIT also offers school learnings solutions of which 72% is IT labs in public schools. After an year of apparent de-focusing on this business, NIIT is back to bidding aggressively for government contracts. Across 940 private schools, NIIT provides IT training and some curriculum based content on CDs. 12-15 pilots are running to test multimedia content within the classroom channels.

# Risks to our view

NIIT has had a volatile few years on macro and company-specific issues. On the macro side, the IT-training market is cyclical with growth trends in the industry. For example, NIIT faced a protracted slowdown after the 2001 tech slump. The rise of graduate courses in IT opened an alternative for students who were outside the four-year degree programme in engineering, reducing the attractiveness of private diploma providers such as NIIT.

But there have been company issues too. NIIT has entered several segments without achieving scale in many. For example, NIIT has been in training for call-centre agents, and ERP professionals in the past. NIIT has not tapped the China market deeply enough, where peer Aptech seems to have done better. Despite its two-decade-plus branding lead, NIIT was slower to recognise the shift in market opportunity towards schools. In public schools, NIIT has had a few changes in strategy in the past 18 months.

NIIT's cheaper valuation and improving financial profile mean it could outperform, but we are not convinced on the longer-term story. Execution risk remains.

# **Key earnings drivers**

Year to 31 March	2007A	2008CL	2009CL	2010CL
Govt schools EOP	3,906	3,828	6,328	8,828
Monthly realisation/govt school (Rsm)			14,532	15,676
Private schools EOP	806	940	1,140	1,440
Monthly realisation/pvt school (Rsm)	26,000	26,000	26,000	26,000



# **Summary financials**

Year to 31 March	2006A	2007A	2008CL	2009CL	2010CL	
Revenue	4,507	7,951	9,968	11,906	14,545	
Operating Ebitda	611	774	1,029	1,487	2,089	
Operating Ebit	238	302	485	854	1,342	
Interest income	85	116	95	84	97	Revenue growth
Interest expense	(57)	(172)	(190)	(172)	(186)	somewhat pulled down
Other items	164	331	357	392	430	by the corporate training
Profit before tax	429	577	746	1,158	1,683	business.
Taxation	(29)	(4)	(27)	(115)	(213)	
Minorities and other	0	0	0	0	0	
Profit	400	573	719	1,043	1,470	
Summary cashflow forecast	t (Rsm)					
Operating Ebit	238	302	485	854	1,342	
Depreciation/amort	374	473	545	633	747	
Working capital - trade	(339)	1,337	189	(169)	(257)	
Other operating items	(224)	(550)	(227)	(97)	(158)	
Operating cashflow	49	1,561	992	1,221	1,674	Expansion in governmen
Net interest/taxes/other	(2)	(60)	(122)	(203)	(302)	schools business could
Cashflow	47	1,502	869	1,018	1,372	increase capex
Capital expenditure	(522)	(2,933)	(700)	(1,263)	(1,263)	requirements.
Acq/inv/disposals	188	119	357	392	430	. Squi ciricitoi
Free Cashflow	(286)	(1,312)	526	147	539	
Ord div paid/Other items	(100)	(210)	(204)	(297)	(419)	
Decrease in net debt	(386)	(1,522)	322	(150)	121	
Summary balance sheet for	ecast (Rsm)					
Cash & equivalents	650	736	415	465	735	
Debtors - trade	1,895	2,204	2,731	3,588	4,782	
Inventories - trade	88	132	132	132	132	
Other current assets	664	1,438	1,727	2,004	2,381	
Fixed assets	1,387	3,847	4,002	4,632	5,147	
Intangible assets	0	0	0	0	0	Debtor days could
Other term assets	420	693	692	692	692	increase driven by
Total assets	5,105	9,050	9,699	11,512	13,870	expansion in governmen
Short-term debt	0	0	0	0	0	schools business.
Creditors - trade	1,132	2,823	3,539	4,227	5,164	
Other current liabs	157	381	442	622	842	
Long-term debt/CBs	1,090	2,698	2,055	2,255	2,405	
Other long-term liabs	0	0	0	0	0	
Minorities/other equity	57	4	4	4	4	
Shareholder funds	2,669	3,145	3,659	4,405	5,456	
Total liabs & equity	5,105	9,050	9,699	11,512	13,870	
Ratio analysis						
Revenue growth (%)	13.1	76.4	25.4	19.4	22.2	
Op Ebitda growth (%)	24.9	26.6	33.0	44.5	40.4	
Op Ebit growth (%)	64.8	26.8	60.7	76.3	57.1	While corporate training
Op Ebitda margin (%)	13.6	9.7	10.3	12.5	14.4	will continue to contract
Op Ebit margin (%)	5.3	3.8	4.9	7.2	9.2	margins, the trend is
Net profit margin (%)	8.9	7.2	7.2	8.8	10.1	upwards, with Ebitda
Dividend payout (%)	36.5	29.1	28.5	28.5	28.5	margins expanding each
Tax rate (%)	6.8	0.6	3.7	9.9	12.7	year ahead.
Ebitda/net int exp (x)	(22.2)	13.8	10.8	16.8	23.3	
Net debt/equity (%)	16.2	62.3	44.8	40.6	30.6	
Gross debt/equity (%)	40.0	85.7	56.1	51.1	44.0	
Net debt/op Ebitda (x)	0.7	2.5	1.6	1.2	0.8	
Gross debt/op Ebitda (x)	1.8	3.5	2.0	1.5	1.2	
Return on equity (%)	15.9	19.7	21.1	25.9	29.8	Return ratios could
ROCE (%)	14.3	15.3	16.2	21.7	26.6	improve but execution is
Return on assets (%)	9.0	8.1	7.7	9.8	11.6	critical.



How would a school's income statement look if it were a company?

# Appendix 1: Modelling a school

# Simulation 1: School is a profit making company

Schools in India work on a two-tier structure of (i) a non-profit trust, and (ii) profits at the suppliers' end. For this model, let us assume a K-12 school is a profit-making entity and owns the land on which it is built. For a first look at fundamentals, this helps simplify the picture somewhat. Our assumptions also include distribution of schools between tiers of cities. For example, a Tier-1 city, where real estate prices are high, would likely make do with 2.5 acres at a cost of Rs20m per acre, while in a Tier-2 city a school might cover 3.5 acres at Rs10m per acre. We have assumed 50% of schools in Tier-1 cities, 30% in Tier-2 and the remainder in Tier-3 cities.

