

A Report on
Market Data for Private Sector Investments in Nepal
Education Sector

Prepared By



**With the support of DFID
Nepal**

In partnership with



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BACKGROUND OF THE STUDY

Education sector is one of the important indicators of socio-economic development of a nation and is often viewed as a key index of the social and human development. Education sector in Nepal is well diversified with significant private sector activity in primary and secondary schools, technical and vocational colleges as well as tertiary colleges and universities. Access to primary and secondary education in Nepal is very high as a result of high focus of the government but challenges remain in access to higher education and improving employability through technical and vocational education. Private sector providers of risk capital such as venture capital funds, private equity funds, impact investors and venture debt funds can play a pioneering role in addressing this need and building the case for the “business opportunity” of investing in Nepal. Early successes in investments can unlock further

mainstream and domestic capital; and form the corner stone of a strong and resilient private sector in Nepal, which will in turn drive inclusive growth.

However, one of the biggest challenges investors in Nepal face is a lack of clarity around market landscapes, business profiles, valuation benchmarks and exit opportunities. **Market Data for Private Sector Investments in Nepal** is a first of its kind attempt towards bridging this information divide. It seeks to act as a guide to foreign and domestic investors by providing insights into the landscape of private sector activity in Nepal. These insights include structure of the sector, state of the financial inclusion, identifying more promising investment opportunities, and evaluating capital flow and valuations in the sector. The report has been compiled using data from several credible sources, including existing research literature and industry publications. The secondary data was validated and additional information was gathered by engaging with key stakeholders in the sectors such as industry players, experts, financial institutions, policy makers, development finance institutions and sector associations. The report is constrained by limited consistent availability of data. In absence of hard and consistent data in some cases, the report relies on data from the field and relevant, triangulated proxy data from secondary sources.

METHODOLOGY AND APPROACH

The report is based on (a) primary data from interviews and focus group discussions with enterprises, experts and policy-makers and (b) secondary data from Dolma Impact Fund and relevant government and policy publications in Nepal. The report draws on data derived from sources such as Nepal government publications, data from World Bank and Intelicap's proprietary knowledge base.

The report has been compiled using data from several credible sources, including existing research literature and industry publications. The secondary data was validated and additional information was gathered by engaging with key stakeholders in the sectors such as industry players, experts, financial institutions, policy makers, development finance institutions and sector associations.

The report is constrained by limited consistent availability of data across all sectors. In absence of hard and consistent data in some sectors, the report relies on data from the field and relevant, triangulated proxy data from secondary sources. It must also be noted that report does not extensively cover all the value chain elements in a sector - only promising, potentially high growth sectors are analysed. Users of this report should be cognisant of these data limitations.

CURRENCY EXCHANGE RATE

1 US\$ = 100 NPR (Nepalese Rupee)

ABBREVIATIONS

ADB	Asian Development Bank
BBA	Bachelor of Business Administration
CAGR	Compound Annual Growth Rate

DFI	Development Finance Institution
DFID	Ukaid's Department for International Development
FDI	Foreign Direct Investment
ECD	Early Childhood Development
ESF	Education Service Fee
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (German aid agency)
GDP	Gross Domestic Product
IFC	International Finance Corporation
ICT	Information and Communication Technology
IRD	Inland Revenue Department
ILO	International Labour organisation
INGO	International Non-Governmental Organisation
IT	Information Technology
MBBS	Bachelor of Medicine Bachelor of Surgery
MIS	Management Information System
MoE	Ministry of Education
NMC	Nepal Medical Council
PE	Private Equity
PPP	Public-Private Partnership
R&D	Research and Development
SAARC	South Asian Association of Regional Cooperation
SEP	Skills for Employment Program
SEZ	Special Economic Zones
SME	Small and Medium Enterprise
SSR	School Sector Reform
TVET	Technical and Vocational Education Training
VAT	Value Added Tax
VC	Venture Capital
WHO	World Health Organisation
UGC	Universities Grants Commission
USAID	United States Agency for International Development
UNESCO	United Nations Educational, Scientific and Cultural Organisation

Education Sector in Nepal

4% public spending as a percentage of GDP on education sector in Nepal. Second highest in the SAARC region

US\$ 55 million estimated market size for Medical colleges in Nepal. **US\$ 25 million** estimated market size for Business Schools in Nepal. **US\$ 15 million** estimated market size for Hotel Management colleges in Nepal.

US\$ 6 million potential market size for technology and content providers in Nepal

17%-21% estimated hurdle rate for the higher education enterprises in Nepal. **20%-22%** estimated hurdle rate for technology and content providers in Nepal

1 Executive Summary

The education sector in Nepal is well diversified with significant private sector activity across primary and secondary education, tertiary colleges and universities as well as technical and vocational education.

Education sector in Nepal is well diversified and demand of quality education is driven by the high demographic dividend in the country and aspirations of the younger generation to use education as a vehicle for social mobility and prosperity. Education sector is a key focus sector of the Nepalese government with public spending on education estimated at around 4% of GDP in 2010 which is one of the highest in the SAARC region¹.

Nepal's primary and secondary education system consists of over 35,000 schools² (around 25,000 public and 10,000 private schools). The organised activity in pre-primary education system is still evolving with 4-5 major players active in the country³. The tertiary education system consisting of higher education and vocational and technical education categories has seen significant private sector activity (consisting of nine public universities and more than 1000 colleges⁴) in the last decade especially in business management, hotel management and medical disciplines. The vocation education system is also well diversified with 14 technical schools, 4 polytechnics, 2 community development vocational training centres and⁵ more than 450 private technical schools and polytechnics active in the country. Significant private sector activity has been seen in vocation courses such as International Culinary, nursing diploma and pharmacy courses⁶.

The supporting services for the education sector in Nepal are dominated by the public sector enterprises; however digital content and technology segment has better level of organised and commercial scale private sector activity with 4-5 players active in the segment. This segment is still evolving in Nepal but has a very high growth potential in the next few years.

Quality of education is a key concern for the education sector in Nepal with low passing rates. Technical and vocational education segment is still evolving with highly fragmented and small scale private sector activity. Technology and content providers are expected to play a key role in improving quality of education and the segment is expected to grow at a healthy rate in near future.

The education sector in Nepal is well diversified with a high number of schools and colleges but quality of education remains a concern. Though there is almost no quantity gap in primary education in terms of number of schools and students, quality gap exists; with reasonably poor quality of outcomes. The pass rate of students is only around 70% at primary level and it substantially decreases in secondary and higher education segments. The tertiary education enrolment rate in Nepal is much lower compared to

¹ World Bank Development indicators 2010,

² Flash report – I, Department of Education, 2013

³ Intellect primary research 2014

⁴ UGC Annual Report, 2011-2012

⁵ Sector Assessment(Summary)Education: Country Partnership Strategy Nepal;2013-17

⁶ Refer section 3.1.1 and 6.2.1 for detail discussions

other developing nations in the world with gross enrolment rate⁷ in higher education pegged at a low 10%⁸. A significant number of Nepalese students go abroad for Higher Studies; mostly in India, China and USA primarily because of lack of quality options within Nepal.

Schools dropouts and students from lower socio-economic demographic segment usually find their way to vocational education. However access to Technical and vocational education (TVET) is far from equitable between urban and rural areas and across different social groups, an area of concern that needs to be addressed in near future. In addition the private sector activity in the segment is highly fragmented with a number of small private players active mainly in the Kathmandu Valley region.

Technology and content providers could play a key role in improving the quality of education delivery in Nepal. These service providers supplement the delivery mechanism by relevant content in the form of multimedia or interactive software. These service providers are now constantly being sought after by many schools in Nepal because of their role in improving effectiveness of education delivery.

Regulatory policies in the education sector offer a mixed bag of encouraging and inhibitive impact on enterprise operations and value.

The regulatory regime in Nepal offers a mixed bag of encouraging and inhibitive impact on enterprise operations and value in the education sector.

The school segment in Nepal has restrictions on profit making with the Nepalese Government's directive to private schools to allocate 60% of the tuition fees on the teacher's salary that may impact the profitability of private sector firms. In the Technology and Content segment, Nepalese curriculum requires to have all the content in Nepali language compulsorily apart from English. This in a way restricts many non-Nepalese players to venture into this segment.⁹

On the positive side, government provides subsidised loans to students at a very low interest rate. This ensures a healthy demand for education in Nepal. Moreover, education sectors firms undergo a relatively easy and simpler taxation exercise as compared to firms in other sector.

Government of Nepal allows 100% FDI with 100% ownership of firms in education sector. Such an investment freedom makes education sector private player friendly.