### Rs42m average land cost

### Cost of land

(Rsm per acre)	Cost	%
Tier-1 city	20.0	50
Tier-2 city	10.0	30
Tier-3 city	5.0	20
CLSA assumption	14.0	

Source: CLSA Asia-Pacific Markets

### Area of land

	Acres	%
Tier-1 city	2.5	50
Tier-2 city	3.5	30
Tier-3 city	4.0	20
CLSA assumption	3.0	

Source: CLSA Asia-Pacific Markets

Among the other assumptions, the following are important:

- Number of students: A school starts off till Grade 6 in the first year, expands into Grades 8, 10 and 12 by years 2, 3, 4. There are four sections per grade and a peak of 45 students per section implying capacity of 2,160 students per school.
- **□ Fees:** Tuition is Rs3,000pm, and the one time admission fee is Rs25,000.
- □ **Salaries:** The average salary of a teacher is Rs12,000pm, plus allowances equivalent to 12% of salary. Wages rise 8% per year. Tuition fees rise 5% per year. There are two teachers per class, ie a peak of 96 teachers, and a student teacher ratio of 23 at peak capacity. Support staff of 50 (at peak) with average salary of Rs5,000 per month.
- We have assumed Rs700 as the cost of construction per square foot. This is lower than an upper end apartment complex for example, but broadly similar to lower cost housing. We think this cost is justified as several facilities in a school are shared and quality of fittings (flooring for example) need not be as opulent.

40%+ IRR

Our calculations indicate an IRR of at least 40-42% and a payback period of under four years for a K-12 school with the above dynamics. Return on invested capital crosses 40% in the third year of operation, and can go up to 60-65% as the school reaches full capacity. Clearly, running a school can be extremely profitable, even if we reduce tuition to Rs1,500 or less. We believe there would be at least 15,000-20,000 private schools in India generating a reasonable surplus.



Need Rs145m to set up a school

_			(D)
Labex	per	scnoo	l (Rsm)

capex per seriou (Ksiii)	
Land	
Acres	3.0
Rsm per acre	14.0
Cost of land	42.0
1 acre = sf	43,560
Number of sf	130,680
Cost (Rs psf)	321.4
Building	
Sqft needed per student	50.0
Cost of building psf (Rs)	700.0
Total sf needed	108,000
Cost of building	75.6
Computers	
Number of computers needed	75
Cost per computer (Rs)	50,000
Computer cost	3.8
Computer cost per student (Rs)	1,736
Other equipment	
Furniture cost per student (Rs)	2,000
Science lab equipment cost per student (Rs)	2,500
Sports equipment cost per student (Rs)	2,000
Total cost per student of other equipment (Rs)	6,500
Total cost of other equipment	14.0
Library books (10,000 books @Rs500 each)	5.0
Other contingency costs	5.0
Total capex needed	145.4

Source: CLSA Asia-Pacific Markets, Discussions with professionals running schools

# **Capex outflow**

# Typical completion and capex schedule (Rsm)

Years	0	1	2	3
Land	42.0			
Building % completion (based on next year enrolment)	33	52	74	100
Building cost	25.2	14.0	16.8	19.6
Computers	1.3	0.7	0.8	1.0
Other equipment	4.7	2.6	3.1	3.6
Library	1.7	0.9	1.1	1.3
Other costs	2.5	2.5	-	-
Total capex, initial	77.3	20.7	21.9	25.5

Source: CLSA Asia-Pacific Markets, Discussions with professionals running schools

Thousands of private schools in India should be generating a surplus

# Surplus under scenarios of teacher salary and monthly tuition fee

# Average base salary of a teacher per month (12% allowances not included)

		(12 % anomanoes not meradea)										
		10,000	12,000	14,000	16,000	18,000						
	1,250	22	13	4	(5)	(14)						
	1,500	35	27	19	12	4						
	1,750	44	38	31	24	17						
Monthly	2,000	51	45	39	33	27						
tuition fee	2,250	57	52	46	41	36						
(Rs)	2,500	62	57	52	47	42						
	2,750	66	61	57	52	48						
	3,000	69	65	61	56	52						
	3,250	72	68	64	60	56						

Source: CLSA Asia-Pacific Markets, Discussions with professionals running schools