Under current market scenario, Higher Education segment and Technology and Content segment companies present the most attractive investment opportunities for the PE/VC investors. In higher education segment medical colleges, management schools (Business Schools) and hotel management institutes come across as the most attractive segment for investors in Nepal

Higher education segment and Technology and Content segment present the most attractive investment opportunities for the PE/VC investors in the education sector in Nepal. These two segments are expected to have higher profitability and returns for investors and are scalable for achieving healthy market growth.

Higher Education segment has significant organised and commercial-scale private sector activity in Nepal. This segment usually is capital intensive and needs significant amount of capital for investment in

⁷ Gross Enrollment Ratio is the total enrollment within a country "in a specific level of education, regardless of age, expressed as a percentage of the population in the official age group corresponding to this level of education."(UNESCO)

⁸ UGC Annual Report, 2011-2012

⁹ From primary interviews conducted during the course of this study in Nepal

quality infrastructure, research facilities, laboratories, technology upgrading and training centres etc. In the higher education segment in Nepal, Medical Colleges, Management Schools (Business Schools) and Hotel Management institutes were found to be more attractive for investors.

The demand for Hotel Management schools is extremely high in Nepal primarily on account of immediacy of absorption in both domestic and foreign tourism and hospitality market. Medical colleges also offer high return to students in terms of the opportunities and employability options both in Nepal and international markets. Business Schools providing management education also present attractive investment opportunities. With stability in the Nepalese political system and predictable economic growth, demand for management education is expected to rise in near future and business schools with excellent industry linkages could emerge as potential investment destinations for PE/VC investors.

The present market size of the Medical colleges in Nepal is estimated around US\$ 55 million excluding the hospital service and research component of medical college's income¹⁰. The present market size of management institutes (Business Schools) is expected to be around US\$ 25 million. The present market size of hotel management institutes is expected to be around US\$ 15 million¹¹. With increasing level of fees and improved number of seats per Management College, the segment may see a high rise in demand and growth rate in the next 2-3 years.

The Technology and Content segment in Nepal is another high potential segment for PE/VC investors given the higher returns and profitability in the segment as well as future growth potential. Inflow of capital into this segment will vitalise the segment which will improve the profitability. The potential market size of the technology and content segment in Nepal is estimated around US\$ 6 million in the next 2-3 years¹². Given the private sector activity picked in the segment only in the last 3-4 years, the segment is expected to grow at a higher rate in near future

Other opportunities for private equity investors may also emerge in form of Vocation Education institutes, pre-primary schools and 'Type A' schools in the next few years.

The Vocational education in Nepal is growing rapidly due to increased governmental focus in the segment and rising industry demands for trained and skilled workers. As a result, the demand for vocation education is steadily rising. Currently, most players active in the segment are stand-alone entities and operate in market in small and fragmented way. However upon sufficient consolidation in the industry and emergence of a few major private players, the segment could emerge as a potential investment opportunity in the next few years as has been seen in case of neighbouring countries like India.

The pre-primary schools and 'Type A' private schools could be other emerging opportunities for PE/VC investors in Nepal. This is primarily due to the emergence of a new middle class¹³ with increasing disposable income and high focus on quality education even at a premium price¹⁴. At present the pre-primary school segment is still in nascent stage but a few private players have entered the market in the Kathmandu Valley.

Valuation of higher education enterprises and technology and content companies in Nepal is challenging due to lack of historical data; however given brisk activity in the sector, early entrants in the private equity space have an opportunity to buy stakes at lucrative prices

¹⁰ Refer section 6.1.1 for details on the business models of hospitals in Nepal

¹¹ Intellect Analysis 2014, please refer Annexure 11.3 for details

¹² Intellect Analysis 2014, please refer Annexure 11.3 for details

¹³ Asian Development Bank, The Rise of Asia's Middle Class, 2010

¹⁴ Refer Section 6.2.2 for details

There is very little public information available on past equity investments into the education companies in Nepal. The lack of data is primarily due to infancy of the investment value chain and support infrastructure such as research and ratings. Further, sparse research coverage of capital markets in Nepal has resulted in limited availability of historical data and limited access to updated industry benchmarks. However, the investment landscape is witnessing brisk activity, with 2-3 institutional investment funds setup over the last three years. This status of the investment landscape presents an opportunity for early private equity entrants to make investments at lucrative valuations.

In the absence of industry benchmarks for valuation; data from comparable SAARC countries and hurdle rates may be used as broad level guides for making investment decisions

Valuation data from comparable countries like India, Sri Lanka, Bangladesh and Pakistan may be used as broad guides by investors. However, investors should be cognisant that countries like India have much higher market capitalisation and better investment value chains. Hence, even though some comparable valuation ratios can be used from other developing SAARC countries, they can at best be broad guides since the regulatory regimes, banking infrastructure, market capitalisation and other macro-economic indicators vary widely from country to country.

Lower valuation multiples on Cost of Equity in the hotel management enterprises and technology and content providers make them the most attractive for PE/VC investors

In absence of consistent data on valuation ratios in the sector, hurdle rate can serve a good indicator of minimum expected return from investments in the sector. Based on the data from the Higher education enterprises in Nepal and comparable proxies, the Cost of Equity for investments the higher education segment is estimated to vary from 38 % to 44%; and Weighted Average Cost of Capital (WACC) is estimated to vary from 17% to 20%. Typical capital structures of 20:80 were observed in few family run higher education enterprises especially in the hotel management category leading to lower Cost of Equity Values and making them more attractive for PE/VC investors in Nepal. The Cost of Equity for hotel management enterprises in Nepal was estimated to vary from 22 % to 24% making them more attractive for PE/VC investors. The WACC for Hotel Management enterprises was estimated to be in the range of 19% to 21%.

The Cost of Equity for technology and content providers in Nepal was estimated to be in the range of 21% to 23% and WACC in the range of 20 to 22% making them attractive for PE/VC investors in Nepal.

Promoter buy-back likely to be most popular approach for equity exits in Nepal in the next 4-5 years in the technology and content provider segment and higher education segment. Trade sale may be observed in the higher education- hotel management segment

Re-purchase of private investor's shared by promoter(s) is likely to be the more prevalent approach for exits in Nepal especially in the technology and content provider segment and higher education segment which are mostly promoted by established business groups or high net worth individuals. While promoter's ability to buy-back will be one driver; the other will probably be the prevailing promoter sentiment where existing promoters want to ultimately retain complete control of the firm. There seems to be a high degree of apprehension about loss of control amongst promoters that could result from diluting management stake¹⁵.

¹⁵ From primary interviews conducted by Intellectap during the course of this study in May 2014

Acquisition by a large education groups or merger of two complementary smaller higher education businesses is somewhat likely especially in the hotel management segment. This is expected to be driven by the expansion drive that most hotel management institutes seem to be displaying to capture greater market share by attracting students regions outside the Kathmandu valley area.

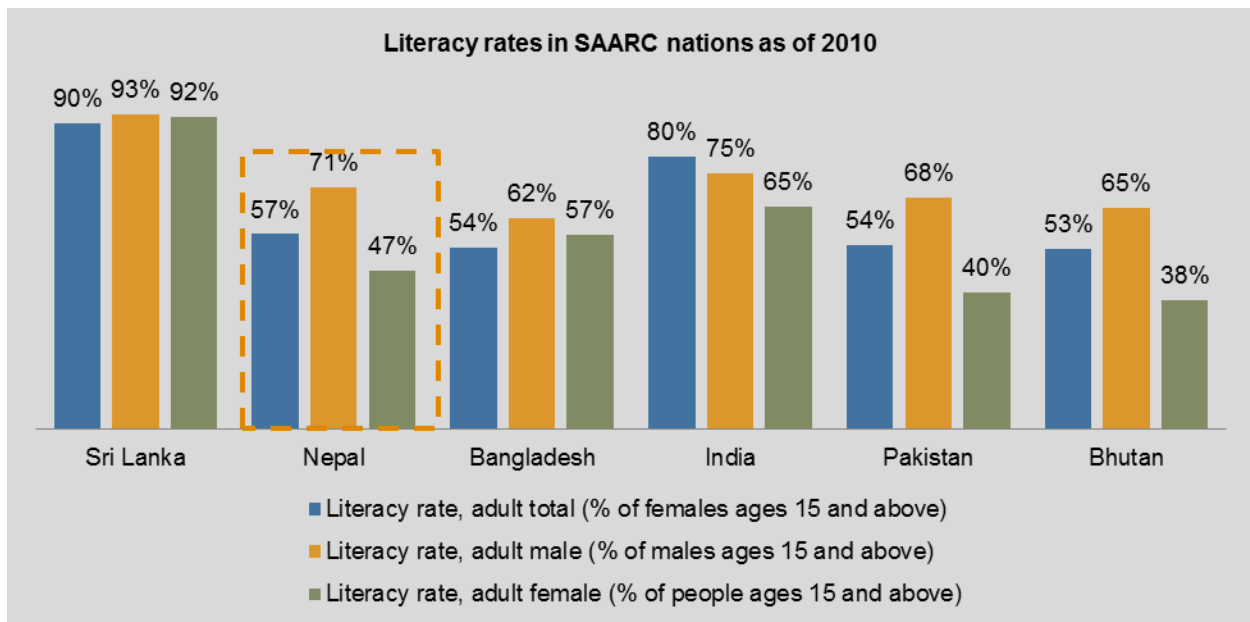
2 Education Sector in Nepal

Education sector is one of the important indicators of socio-economic development of a nation and is often viewed as a key index of the social and human development.