Years (Rsm)	1	2	3	4	5	6	7	8	9	10	11	12
Upper standard	6	8	10	12	12	12	12	12	12	12	12	12
Classes per standard	4	4	4	4	4	4	4	4	4	4	4	4
Students per class	30	35	40	45	45	45	45	45	45	45	45	45
Total students	720	1,120	1,600	2,160	2,160	2,160	2,160	2,160	2,160	2,160	2,160	2,160
Tuition fee per month (Rs)	3,000	3,150	3,308	3,473	3,647	3,829	4,020	4,221	4,432	4,654	4,887	5,131
One time joining fee (Rs)	25,000	26,250	27,563	28,941	30,388	31,907	33,502	35,178	36,936	38,783	40,722	42,758
Tuition revenues	25.9	42.3	63.5	90.0	94.5	99.2	104.2	109.4	114.9	120.6	126.7	133.0
Admissions per year - start up effect	720	400	480	560	_	-	-	-	-	-	-	-
Admissions per year - recurring		140	160	180	180	180	180	180	180	180	180	180
Admission fee	18.0	14.2	17.6	21.4	5.5	5.7	6.0	6.3	6.6	7.0	7.3	7.7
Total revenue	43.9	56.5	81.1	111.4	100.0	105.0	110.2	115.7	121.5	127.6	134.0	140.7
Teachers per class	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Total teachers	48	64	80	96	96	96	96	96	96	96	96	96
Student - teacher ratio	15	18	20	23	23	23	23	23	23	23	23	23
Average pay of a teacher, Rs p.m.	12,000	12,960	13,997	15,117	16,326	17,632	19,042	20,566	22,211	23,988	25,907	27,980
Allowances etc. (@12%)	1,440	1,555	1,680	1,814	1,959	2,116	2,285	2,468	2,665	2,879	3,109	3,358
Total salary per teacher, Rs p.m.	13,440	14,515	15,676	16,931	18,285	19,748	21,328	23,034	24,877	26,867	29,016	31,337
Salary cost for teachers	7.7	11.1	15.0	19.5	21.1	22.7	24.6	26.5	28.7	31.0	33.4	36.1
Number of support staff	25	30	35	40	45	50	50	50	50	50	50	50
Average salary p.m. for support staff, Rs pm	5,000	5,250	5,513	5,788	6,078	6,381	6,700	7,036	7,387	7,757	8,144	8,552
Allowances etc. (@12%)	600	630	662	695	729	766	804	844	886	931	977	1,026
Total salary per support staff, Rs pm.	5,600	5,880	6,174	6,483	6,807	7,147	7,505	7,880	8,274	8,687	9,122	9,578
Salary cost for support staff	1.7	2.1	2.6	3.1	3.7	4.3	4.5	4.7	5.0	5.2	5.5	5.7
Total salary costs	9.4	13.3	17.6	22.6	24.7	27.0	29.1	31.3	33.6	36.2	38.9	41.8
% of revenue	21	23	22	20	25	26	26	27	28	28	29	30
Annual kWH usage per class room	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Cost per kWH	7.0	7.4	7.7	8.1	8.5	8.9	9.4	9.8	10.3	10.9	11.4	12.0
Electricity cost, Rsm	0.7	0.9	1.2	1.6	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3
% of revenue	1.5	1.7	1.5	1.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
% of students coming by bus	20	25	30	35	40	45	50	55	60	60	60	60
Number of students coming by bus	144	280	480	756	864	972	1,080	1,188	1,296	1,296	1,296	1,296
Number of buses plying	4	7	12	19	22	25	27	30	33	33	33	33
Bus cost, Rs m	1.0	1.8	3.0	4.8	5.5	6.3	6.8	7.5	8.3	8.3	8.3	8.3
Bus cost per student per month, Rs	579	521	521	524	530	536	521	526	530	530	530	530
Recovered from parents	300	300	300	300	300	300	300	300	300	300	300	300
Bus subsidy	0.5	0.7	1.3	2.0	2.4	2.8	2.9	3.2	3.6	3.6	3.6	3.6
% of revenue	1.1	1.3	1.6	1.8	2.4	2.6	2.6	2.8	2.9	2.8	2.7	2.5
Overheads	8.2	8.6	9.1	9.5	10.0	10.5	11.0	11.6	12.2	12.8	13.4	14.1
% of revenue	18.7	15.3	11.2	8.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Ebitda	25.1	32.9	51.9	75.7	61.2	63.0	65.5	67.8	70.2	73.0	75.9	78.9
Ebitda (%)	57	58	64	68	61	60	59	59	58	57	57	56
Depreciation	4.7	6.1	9.2	7.6	6.2	6.7	5.5	5.0	5.9	4.9	4.2	5.6
Ebit	20.4	26.8	42.7	68.1	55.0	56.2	59.9	62.8	64.3	68.1	71.7	73.3
Ebit (%)	46	47	53	61	55	54	54	54	53	53	54	52
Interest Income	1.3	2.1	3.1	5.7	9.7	13.7	18.0	22.6	27.3	32.7	38.8	44.8
Pre-tax profit	21.7	28.9	45.9	73.8	64.7	70.0	78.0	85.3	91.6	100.8	110.5	118.1
% margin	49	51	57	66	65	67	71	74	75	79	82	84
Tax	(7.4)	(9.8)	(15.6)	(25.1)	(22.0)	(23.8)	(26.5)	(29.0)	(31.1)	(34.3)	(37.6)	(40.1)
Net profit	14.3	19.1	30.3	48.7	42.7	46.2	51.5	56.3	60.5	66.5	72.9	78.0
Net %	33	34	37	44	43	44	47	49	50	52	54	55
Cash surplus	19.0	25.2	39.5	56.4	49.0	52.9	57.0	61.4	66.3	71.5	77.1	83.5
ROACE (%)	24	26	34	42	29	26	25	23	21	21	20	19
ROIC (%)	18	21	29	43	37	39	44	48	50	55	63	64

Source: CLSA Asia-Pacific Markets, Discussions with professionals running schools

Real life structures are two tiered

# Simulation 2: Non-profit trust, liaises with suppliers

In real life, given that most schools are structured as non-profit trusts, the surplus retained within the trust is only marginal, perhaps 0-5% of the total annual income from tuition and admissions. Profit is made at the supplier level, from school management to equipment provision.



Services can be priced on a per student per month basis School management could include security, student supervision and monitoring, teacher training, examinations, educational tours and the holding of parent-teacher meetings. Within technology services, suppliers could provide school management (database) software, library management software, setting up and maintaining the computer room, hosting and maintaining the school web portal or the alumni portal. Payments could be made to intellectual property, which includes brand licensing payments, lesson plans, textbooks, specific methodologies at the preschool level, online tutoring and lesson help services (access). Payments could also be made for multimedia content within the classroom, such as Smart Class, a product of Educomp. Most of these services can be converted to a charge per student per month.

Lease costs

Land used by the school is also usually leased, typically for an amount equivalent to 14-15% of the school's capex, plus a service fee, which could be 4-5% of annual collections from tuitions and admissions. The service fee goes partly to such items as maintenance services for the school buildings. Adding the numbers, we note that for each US\$100 collected by the school, US\$40 is running costs, US\$22 for the land lease, US\$36 to suppliers, and US\$2 is retained. The trust makes no or very little money.

Only 2% surplus retained in school trust

Payment structures	
(Rsm)	
Steady state revenue per year, per school	120.0
Steady state Ebit (surplus) per year per school (%)	60
Fee to suppliers, per month per student (Rs)	
IPR related fees	600
Technology related services	300
School management services	600
Multimedia education product inside the classroom	150
Total fee per month per student (Rs)	1,650
Total fee for all students	43
% of school collections	36
Fee to lessor	
Lease rental = 14.5% of capex	21
Fee revenue = 4.5% of collections	5
Total payment to lessor	26
% of school collections	22
Total payment to suppliers (%)	58
Surplus left in school trust (%)	2
Source CLSA Asia Pacific Markets Discussions with professionals rupping schools	

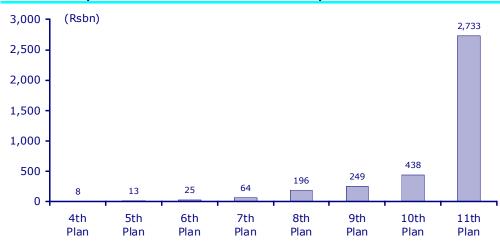
Source: CLSA Asia-Pacific Markets, Discussions with professionals running schools



Renewed focus on education in 2007-12

# Appendix 2: Key educational data

Planned outlay on education to increase substantially in 11th Five-Year Plan



Note: 11th plan numbers are preliminary. Source: CLSA Asia-Pacific Markets, Planning Commission India

"Education for all" programme takes centre-

# Financial projections for 11th Five-Year Plan

Programmes	Outlay (Rsbn)
Sarva Shiksha Abhiyan	720
Lunchl	481
Others (ongoing)	128
New initiatives	341
Merit scholarship	17
Success programme	163
Inclusive expansion in higher education	154
Others (ongoing higher education)	244
New initiatives - Higher education	486
Total	2,733

Source: CLSA Asia-Pacific Markets, Planning Commission India

# Free and compulsory education for 6-14yr age

group

Special focus on education for girls and those with special needs

# Sarva Shiksha Abhiyan

Sarva Shiksha Abhiyan (SSA, or "education for all") is a flagship programme of the Government of India aimed at achieving universal education as mandated by the 86th amendment to the Constitution. This amendment makes free education of children aged 6-14 (some 205 million in number as of 2001) a fundamental right. SSA aims to achieve this goal by 2010.

The programme seeks to open new schools in those habitations which do not have schooling facilities and strengthen existing school infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant and school improvement grants. Existing schools with inadequate teacher strength are provided with additional teachers, while the capacity of existing teachers is being strengthened by extensive training, grants for developing teaching-learning materials and strengthening of the academic support structure at a cluster, block and district level. SSA seeks to provide quality elementary education including life skills. SSA has a special focus on girls' education and children with special needs. SSA also seeks to provide computer education to bridge the digital divide. The financial assistance under the programme of SSA was on a 85:15 sharing arrangement (85% Central government, 15% states) during the Ninth Five-Year Plan, and moved to 75:25 during the 10<sup>th</sup> Five-Year Plan, with 50:50 thereafter.



# Dramatic rise in outlay for Sarva Shiksha Abhiyan

# Outlay on Sarva Shiksha Abhiyan to rise

(Rsbn)	Outlay on education	Outlay on SSA	Expenditure
10th Plan (2002-07)	438.2	170.0	280.8
11th Plan (2007-12)	2,733.3	720.0	

Source: CLSA Asia-Pacific Markets, Department of Education, Planning Commission India

# **Education cess**

# Education cess helps raise funds

An education cess at the rate of 2% of the aggregate duties of customs, excise and service tax was imposed as part of the finance bill introduced in Jul'04 to fund basic education in India. An additional 1% cess called "Secondary and Higher Education Cess" was imposed on customs and excise duty to fund the expansion of capacity in institutions for higher education.

Collections from education cess have risen significantly

(Rsbn)	Education cess	<u> </u>	Total
	Direct tax	Indirect tax	
FY07	40.3	46.42	86.7
FY06	32.13	44.24	76.4
FY05	18.04	25.14	43.2

Source: CLSA Asia-Pacific Markets, Government of India Ministry of Finance

# School enrolment in India

(m)	Primary (Grades 1-5)		Middle	(Grades 6	5-8)	Secondar	y (Grades	9-12)	Tota	l enrolme	ent	
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1950-51	13.8	5.4	19.2	2.6	0.1	2.6	1.3	0.2	1.4	17.6	5.6	23.2
1951-52	13.8	5.5	19.3	3.0	0.7	3.7	1.7	0.3	1.9	18.5	6.4	24.9
1956-57	18.5	8.3	26.7	3.6	1.0	4.6	2.0	0.4	2.4	24.1	9.7	33.8
1961-62	26.0	13.1	39.1	5.6	1.9	7.5	3.0	0.7	3.7	34.6	15.7	50.3
1969-70	34.8	20.7	55.5	9.3	3.7	13.0	5.5	1.8	7.3	49.5	26.2	75.7
1974-75	40.3	24.6	64.9	10.6	4.8	15.4	6.5	2.4	8.9	57.3	31.8	89.1
1980-81	45.3	28.5	73.8	13.9	6.8	20.7	8.4	3.5	11.9	67.6	38.8	106.4
1985-86	52.3	35.2	87.4	17.7	9.6	27.3	11.5	5.0	16.5	81.5	49.8	131.3
1992-93	60.5	44.9	105.4	23.7	15.0	38.7	15.0	7.7	22.7	99.2	67.6	166.8
1995-96	62.4	47.4	109.8	25.0	16.0	41.0	16.1	8.8	24.9	103.5	72.2	175.7
1996-97	62.5	47.9	110.4	24.7	16.3	41.0	17.2	9.8	27.0	104.4	74.0	178.4
1997-98	61.2	47.5	108.7	23.7	15.8	39.5	17.1	10.2	27.2	102.0	73.5	175.4
2002-03	65.1	57.3	122.4	26.3	20.6	46.8	19.5	13.7	33.2	110.8	91.6	202.4
2004-05	70.0	61.0	131.0	29.0	23.0	52.0	21.0	15.0	36.0	120.0	99.0	219.0

Distribution of schools by management type

(%)		Primary		Uţ	per Primary		Secondary		
	Govt + local body	Private (aided)	Private (unaided)	Govt + local body	Private (aided)	Private (unaided)	Govt + local body	Private (aided)	Private (unaided)
1973-74	93.3	5.0	1.6	77.6	17.8	4.7	37.4	57.0	5.6
1978-79	94.0	4.4	1.6	78.4	16.9	4.7	39.2	57.3	3.6
1986-87	93.1	4.3	2.6	75.1	16.3	8.6	45.2	44.8	10.0
1993-94	92.1	3.8	4.1	79.5	9.5	11.0	47.1	37.8	15.2
1996-97	91.7	3.3	5.0	75.5	10.3	14.2	45.7	36.2	18.1
1997-98	91.3	3.8	4.1	74.5	9.7	15.9	45.8	34.9	19.4
1998-99	91.3	3.3	5.5	74.0	9.2	16.8	45.2	34.1	20.7
2001-02	90.9	3.1	6.0	76.4	7.8	15.8	42.5	34.0	23.6
2002-03	88.8	3.6	7.6	72.6	7.4	20.1	42.8	29.3	28.0
2003-04	90.7	2.9	6.5	72.3	6.7	21.0	39.3	28.7	32.0
2004-05	90.2	2.6	7.2	72.2	6.4	21.4	41.1	29.4	29.6