The Government of Nepal has ratified the Convention of the Rights of the Child (1989), and is a signatory of the declaration Education for All (1990). These documents call for the provision of public education to all children, regardless of their physical, intellectual, emotional, social, linguistic, or other conditions. The Department of Education had taken up the challenge of initiating inclusive education in Nepal.

The literacy rate of Nepal is low as compared to other South Asian countries like Sri Lanka and India. Moreover there is huge disparity between male and female literacy rates. The government of Nepal being cognisant of the dismal state of education is taking conscious effort to improve the status of education.

Figure 1: Comparison of literacy rates of South Asian countries with Nepal



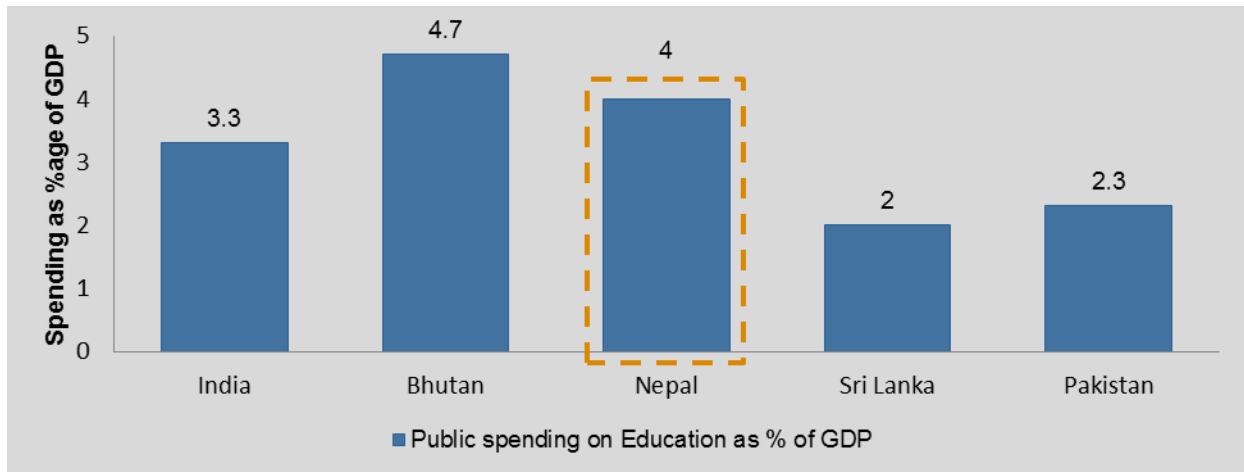
Source: World Development Indicators, World Bank Data Base, Accessed in May 2014

Education has been widely dominated by the public sector in Nepal as it is generally viewed as the duty of the state to provide education to its people. The education sector is driven by the government policies and regulations; a young and aspiring population that views education as a right; increase in the income levels; and emergence of support infrastructure such as digital education providers to support the sector. In this context, the main focus of the government concerning education has always been in the formal education system. Other modes of education like informal and non-formal has been less prioritised.

The public spending on education for Nepal was around 4% of GDP in 2010 which is one of the highest in the SAARC countries. This indicates that Nepal as a nation recognises the importance of education and

gives substantial attention to realise its education sector improvement goals. This is quite evident in Figure 2. However the quality and effectiveness of outcome of the public spending is a cause of concern. There are inherent inefficiencies in the spending pattern & fund allocation structure; around 80% of the education budget is spent on administrative expenses¹⁶ which results in constricted and limited focus on key areas like educational infrastructure development and curriculum improvement.

Figure 2: Education spending in Nepal and other SAARC countries



Source: World Development Indicators, World Bank Data Base, Accessed in May 2014

2.1 Role of education sector in economic development

Education plays crucial role in Nepal’s economy; directly affects the economic productivity levels and contributes to improve GDP.

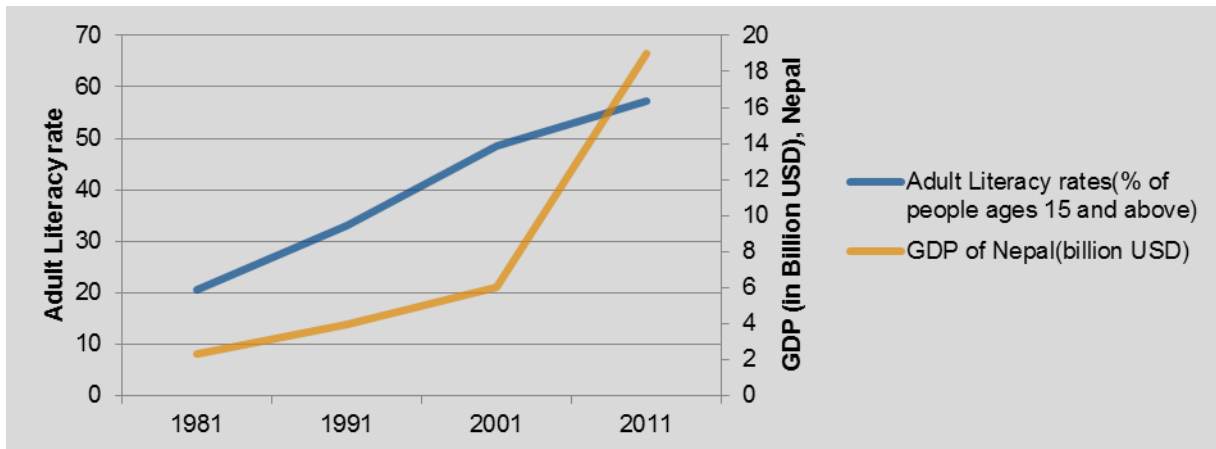
Education, skills, and quality workforce are crucial determinants of a nation’s productivity. Raising educational levels creates a quality workforce which is a critical factor in economic development of any country.

Education influences and affects the GDP growth, services export, trade and per capita income of a nation. The level of education can be determined by the enrolment rates, government’s effort to facilitate access to quality education (in terms of government’s expenditure on education).

The Literacy rate of a country and its GDP growth rate are often related. Figure 3 shows strong positive dependency between education and GDP growth rate in Nepal. Logically and naturally, the level of literacy and education determines the degree to which people are engaged gainfully in skilled work which in turn contributes to GDP. Because of this dependency, this sector becomes a priority for inclusive development in Nepal.

¹⁶ Nepal Economic Growth Agenda, 2012 by FNCCI & Samriddhi Foundation

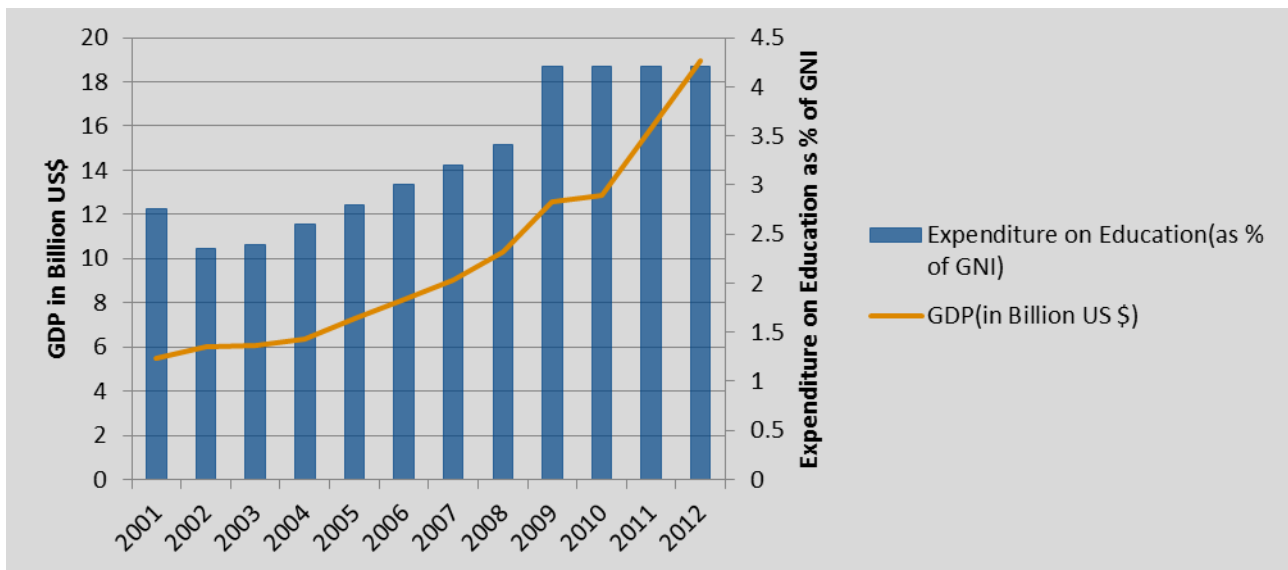
Figure 3: Literacy rate and GDP relationship from 1981 to 2011