Source: CLSA Asia-Pacific Markets, Department of Education



# **Educational institutions in India**

	Primary	Upper Primary	High/Inter/Pre Deg/Jr College	Colleges for general education	Colleges for professional education	Universities
1950-51	209,671	13,596	7,416	370	208	27
1956-61	278,135	21,730	10,838	466	218	31
1960-61	330,399	49,663	17,329	967	852	45
1965-66	391,064	75,798	27,614	1,536	770	64
1970-71	408,378	90,621	37,051	2,285	992	82
1975-76	454,270	106,571	43,054	3,667	3,2761	101
1980-81	494,503	118,555	51,573	3,421	3,542 <sup>1</sup>	110
1985-86	528,872	134,846	65,837	4,067	1,533¹	126
1990-91	560,935	151,456	79,796	4,862	886	184
1991-92	566,744	155,926	82,576	5,058	950	196
1992-93	572,541	153,921	84,086	5,334	989	207
1993-94	572,923	155,707	88,411	5,639	1,125	213
1994-95	581,305	163,605	92,252	6,089	1,230	219
1995-96	590,421	171,216	98,134	6,569	1,354	226
1996-97	598,354	176,772	102,183	6,759	1,770	228
1997-98	610,763	185,506	107,100	7,199	2,075	229
1998-99	628,994	193,093	112,050	7,494	2,113	237
1999-00	641,695	198,004	116,820	7,782	2,124	244
2000-01	638,738	206,269	126,047	7,929	2,223	254
2001-02	664,041	219,626	133,492	8,737	2,409	272
2002-03	651,382	245,274	137,207	9,166	2,610	304
2003-04	712,239	262,286	145,962	9,427	2,751	304
2004-05	767,520	274,731	152,049	10,377	3,201	407

<sup>&</sup>lt;sup>1</sup> Includes institutions for post-matric courses.

# Teacher-student ratio has deteriorated

# Teacher-pupil ratio

reacher-puph ratio			
	Primary	Secondary	Higher Secondary
1950-51	1:24	1:20	1:21
1960-61	1:36	1:31	1:25
1970-71	1:39	1:32	1:25
1980-81	1:38	1:33	1:27
1990-91	1:43	1:37	1:31
1995-96	1:47	1:38	1:33
2004-05	1:46	1:35	1:33

# Only 10% of teachers are trained for teaching

# Distribution of teachers by school type

('000)		Primary			Upper Primary			High/Hr Secondary		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
1950-51	456	82	538	73	13	86	107	20	127	
1955-56	574	117	691	132	19	151	155	35	190	
1960-61	615	127	742	262	83	345	234	62	296	
1965-66	764	180	944	389	139	528	368	111	479	
1970-71	835	225	1,060	463	175	638	474	155	629	
1975-76	955	283	1,238	554	224	778	559	200	759	
1980-81	1,021	342	1,363	598	253	851	669	257	926	
1985-86	1,094	402	1,496	663	305	968	793	339	1,132	
1990-91	1,143	473	1,616	717	356	1,073	917	417	1,334	
1991-92	1,144	492	1,636	714	365	1,079	931	450	1,381	
1992-93	1,189	493	1,682	736	346	1,082	908	445	1,353	
1993-94	1,196	507	1,703	710	370	1,080	938	467	1,405	
1994-95	1,181	533	1,714	732	390	1,122	956	490	1,446	
1995-96	1,187	553	1,740	756	409	1,165	982	511	1,493	
2000-01	1,221	675	1,896	820	506	1,326	1,184	577	1,761	
2001-02	1,213	715	1,928	921	547	1,468	1,157	620	1,777	
2002-03	1,167	746	1,913	936	645	1,581	1,221	812	2,033	
2003-04	1,260	837	2,097	944	648	1,592	1,250	774	2,024	
2004-05	1,319	842	2,161	992	597	1,589	1,282	801	2,083	

Source: CLSA Asia-Pacific Markets, Department of Education



# India's education system falters at middle and upper levels

	Elementary	entary Secondary			
High EDI	-				
USA	100	95	82		
UK	101	170	60		
France	105	110	56		
Germany	99	100			
Sweden	109	137	82		
Norway	99	114	80		
Medium EDI					
Brazil	145	110	20		
Mexico	109	79	22		
China	118	73	19		
Egypt	100	87	29		
Indonesia	116	62	16		
Sri Lanka	102	81			
Low EDI					
Saudi Arabia	67	68	28		
India	107	52	11		
Pakistan	82	27	3		
Bangladesh	109	51	7		
Nigeria	99	35	10		

Source: CLSA Asia-Pacific Markets, Global Education Digest 2006 by UNESCO

# Affiliated industrial training institutes (by state)

	ITIs		Government			Private		
	Verified	Total	General	Women	Others	General	Women	Others
Andaman and Nicobar Island	1	1	1	-	-	-	-	-
Andhra Pradesh	582	583	61	21	3	487	4	7
Arunachal Pradesh	3	3	3	-	-	-	-	-
Assam	27	29	23	3	1	2	-	-
Bihar	98	98	22	7	-	69	-	-
Chandigarh	2	2	1	1	-	-	-	-
Chhatisgarh	114	114	49	7	4	54	-	-
Daman and Diu	2	2	2	-	-	-	-	-
Delhi	69	69	5	3	7	28	23	3
Dadra and Nagar Haweli	1	1	1	-	-	-	-	-
Goa	17	18	12	-	-	6	-	-
Gujarat	300	302	153	4	3	139	2	1
Himachal Pradesh	77	77	34	17	-	26	-	-
Haryana	114	129	48	44	-	26	10	-
Jharkhand	49	53	12	2	-	38	_	1
Jammu and Kashmir	39	39	33	1	5	-	_	_
Kerala	420	472	51	8	8	395	2	8
Karnataka	798	801	89	11	11	664	6	20
Lakshadweep	1	1	1	-	-	-	-	-
Meghalaya	5	7	4	1	-	2	-	-
Maharashtra	655	656	348	14	2	283	9	-
Manipur	1	7	6	1	-	-	-	-
Madhya Pradesh	145	145	90	12	-	42	1	-
Mizoram	2	2	2	-	-	-	-	-
Nagaland	1	1	1	_	-	-	_	_
Orissa	265	268	15	7	5	200	3	38
Punjab	164	182	56	49	4	64	9	_
Pondicherry	16	16	6	2	-	8	_	_
Rajasthan	274	275	82	8	7	172	2	4
Ro	-	1	-	-	-	-	-	-
Sikkim	1	1	1	-	-	-	_	-
Tamil Nadu	614	673	56	7	5	596	6	3
Tripura	7	7	6	1	-	-	-	-
Uttaranchal	77	77	50	4	5	17	_	1
Uttar Pradesh	300	300	66	38	2	184	10	-
West Bengal	77	77	40	2	2	31	2	-
Total	5,318	5,489	1,430	275	74	3,533	89	86

Source: CLSA Asia-Pacific Markets, Directorate General of Employment & Training



# **Appendix 3: Regulations elsewhere**

# Korea, Brazil, Singapore, UK, US

Section 3 of this report discusses the regulatory ambiguity around certain aspects of Indian education. This appendix looks at regulations surrounding education in other countries, some of which are instructive from an Indian context, be it in terms of "for profit" education, or the structure of public-private partnerships in K-12 and higher education.