Source: World Development Indicators, World Bank Data Base, Accessed in May 2014

A relationship plot between government spending and GDP indicates that the increase in GDP over the years is accompanied by increase in government spending/ expenditure on education. While the expenditure on education as a percentage of gross national income remained fixed at around 4%, but the GDP grew almost exponentially for 2009-2012 with CAGR at 14.74%. Though there is increase in government spending, there is need for more focussed and strategic spending in education sector.

Figure 4: Relationship between GDP and Expenditure on Education in 2001-2012 for Nepal



Source: World Development Indicators, World Bank Data Base, Accessed in May 2014

Education level of migrants has direct effect on amount of remittance received: Higher the education levels of migrants, higher are remittance received in Nepal.

In Nepal, remittances form an important component of GDP and contributed to about 25% of GDP in 2012-13¹⁷. There is a strong linkage between the education level of the migrant and the average per capita remittances received in Nepal. With increasing education level of migrant, the degree of skill involved in the type of work the migrant engages himself increases; which have direct impact on the earning potential. Table 1 depicts the relationship between education level and per capita remittance received.

Table 1: Average Per Capita Remittances Received 2003/04

Education level of Head	Urban Nepal (in NPR)	Rural Nepal (in NPR)
Illiterate	3287	1986
Primary	3795	3283
Secondary	2614	-
Higher Secondary	4229	4936

Source: Nepal Critical Development Constraints by ADB, DFID, ILO study

Improving education levels in Nepal are contributing towards growth of knowledge & services industry.

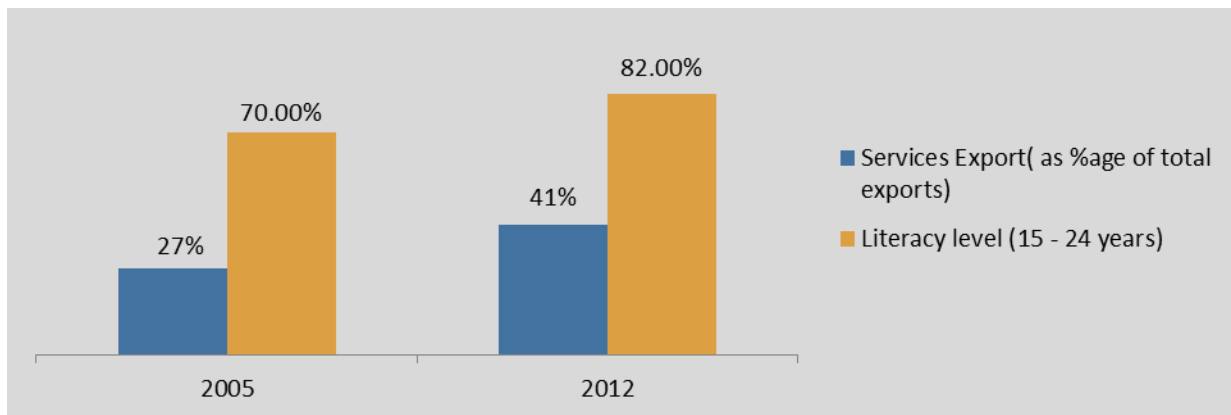
The transition from manufacturing to the services-based new economy cannot be smooth and obvious, if there is no improvement on educational indicators. This is quite evident in Nepal, where, with increasing level of education, there is corresponding increase in export of services. The service export basket of Nepal includes Information Technology and Software Development, Business process Outsourcing, and Engineering Services and Tourism services¹⁸. It is primarily because the economy tends to move to a more knowledge based economy engendering more valued services. The contribution of services in export increased from 27% in 2005 to 41% in 2012 (refer Figure 5). During the same period the increase in literacy rate was also substantial from 70% to 82%.¹⁹ Services exports increase as the education level starts improving and the share of service exports in overall export portfolio of a country increases.

¹⁷ <http://www.worldbank.org/en/news/feature/2013/10/02/Migrants-from-developing-countries-to-send-home-414-billion-in-earnings-in-2013> accessed on June 2014

¹⁸ International Trade Center, Geneva, Andreas Lendle

¹⁹ World Development Indicators, 2013

Figure 5: Services Export and Literacy level Linkage



Source: World Development Indicators, World Bank Data Base, Accessed on May 2014

Thus the role of education in economic development is crucial. It has indirect, strong and long term impact on economic development of Nepal. Education helps carve out the path of development and develops the growth trajectory for a developing nation. Though the impacts are not immediate, but the scale in which education catalyses the pace of economic development makes this sector a development critical sector.

2.2 Overall state of supply and demand in the sector

There is a demand-supply gap in the education industry since the volume of education seeking population is increasing but education infrastructure is inadequate to cater to the need.

Though there has been rise in number of schools and other educational facilities from 2011-12, it had not resulted in improving education levels in country as indicated by poor pass percentage. The average pass percentage of Nepalese Basic School Education is at around 60% and for Higher Secondary Education is around 25%.²⁰ Moreover a significant number of Nepalese students go abroad for Higher Studies; mostly in China, India and USA primarily because of lack of options within Nepal. According to the Nepal Medical Council (NMC), about 600 students from Nepal go overseas for the MBBS every year, while about 100 post-graduate students abroad for the Doctor of Medicine/Doctor of Surgery degrees annually.²¹ Nepal is the eleventh leading place of origin for students coming to the United States²². The majority of Nepalese students study at Undergraduate level in these foreign universities. Around 53% of total outgoing students opt for Undergraduate studies and around 30% opt for graduate studies; rest go abroad for Optional Practical Training²³. For instance in 2011-12 it was estimated that over 14,000 Nepalese students were studying in Australia²⁴, more than 9600 students were studying in USA²⁵ and a significant number of students in the UK. This shows substantial outflow of Nepalese money as educational expenses. This amount could have been retained in the domestic market itself had there been equivalent educational options for the Nepalese students.

²⁰ Flash Report, 2012-13

²¹ <http://www.asianewsnet.net/High-fees-forcing-Nepali-medical-students-to-study-49411.html> accessed on June 2012

²² Institute of International Education, Educational Exchange Data from Open Doors 2012

²³ Institute of International Education, Educational Exchange Data from Open Doors 2012

²⁴ http://www.austrade.gov.au/Education/Student-Data/2012#.U_LJw_mSz1Y

²⁵ Institute Of International Education, Educational Exchange Data from Open Doors 2012

The significant demand-supply gap in education sector presents an opportunity for private equity investors to support businesses that are creating various types of new and technology based solutions to address this need.

2.2.1 Analysis of Demand Dynamics

The demand for education is extremely high in Nepal. Around 55% of total population is under 25 years of age. This segment of population needs formal and skilled education so that they contribute efficiently and actively to the national economy.

From the census data 2011, the demand for education is estimated. Around 45% of total population were in school going age; 25% of the total population need access to basic education; 11% need access to secondary education. The demand for school education is very high for Nepal.