### Korea

The current education system of Korea was established according to the Education Law enacted in 1949. The school system is a linear one of 6-3-3-4, consisting six years of elementary school, three years of middle school, three years of high school and four years of college or university.

# Regulation

Easy to establish a private school

Low regulatory barrier to establish and operate a private educational institution. Prospective owner just needs to submit papers to the local superintendent of education before setting up an educational institution.

Private sector is allowed to enter all areas of education by market type (exam-prep, personal tutoring, reference materials, online/offline, publishing, etc) and age group (preschool to adult).

Fee is regulated

Fees for offline institutions are regulated - fees cannot increase faster than inflation. The absolute amount is regulated as well, although this amount varies depending on subject and age group.

Government has exempted private schools from taxation in acquisition and sale of properties related to school education and provides subsidies to cover shortages of remuneration of teachers and operational costs. Loans are provided through the 'Korea Private School Promotion Foundation' to help private schools with expansion and renovation of facilities.

# **Government policy focus**

**English in focus** 

**English in public schools:** English takes up the bulk of private education spend in Korea. Some measures suggested by the new government include giving English lectures in English (not just for the conversation classes but for reading, writing, grammar classes as well) and improving quality of English teachers by hiring outside of the regular teacher pool and recruiting people with good English capabilities (even though they may not have a teaching background), such as Korean-Americans.

PPP for after school usage

**After-school classes:** Public schools are partnering with private institutions to provide classes after regular school hours. Currently the subjects that are open to the private sector are limited (essay-writing, computers) but more subjects are expected to be available to private operators in the future.

**Subsidy from government:** Local governments are partnering with private institutions to build community learning centres where private English education is offered at a government-subsidised fee.



# **English training - Skill development boost from govt**

EPIK is an interesting example of a government-promoted skill-enhancement programme that India could replicate both for language and for vocational training. EPIK, or the English Programme in Korea, is sponsored by Ministry of Education and puts native English speakers in public schools. Established in 1995, the aim was to improve the English-speaking ability of students and teachers, foster international exchanges, and reform teaching methodologies employed in Korean schools.

Seoul English Village, the first in Korea, started with funding from the local municipality. Management was assigned to Herald Media, owners of the largest English newspaper in Korea. After initial financial problems characteristic of any pioneering venture, the operation is now profitable. Fees are capped by

the Seoul city government. The village costs US\$2.3m a year to operate.

Several other villages began operating in 2005 in Incheon (annual budget US\$1.7m) and Seongnam (start-up budget US\$2.3m). Villages in Asan and Mokpo opened in 2006-07.

In April 2006, Paju, Kyonggi-do commenced operations, built round the 3E model of "education, entertainment and experience". The provincial government spent US\$97m an English-language theme park, complete with tramway. English is incorporated into a range of activities, including cooking classes. Funding was derived from the education board as well as the province's general development budget.

# **Brazil**

Concentrated regulatory powers

Education is under the supervision of the Ministry of Education and Sports, assisted by the National Council for Education. States are directly responsible for the administration of elementary and secondary education. The Ministry of Education has ultimate control over most aspects of higher education. The principal standard-setting agency is Federal Council of Education.

25% of state and local tax revenues go to education

Brazil's education system is financed by funds from both the public sector (through direct and indirect administration agencies at the federal, state and municipal levels of government) and the private sector, which charges tuition fees. Brazil's Constitution allocates 25% of state and local tax revenues to education. The public expenditure on education, as a percentage of GNP, at the present moment is 4.8%. The education system is divided into three levels: nine years of fundamental education, three years of secondary education and four years of higher education. Preschool or infant education is added to this hierarchical structure, for the purpose of providing assistance to children younger than seven years of age.

# Regulation

No fee regulation; schools can make profits

Private-sector participation is subject to government approval.

The government does not interfere in fees/profitability of any private-sector educational institution.

# **Government reforms**

Higher education has more flexibility

Created a new category of institutions, the "university centres", which enjoy most of the legal privileges as universities, have greater autonomy over curricula and enrolments and have a mandate to concentrate on undergraduate teaching instead of research.

Creation of shorter courses in which a student attains a degree in only 2 years. Annual evaluation of all institutions of higher education.



# **Bolsa Escola - Rewarding education**

Bolsa Escola is based on a very simple premise that if children do not study regularly because they have to work, then they will stop working and go to school only if they or their families have the necessary funds. The Bolsa Escola programme was designed based on this simple notion and families who fulfilled the following conditions were invited to participate and received a stipend:

- ☐ Their income levels were below the national poverty level.
- ☐ All the children in the family of school age had to be enrolled in school (no exceptions).
- ☐ The family ensures children did not miss more than two days of class per month. If even one of the children missed more than two days of classes, the family gets no money that month under the Bolsa Escola programme.

Bolsa Escola was introduced on a national-scale in 2001, building on earlier municipal-level program

initiatives. By late 2003, it was in use in almost all of Brazil's 5,561 municipalities, providing nearly US\$500m in stipends for 8.6m children from 5.1m families. In October 2003, Bolsa Escola was merged with three other transfer programmes. The Bolsa Familia Programme aims to reach 11.2m families (or 44m people).

Many aspects of programme implementation for Bolsa Escola devolved to municipal governments, the identification and selection beneficiaries, monitoring and enforcement conditions and management of local accountability mechanisms. Payment of benefits was retained by central agencies. This resulted in considerable variation in the manner in which municipalities chose to implement the programme, providing a unique explore how differences opportunity to institutional settings lead to different choices in targeting, monitoring and enforcement, accountability instruments and practices.

# **Fundef - Innovative funding**

Brazil set up its educational funding programme Fundef in 1996 and by January 1998 it was in operation in all states. Fundef introduced national minimums for spending per student in Grades 1-8, and imposed a framework for the allocation of funds between the state and municipal public school networks. The federal government was also required to top up spending in jurisdictions unable to achieve the national minimums.

Fundef draws on revenue allocations at the federal, state and municipal levels, as well as revenue from state value-added taxes and federal export taxes, among others. Funding is allocated according to the number of students enrolled.