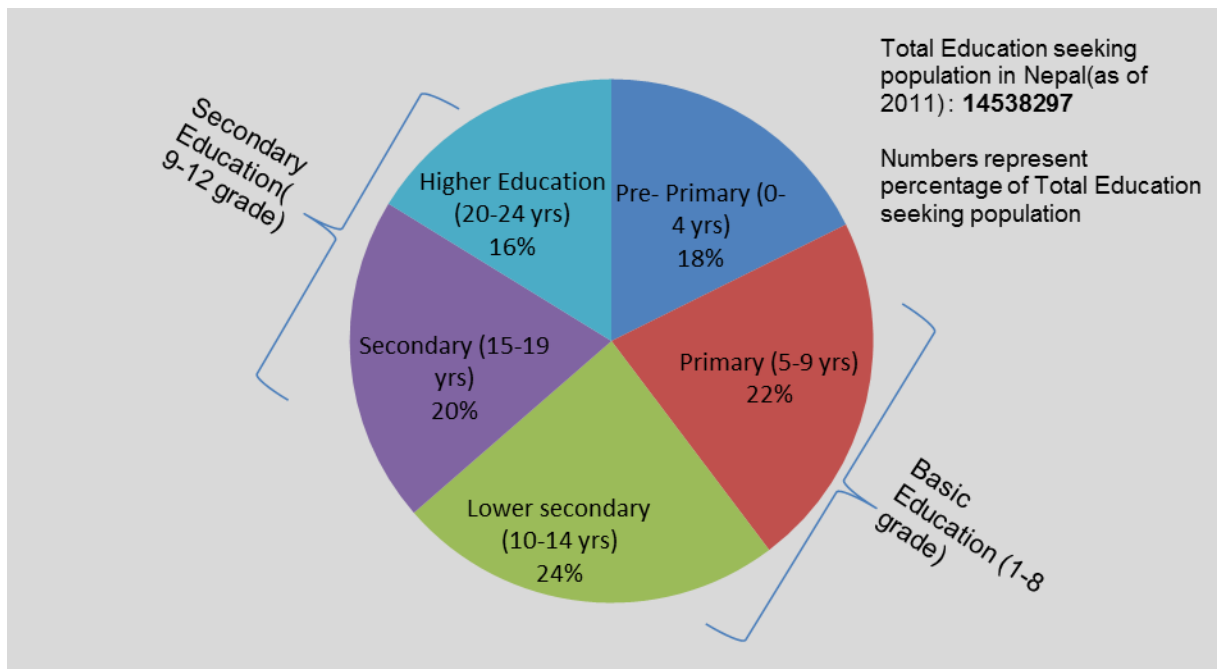
Table 2: Demand estimation for education in Nepal

Education level	Population (in numbers)	Percentage(of total population)
1. School		
1.1 Pre-Primary(0-4yrs of age)	2567963	9.7%
1.2 Primary(5-9yrs of age)	3204859	12.1%
1.3 Lower secondary(10-14yrs of age)	3475424	13.2%
1.4 Secondary(15-19yrs of age)	2931980	11.5%
2. Higher Education		
2.1 College/Graduation(20-14yrs of age)	2358071	8.9%

Source: National Population and Housing Census, 2011, Government of Nepal

Of the total education seeking, population, the demand for Lower secondary education is highest; around 24 % of total education seeking population need lower secondary education.

Figure 6: Demand for education level wise



Source: National Population and Housing Census, 2011, Government of Nepal

There is significant competition to get admission into various colleges and technical schools. For admission into medical schools in Nepal, the competition is high. For example in 2012, for a total of 860 seats under various disciplines around 5200 application came which means 1 in every 6 application gets selected.²⁶ This hints at demand for more Medical colleges in Nepal. The need for more medical colleges in Nepal hints at high preference for Medical education in Nepal. The international student inflow is significantly high. For example, in medical colleges around 50% of student inflow is from India and Sri Lanka. This inflow is primarily driven by affordable quality education options in Nepal as compared to the cost of medical education in India and Sri Lanka.²⁷ Similarly the number of Engineering colleges and Management schools are also less to cater to the needs of the student. Moreover, there is demand from students of countries like India as well. For general courses like BBA, for every single seat around 7 applicants compete for admission. This hints at the high demand for business schools and overall higher education in Nepal.

Demand for vocational education is increasing; and the latent potential of vocational education in filling the employability gap is immense.

The school dropout rate in Nepal is very high and majority of the students who leave the schools early may not be fully prepared to contribute to productive economic output in Nepal. The dropout rate is around 6% at each level of school education.²⁸ The overall survival rate to class 8 is at 70%. This means a huge number of existing student base of over 1.3 million students ²⁹still dropout of school and actually

²⁶ MBBS student selection: search for proper criteria, Kathmandu University Medical Journal (2003)

²⁷ <http://heapol.oxfordjournals.org/content/early/2011/08/30/heapol.czr052.full> accessed on June 2014

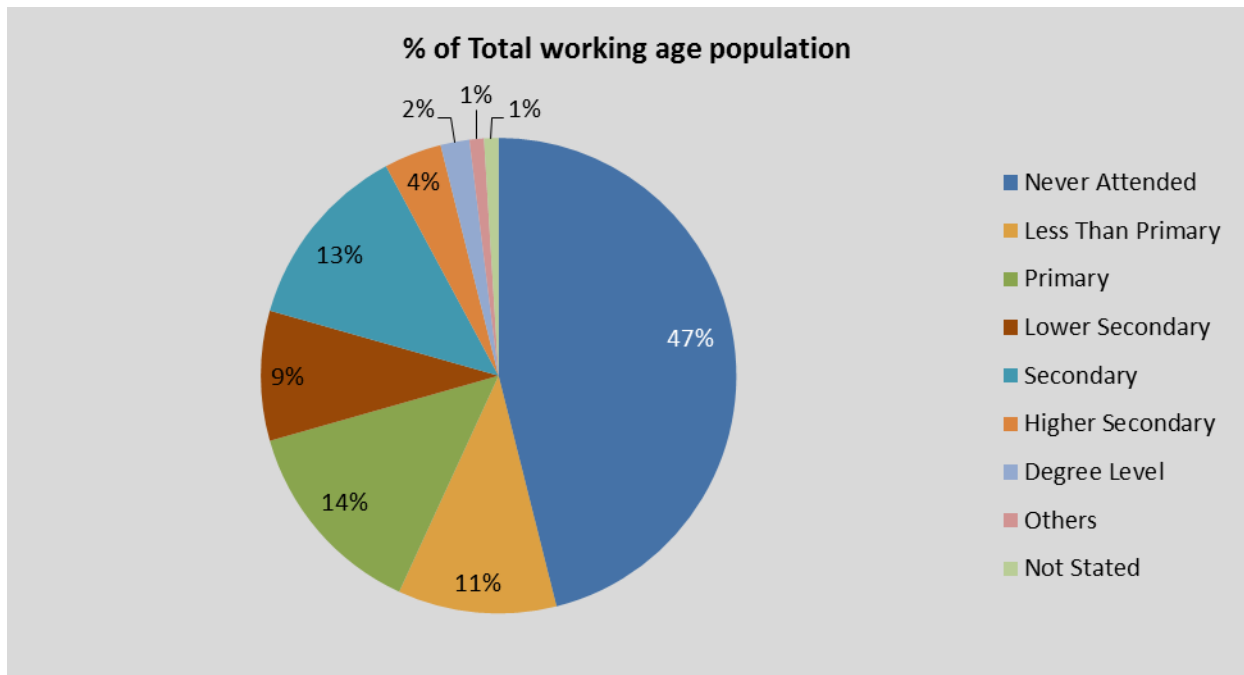
²⁸ Flash Report-I 2013, Department of Education, Government of Nepal

²⁹ 70% survival rate implies 30% of students enrolled in primary do not reach lower secondary and this 30% is best suited for vocational education.

do not complete secondary education. These dropouts from schools have lesser skills and usually end up in job market doing largely unskilled or semi-skilled work. They make up a sizeable population in the labour workforce.

According to Nepal Labour Force Survey in 2008 around 25% of workforce has not completed their lower secondary education. The average educational level of workforce also proxies for Vocational education demand. For example, in 2008, around 47% of the working age population never attended school, 11% was at less than primary level, and 14% completed primary education; only 2% of the total working population had completed graduation. Figure 7 depicts the level of education among working age population.

Figure 7: Level of Education among working age population in Nepal, 2008



Source: Nepal Labour Force Survey, 2008

There is significant industrial demand for skilled and trained Nepalese manpower in a both domestic and international market. Around 30% of the trained workforce from fields like Hotel Management goes outside Nepal for better job opportunities³⁰. The rising demand for trained workers outside Nepal hints at a strong latent demand for vocational and skills training education in Nepal.

However there seems to be lack of short and relevant vocational training courses which would equip the next generation of workforce with required and rewarding occupational competencies.

2.2.2 Analysis of Supply Dynamics

In Nepal the average school student ratio is 1:165 in 2013. This number has improved compared to previous year which was 1:170. But the quality of education offered in the schools remains an issue of concern.

³⁰ Intellect Primary research 2014

In Nepal, around 34782 schools (in units) cater to the educational needs of more than 16 million students enrolled for primary and secondary education. Majority of the schools provide all levels of education; primary, lower secondary, secondary and higher secondary. Table 3 presents the supply dynamics of school sector break.

Table 3: Existing number of schools and total number of enrolled students

School (by Level)	Number of students enrolled	Number of institutions(Private & Public) in levels
Pre-primary	1,053,054	34,174
Primary(1-5)	4,576,693	33,492
Lower Secondary(6-8)	1,823,192	14,406
Basic Education (1-8)	6,399,885	33,666
Secondary(9-10)	878,047	8,401
Higher Secondary(11-12)	387,516	3,596
Secondary(9-12)	1,265,563	8,696
Total	8718502	34782(in units)

Source: Flash Report –I, 2013, Department of Education, MoE, Government of Nepal, Indiatats; Intelcap Analysis, 2014

In the higher education segment, a total of nine public universities and more than 1000 colleges and institutions cater to the educational need of students in Nepal. Tribhuban University, the largest of all universities of Nepal alone produced 69,023 graduates from technical courses like Engineering, Medicine etc. and 50,093 graduates from non-technical courses in 2009/10³¹.

Vocational education is lately gaining traction due to better income opportunity and employability skills post degree/diploma from these institutes.

Schools dropouts and students from lower socio-economic demographic segment usually find their way to vocational education. The formal public Technical and Vocational Education and Training (TVET) system consists of 14 technical schools, 4 polytechnics, 2 community development vocational training centres, and 30 annex schools under the Council for Technical Education and Vocational Training³². More than 450 private technical schools and polytechnics are also affiliated with this council. In 2009, about 25,000 students were enrolled in the formal TVET system in pursuit of a technical school leaving certificate and diploma. Another estimated 60,000 were receiving short-term training³³. However access to TVET is far from equitable between urban and rural areas and across different social groups, an area of concern that needs to be addressed in near future.

Educational support services are at an early stage of development; supply side is dominated by small scale fragmented operation.

In the supporting services sector, there are estimated 5-10 players in the digital content and technology segment. The segment also has significant international players especially from India. However the client base of international players is very small compared to domestic players. The client base mostly consists

³¹ <http://www.fncci.org/ginfo.php>

³² Sector Assessment(Summary)Education: Country Partnership Strategy Nepal;2013-17

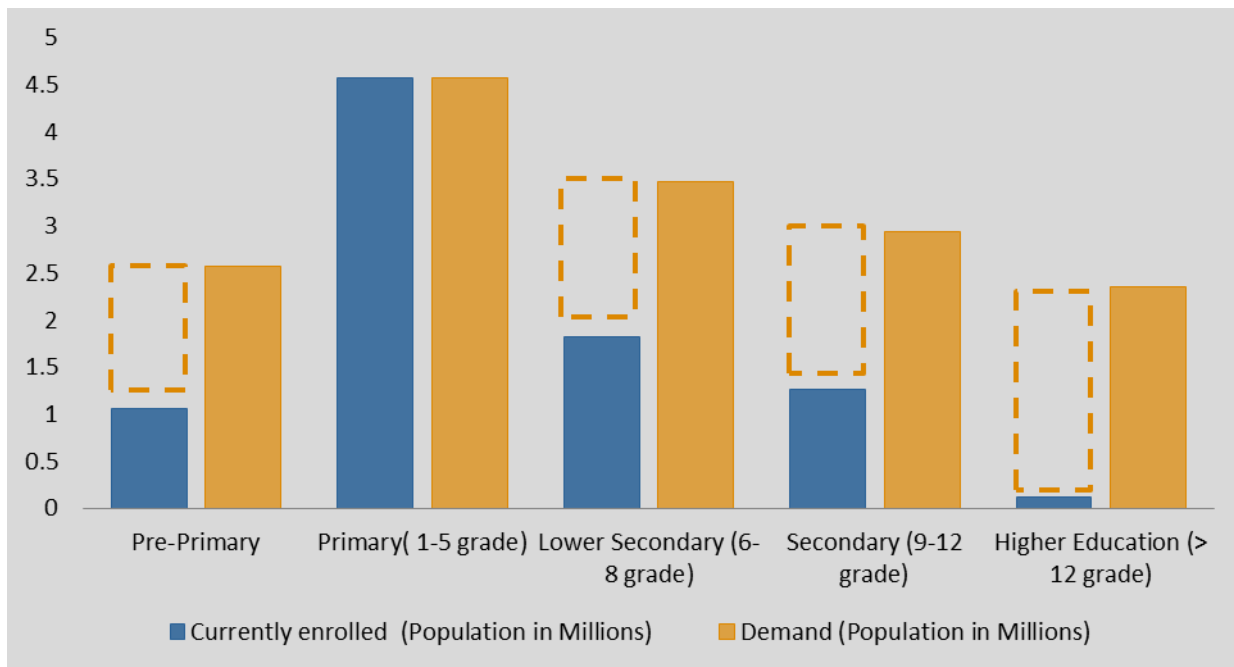
³³ Sector Assessment (Summary) Education; Country Partnership Strategy Nepal, 2013-17

of schools who buy the educational content (mostly in CDs/HDDs) and MIS product. The product set offered to the customer includes school management system, school administration system and library management system. This segment is slowly evolving in Nepal and with very high growth potential in future³⁴.

Demand supply gap is high; ample scope for private sector educational institutes to grow and thrive well.

From the demand and supply dynamics it is very clear that the existing educational facilities (even under full capacity utilisation) are ill- equipped to absorb the existing population. The demand-supply gap for school education is depicted in the Figure 8.

Figure 8: Demand supply gap in education sector



Source: Flash Report –I, 2013, Department of Education, MoE, Nepal; Intelcap Analysis, 2014

There is significant quantity gap in supply-demand dynamics of pre-primary, lower secondary, secondary and higher education.

In primary education, the supply exceeds demand; because of the high Net Enrolment Ratio for primary education which is 98% in 2013³⁵ for Nepal. It results in a situation where supply matches the demand requirement. At an aggregate level, there is almost no quantity gap in primary education, but at developmental region or ecological belt level, there is significant quantity gaps (refer section 3.1.1.2). Similarly quality gap exists; with reasonably poor quality of outcomes in this segment. The pass rate of students is only 70% at primary level. Repetition rate is high at around 20% of students repeating grades

³⁴ Refer section 3.1.2 and section 6.1.3 for detail discussions

³⁵ Flash Report – I, Department of Education, MoE, Government of Nepal, 2013

in 2013.³⁶ These percentages are significantly low as compared to Sri Lanka where the pass rate of primary students is around 85% and repetition rate is 10%.³⁷

There is significant niche gap in educational services sector and in vocational education segment. The overall demand for the support services is relatively low because the target segment is largely unaware of the scope of services that can be gainfully used for bringing efficiency and efficacy in education system.

UNESCO identifies four pillars for educational reforms in emerging and frontier markets; (i) for preparation for higher education; (ii) for social well-being; (iii) for access, equity and inclusiveness and (iv) for creating human resource competent with market needs (economic outcome). In the context of Nepal, the country lags behind in all four outcomes as represented by the indicators in these areas. The current educational reform fails at addressing the equitable access issue. The human resource of Nepal is ill-equipped with the existing skillset and capabilities derived from education. This opens up immense scope and space for agile and alacritous private sector activity.