At least 60 per cent of Fundef allocations must be spent on teachers, the remainder on clearly defined operation and maintenance. School councils monitor the allocation of Fundef resources.

# Singapore

Education in Singapore is under the supervision of Ministry of Education. The education system is divided into five levels - three years of preschool, four years of foundation primary and two years of orientation primary school, four-to-five years of secondary school, two-to-three years of college and finally university.

# Regulation

No fee regulation; profit making allowed

Private schools need to be approved by the ministry and are governed by the Education Act.

Private schools can be set up at any level, but the government recognises only its four universities. Singapore does have foreign universities, but qualifications gained are not locally recognised.

The ministry does not interfere in fees or profitability.

# **Government policy focus**

Policy focus on vocational training

Singapore wants to provide more tertiary education options, especially in the vocational space, and is exploring the establishment of either a technical university or a liberal arts college.



# **Edusave scheme - An overview**

Started in 1993, the Edusave Scheme rewards students who perform well or who make good progress in their academic and non-academic work, and provides students and schools with funds to pay for enrichment programmes or to purchase additional resources. The Edusave Endowment Fund is built up from government contributions. The fund is invested by the government and the interest earned is used to finance the contributions, grants and awards given to schools and students. The Government contributed an initial capital sum of S\$1bn to the fund in 1993.

i) Edusave Pupils Fund: Children aged six-to-16 have an Edusave account, into which the government makes an annual contribution- essentially, the government pays for education directly. Prior to 2004, only the first three children in a family were eligible. Payments in 2008 were S\$180 for primary students and S\$220 for secondary students.

ii) Edusave grants: All primary and secondary schools, junior colleges, centralised institutes, institutes of technical education and special education schools receive annual Edusave grants to fund student resources.

There are various reward programmes for students who meet certain academic rankings, some of which are targeted at low-income households. They include the Edusave Scholarships, Edusave Merit Bursary, Good Progress Award, and Edusave Awards for Achievement and Good Leadership and Service.

# Manpower 21 Plan - Enhancing employability

In response to the workforce challenges of the new millennium, the Manpower 21 Plan was launched by the Singapore government to enhance competitive advantage in the global economy, particularly in knowledge-based industries. Its key strategies are:

- Enhanced manpower information systems.
- □ Lifelong learning for lifelong employability.
- Augmenting the talent pool.
- □ Transforming the work environment.
- Developing a vibrant manpower industry.
- Redefining partnerships.

# **United Kingdom**

Education in the England is the responsibility of the Department for Children, Schools and Families and the Department for Innovation, Universities and Skills. Local authorities are responsible for implementing policy for public education and state schooling. The compulsory education system is divided into three levels: three years of elementary school, four years of primary and five years of secondary school and two years of college. At the age of 16, students take the GCSE examination, which marks the end of compulsory education. The proposal is to make the school-leaving age 18 years but this is only likely by 2015.

### **Regulations**

No regulation on fees, profit making allowed

The Independent Schools Inspectorate (ISI) ensures schools meet national statutory requirements. The government does not interfere in fees or profitability of independent schools, most are structured as charities and qualify for certain tax exemptions.

Profits allowed in higher education since 2004

Higher Education Act 2004 allows profit-making degree institutions, but there is only one private university in the UK, the University of Buckingham.

Beacon Schools - Sharing best practice

# **Government programmes**

The Beacon Schools programme was established in 1998 and all types and phases of state maintained schools were included. It identified high performing schools across England and was designed to build partnerships between these schools and represents examples of successful practice, with a view to sharing and spreading that effective practice to other schools to raise standards in pupil attainment.



# Leading edge programme for secondary schools

☐ For secondary schools, the leading edge partnership programme builds on the success and knowledge about collaborative practice gained from the Beacon Schools programme. It supports groups of secondary schools, including special schools, to work together to tackle some of the most intractable barriers to raising standards. Schools within these partnerships are committed to working collaboratively to design, develop, test and share innovative ideas to raise standards of teaching and learning where improvement is most urgently needed.

### Learning networks for primary schools

□ At the primary level, primary strategy learning networks are being established to help schools work together to raise standards of literacy and mathematics. Groups of primary schools establish themselves as a network with a particular learning focus and receive funding from the Department for Education and Skills to help plan and establish their networks. Local authorities play a key role in determining criteria, evaluating action plans, identifying support for networks and directing funding, based on knowledge of local context and priorities. The long-term aim is that all primary schools should be part of an effective learning network, with most expected to achieve that by 2008.

### **PPP** for specialist schools

☐ Specialist schools are an important part of the Government's plans to raise standards in secondary education. The target of 2,000 specialist schools was achieved 18 months ahead of schedule in February 2005. The specialist schools programme mobilises private-sector sponsors and government funding to achieve target standards in both specialisation and national curriculum requirements.

# Private participation increasing

# **United States**

The compulsory education system is divided into three levels - seven years of elementary school, three years of middle school and four years of high school. Post-secondary education, college or university, commonly consists of four years of study. The private sector is active in all areas of education by market type and age group. There are no restrictions on fees charged.

# No Child Left Behind Act - Progressive, controversial

The No Child Left Behind Act of 2001 covers a number of federal programmes aimed at improving the performance of primary and secondary schools by increasing the standards of accountability for states, school districts and schools, as well as providing parents more flexibility in choosing the type of schools their children attend. It promotes an increased focus on reading and extends the Elementary and Secondary Education Act of 1965.

☐ Reduce bureaucracy and increase flexibility: Additional flexibility will be provided to states and school districts, and flexible funding will be increased at the local level.

# The act aims to:

□ Empower parents: Parents will have more information about the quality of their child's school. Students in persistently low-performing schools will be given a choice to change schools.

☐ Increase accountability for student performance: States, districts and schools that improve achievement will be rewarded. Failure will be sanctioned. Parents will know how well their child is learning, and that schools are held accountable for their effectiveness with annual state reading and math assessments in Grades 3-8.

The 'no child left behind' policy has generated debate on efficacy and outcomes. Supporters claim it promotes systematic and frequent testing, which helps identify learning gaps early, and so remedial measures can be taken for student groups or for entire schools in time. A frequent criticism has been that it promotes standardized testing, and favours schools aiming to meet outcome targets by teaching within the limits of expected testing patterns and the like. As low-scoring schools are penalised, there are concerns the system will become less inclusive.