³⁶ Flash Report, 2013, Department of Education, Government of Nepal

³⁷ Department of Examination, Sri Lanka, accessed on 2014

3 Sector Overview

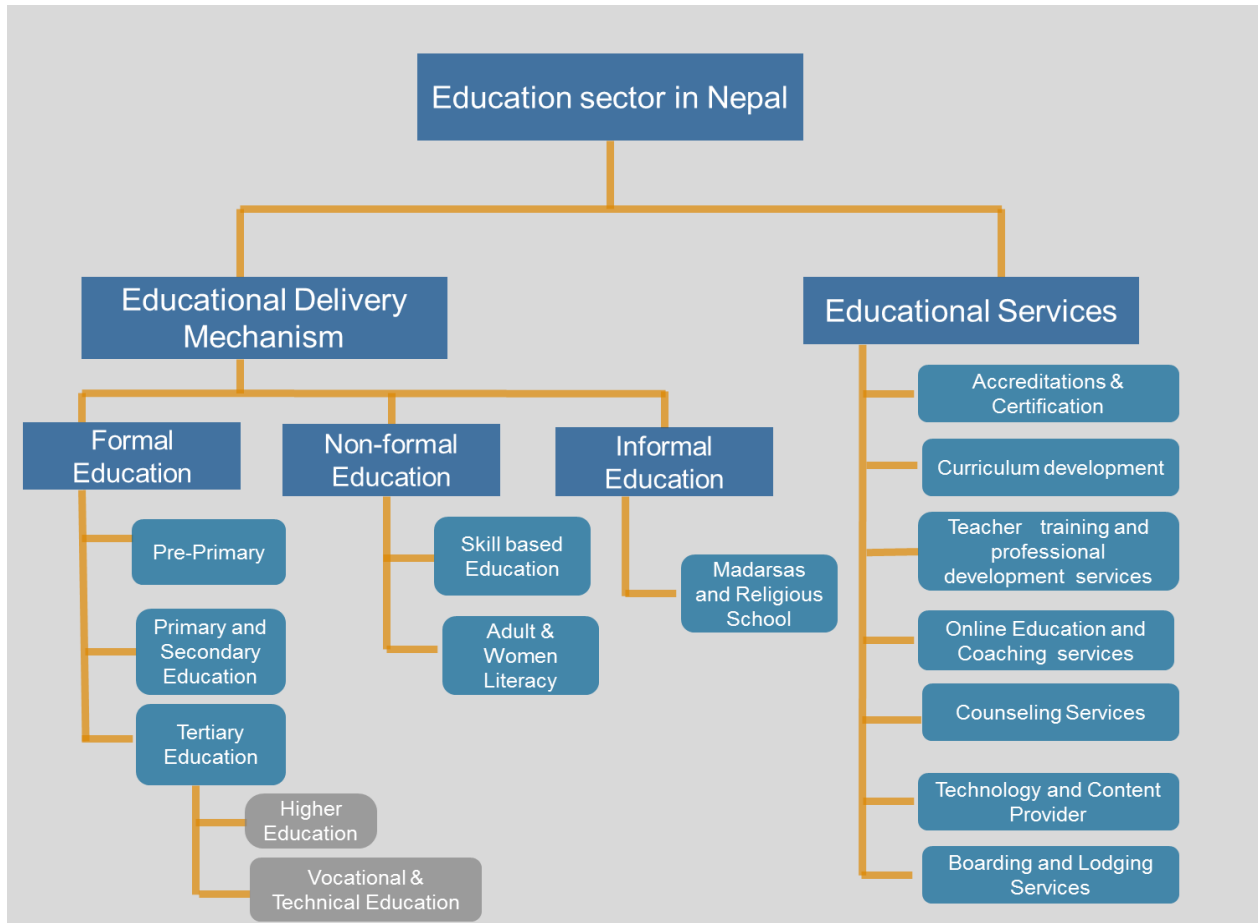
Education in Nepal is delivered by public and private sector and accounts for a total expenditure of over US\$ 49 billion each year. This comprises 4.71% of the Gross Domestic Product (GDP). Government of Nepal spends around 16.1%, 12.1% and 50.1% of GDP per capita for each student in Primary, Secondary and Tertiary education. This is lower than the global average and is at par with other emerging economies in South Asian Association of Regional Cooperation (SAARC) countries. The majority of people employed in the sector are teachers. Around 178534 numbers of teachers are employed in Primary Education of which 92% are trained and 105865 in Secondary Education of which 90% are trained.

3.1 Structure of Education sector in Nepal

Structure of the education sector in Nepal can be analysed across 2 dimensions – (a) examining education delivery models in Nepal; (b) by the variety of educational support services; these two dimensions can be analysed with respect to degree of private and public sector activity, latent opportunities and growth scope.

The education sector in Nepal can be broadly classified into two major sub-sectors: Educational Delivery Mechanism and Educational services. The sub-sectorial break-up of education delivery mechanism and educational service has been shown in Figure 9 below:

Figure 9: Education sector structure overview



Source: Intellecap Analysis 2014

The educational services sector comprises of all types of services which directly or indirectly facilitates the access to education and improves the quality of delivery. These services increase the effectiveness of the whole delivery super-structure and bring in efficiency. These services can be broadly categorised into technology provider (internet services etc.), curriculum development agencies, counselling and consultancy services, training and professional development services and accreditation and certification.

3.1.1 Examining Education Delivery Mechanism

The educational delivery model in Nepal can be sub-categorised into (a) Formal Education (b) Non-Formal Education (c) Informal Education as shown in Figure 9 .

Formal Education in Nepal

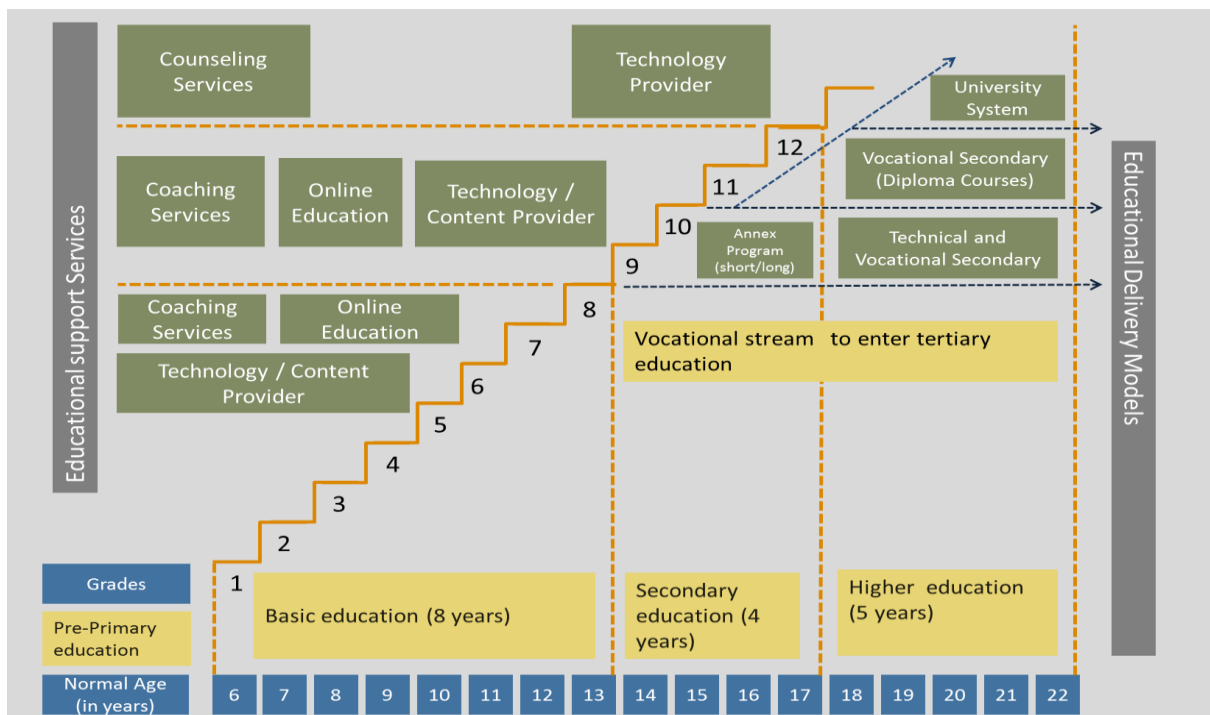
The formal education sector in Nepal constitutes of school education, higher education, technical and vocational education. The institutional arrangement for formal education in Nepal is depicted in the following figure. At the central level, Ministry of Education (MoE) is the apex body in educational matters and is responsible for policy formulation, educational planning and providing overall directions and guidelines. **School Sector Reform Program, 2009 which focused on regrouping various school grades has resulted in increased governmental focus on School and Vocational Education.**

From 2009, the government of Nepal has been implementing a School Sector Reform Program (SSRP: 2009-15), which aims to restructure school education by better integrating the various levels into basic education (grades 1-8) and secondary education (grades 9-12), in hopes of boosting school retention rates and overall enrolments.

A vocational stream at the secondary level (from grade 9) is also being introduced under the new system, which will enable students on a vocational track to enter tertiary education after completing an additional one-year bridge course. The SSRP program has resulted in significant improvements in access to primary education.

The Value Chain of formal education Sector can be depicted has been shown in Figure 10.

Figure 10: Value chain of Formal Education System as per School Sector Reform Plan, 2009



Source: Ministry of Education, Glimpse 2010 and Intellectap Analysis

There is significant private sector activity in the formal education sector. A brief analysis of the private and public sector activity in school education, higher education and technical and vocational education is described below.

3.1.1.1 Pre-Primary Education

Pre-primary education segment holds great growth potential; Immense scope for private players to adequately meet the demand and reap commercial benefits.

In 2013 around 500 new Early Childhood Development (ECD) centres were established as a response to District Education Office's demand to provide ECD service for the un-served children as a part of governmental initiative. The enrolment in ECDs has shown an annual growth rate of 11.3%.³⁸ In Nepal,

³⁸ Flash report – I, Department of Education, 2013, Government of Nepal

the pre-primary (or pre-school) education sector has seen significant private sector involvement. For instance, around 55% of students starting school education have early childhood development/Pre-primary class experience and the private sector schools account for nearly 14% of the enrolment in pre-school category. The private sector involvement is comparatively lower compared to south Asian developing country like India, wherein, the private sector accounts for 20% enrolment in pre-school category.³⁹ Thus, there is scope for further participation of private sector in this subsector.