□ Focus on what works: Federal dollars will be spent on effective, research based programs and practices. Funds will be targeted to improve schools and enhance teacher quality.



www.raffles-educationcorporation.com



www.apollogrp.edu

www.strayereducation.

www.neworiental.org

# Appendix 4: Key US\$1bn stocks

This section provides a listing of meaningfully large (by market capitalisation) education stocks worldwide and their business description. This is a useful pointer to the future of investment themes in India, both in terms of portfolio offerings and scalability.

# **Raffles Education**

Raffles Education (SIN: R17) is a leading education group in Asia, expanding from an initial college in Singapore in 1990 to 28 colleges across Asia-Pacific under five brand names – Raffles University, Hartford Institute, China Education, Shanghai Zhongfa College and Oriental University City. Raffles University colleges and in eight Asian countries and comprise of 16 design institutes and two schools of psychology. Its Hartford institutes offer business management courses in eight colleges and seven countries. China Education offers degree programmes that lead to tertiary qualifications through its Tianjin University of Commerce. Shanghai Zhongfa College offers vocational and technical education, and serves as a feeder school for the group's tertiary education system in China. Raffles Education also provides basic education through its associate company, Oriental Century. Its latest acquisition, Oriental University City, serves 54,000 students in 19 colleges. Raffles Education reported for the financial year ended June 2007 revenue of S\$124m, with a 43% Ebit margin and net income of S\$50.7m.

# **Apollo Group**

Apollo Group (Nasdaq: APOL) provides higher education to working adults through four owned and operated higher-learning institutions - the University of Phoenix, Western International University, Axia College (of the University of Phoenix), the College for Financial Planning, and the Institute for Professional Development. In FY07, Apollo reported revenue of US\$2.7bn, with net income of US\$409m. University of Phoenix, Apollo's flagship university, is the largest private accredited university in the US. Apollo has joint educational agreements in China and India. As of 2007, the combined student enrolment at Apollo was 350,000 students. For the year ended December 2007, Apollo reported revenue of US\$2,837m, with an operating margin of 23.4% and net income of US\$433.8m.

# Strayer Education

Strayer Education (NASDAQ:STRA) is active in post-secondary education, through its wholly owned subsidiaries Strayer University, with 51 campuses in the US serving 36,000 students, and Strayer University Online. For the year ended December 2007, Strayer Edication reported revenue of US\$318m, 30.7%n Ebit margin and net income of US\$64.9m.

# **New Oriental Education & Technology Group**

New Oriental Education & Technology Group (NYSE:EDU). is a provider of private educational services in China, primarily English and other language training, test preparation, courses for admissions and assessment tests, primary and secondary school education, development and distribution of educational content and online education. For the year to May 2007, New Oriental had more than 1m students, with 601,000 in its language training programmes and 466,000 in its test preparation courses. Its network comprises 37 schools, 149 learning centres, 19 bookstores, 2,700 teachers in 35 cities and an online network with 3m registered users. For the financial year ended May 2007, the company reported revenue of RM1,044m with a 19.9% Ebit margin and net income of RM226.7m.



# www.abclearningcentres.

# **ABC Learning Centres**

ABC Learning Centres (ASX:ABS) is an Australian company and major provider of early-education and care services to children between the ages of 6 weeks and 12 years. ABC owns and operates 2,238 childcare centres in Australia, New Zealand, the US and the UK. It has five US brands - The Children's Courtyard, Childtime Learning Centres, La Petite Academy, Montessori Unlimited and Tutor Time Child Care/Learning Centers. In the UK, it is primarily active through the Busy Bee network. In FY07, ABC reported net sales of A\$1696.4m, with an operating margin of 17.4% and net income of A\$143.1m.

# www.benesse.co.jp

# **Benesse Corp**

Benesse Corp (TYO:9783) is a Japan-based educational service provider offering home-study courses, English-teaching materials and practice tests for university entrance examinations and English proficiency exams. It publishes magazines and operates websites, as well as offering a home-delivery food service. Benesse if further involved in aged care provision, including nurse training and recruitment. The company is also engaged in telemarketing and information processing service businesses, as well as the development and sale of systems. It has 31 subsidiaries and two associate companies. Net sales for FY07 were ¥354.6bn, with an operating margin of 41.7% and net income of ¥18.2bn.

# www.megastudy.net

# MegaStudy

Megastudy (KDQ:072870) is a Korea-based company providing education services through video-on-demand online classes and study aids. Offline education services and provided by its network of institutes. In the year top December 2997, online service accounted for 68% or revenue, with offline making up the remainder. Megastudy acquired in November 2007 an 86.96% stake in a Korea-based company engaged in the dental education. For FY06, it reported revenue of W101.2bn, with an operating margin of 31.9% and a net income of W26.4bn.

# www.unianhanguera.edu.

# **Anhanguera Educacional Participações**

Founded in 1994, Anhanguera Educacional Participações (SAO:AEDU11) is one of the leading private, for-profit postsecondary education companies in Brazil. It offers 48 degree programmes, primarily at the bachelor level, in business, law, engineering, health, and other applied social sciences. As of end-December 2007, it had 19 campuses with enrolment of 50,000.

# www.devry.edu

### **Devry**

DeVry (NYSE:DV) owns and operates through its wholly-owned subsidiaries DeVry University, Ross University, Chamberlain College of Nursing, and Becker Professional Review, which prepares students for certified public accountant (CPA) and chartered financial analyst (CFA) examinations, as well as continuing professional education programmes and seminars. In November 2007, DeVry acquired Advanced Academics Inc (AAI), a provider of online secondary education. For the year ending June 2007, Devry reported revenue of US\$933.5m, with an operating margin of 10.9% and net income of US\$76.19m.



www.ittesi.com

# **ITT Educational Services**

ITT Educational Services (ITT/ESI) (NYSE:ESI), incorporated in 1946, is a provider of postsecondary degree programs in the US with some 93 accredited technical institutes in 34 states serving 49,000 students. In the year to December 2007, ITT reported revenue of US\$869.5m, with an operating margin of 27.8% and net income of US\$151.6m.

# Career Education Corp

www.careered.com

Career Education Corp (CEC) (Nasdaq:CECO) is an educational services company operating in six segments, with 71 on-ground campuses serving over 98,000 students across the US, France, Canada, Italy and the UK. Schools include the International Academy of Design and Technology, Le Cordon Bleu and Kitchen Academy and Sanford-Brown in health education, as well as the American Intercontinental University (AIU) and Colorado Technical University CEC is active in the development of a range of short-term online learning and informational programs that generate revenue through the sale of products, premium digital content and advertising space. In the year to December 2006, CEC reported revenue of US\$1785.6bn, with an operating margin of 9.3% and net income of US\$46.6m.



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