3.1.1.2 Primary and Secondary Education

There are two main types of schools in Nepal: (a) Community schools and (b) Institutional/Private schools. Community schools are usually run by the government or a community. Community schools which are fully funded by public funds are categorised in three groups: (a) **community-aided**⁴⁰ (b) **community-managed**⁴¹ (c), **community-unaided**⁴². Community/public schools are fully funded by public funds.

Institutional schools are often referred to as 'private' or 'boarding' schools and have private school management. Private schools in Nepal usually do not receive any funding from the state and have to pay both income and service taxes to the government.

Classification of private sector schools in Nepal

The government recognises and classifies private schools based on two criteria: (a) Profit motive (b) Infrastructural, educational and management related aspects of schools.

Based on profit motive, the schools enjoy differentiated tax and subsidy benefit at the time of registration. For example public trusts are exempted from security deposits/ collateral at the time establishments.⁴³ The classification is depicted in Figure 11.

³⁹ Human Resource and skills requirements in the Education and Skill Development Services Sector (2022)

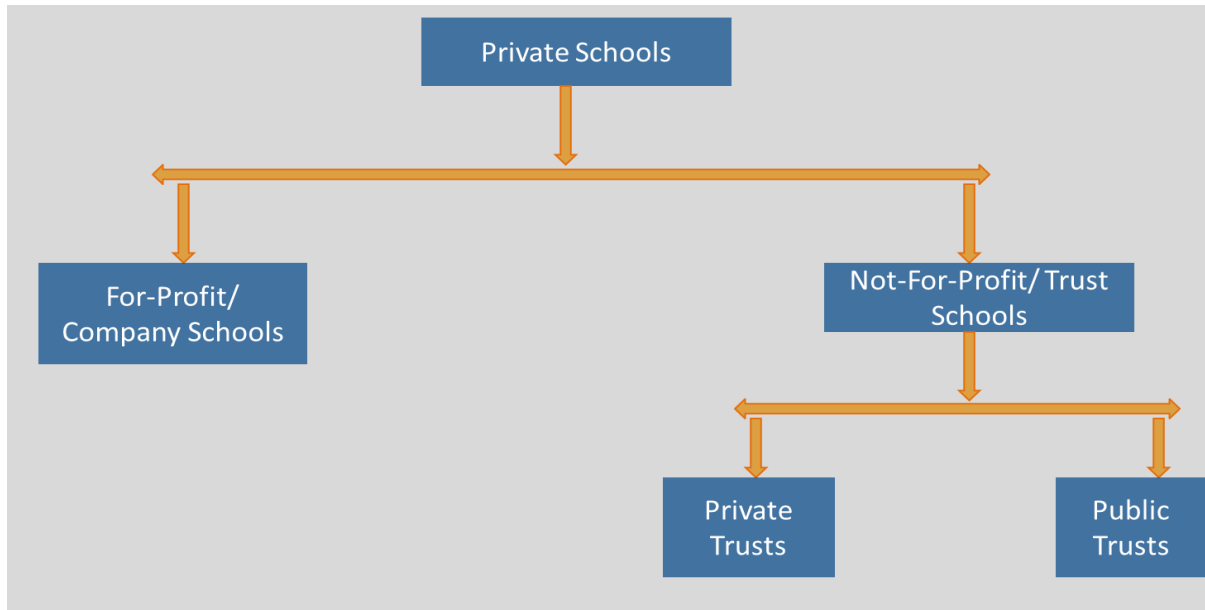
⁴⁰ schools, which are fully supported by the government for teachers' salary and other expenses

⁴¹ schools, which are fully supported by the government for teacher's salary and other funds but their management responsibility lies with the community

⁴² schools, which are either getting partial support or no support from the government

⁴³ Education Act Nepal and Working paper, Privatisation in Education Research Initiative (PERI)

Figure 11: Classification for private schools in Nepal



Source: Intellecap Analysis 2014

The infrastructural, educational and management related aspects of schools in general can be utilised to segment the private schools in Nepal. Based on this classification, the Ministry of Education ⁴⁴(MoE) distinguishes private schools as Type A, Type B, Type C and Type D schools; Type A being the highest rated category in terms of presence of infrastructure and experienced education and management teams. This classification is also indicative of comparative fee structure that a school can charge and the corresponding socio-economic group and class that it caters.

Class A schools primarily cater to the economically affluent demographic segment of Nepal with higher disposable income⁴⁵. This segment of the population is usually ready to pay a premium price for schooling and have comparatively reliable cash flows to pay the fees and other incidentals. The premium price charged by Class A schools (indicating a higher profit margin⁴⁶) coupled with their predictability of cash flows makes them attractive investment opportunities in Nepal.

All schools – public and private, follow government prescribed curriculum, textbooks and other rules and regulations. But private schools have more autonomy in their financial and internal management.

The geographical distribution of schools is highly skewed with the highest number of school in the hilly areas and the lowest in the valley.

Of the total 34,782 schools registered in the department of education in Nepal almost all the schools provide basic level of education (up-to class 8) and around 14000 schools provide lower secondary

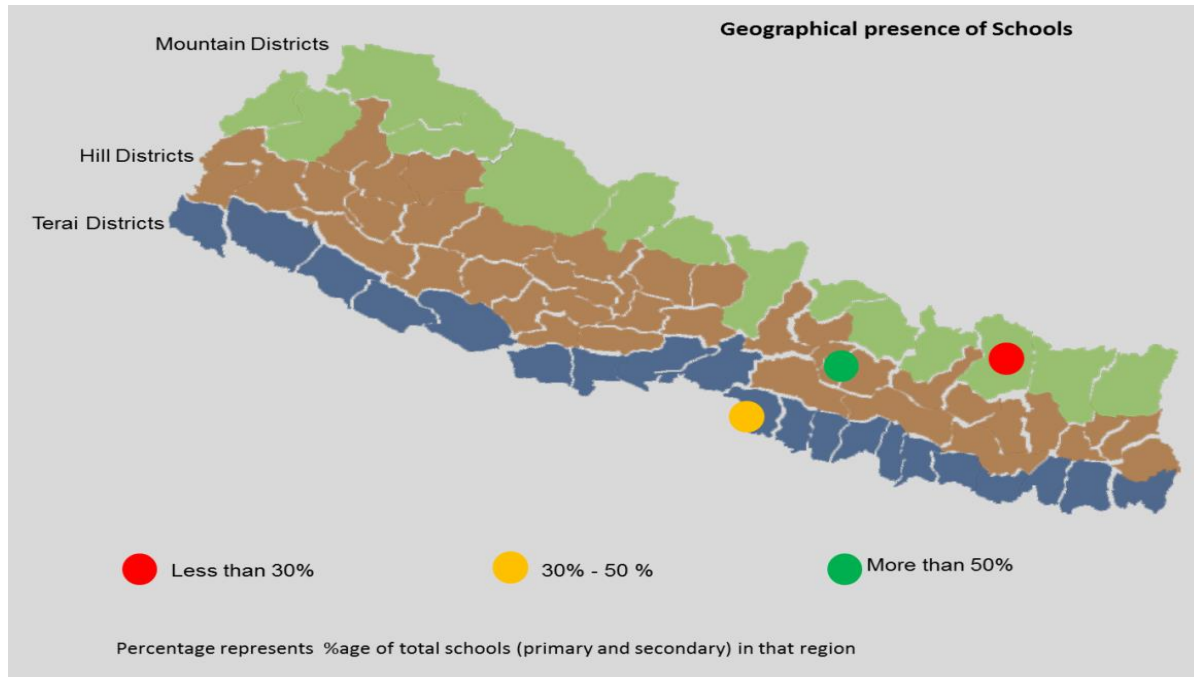
⁴⁴ Education Regulation, 2003, Government of Nepal

⁴⁵ Top 20 percent of Nepalese population is expected to have sufficient disposable income to spend on type A schools education. Source: Central Bureau of Statistics, 2012-13, Survey on Household Income

⁴⁶ Intellecap's primary research indicated that Class A schools had the highest profit margins among all the 4 categories of private schools in Nepal

education⁴⁷. Hilly areas have maximum number of schools (both public and private) compared to other areas. Around 50% of schools of all levels (primary, lower secondary and basic) are present in the hills. This is primarily because of two reasons – (a) high population density in the hilly region (b) better spending ability of the hilly region households.

Figure 12: Percentage distribution of schools in geographical belts



Source: Flash report – I, Department of Education, MoE, Nepal 2013

The private sector has a significant presence in the school education segment. Market share of private players in School segment is significant and there is ample scope to increase the market share.

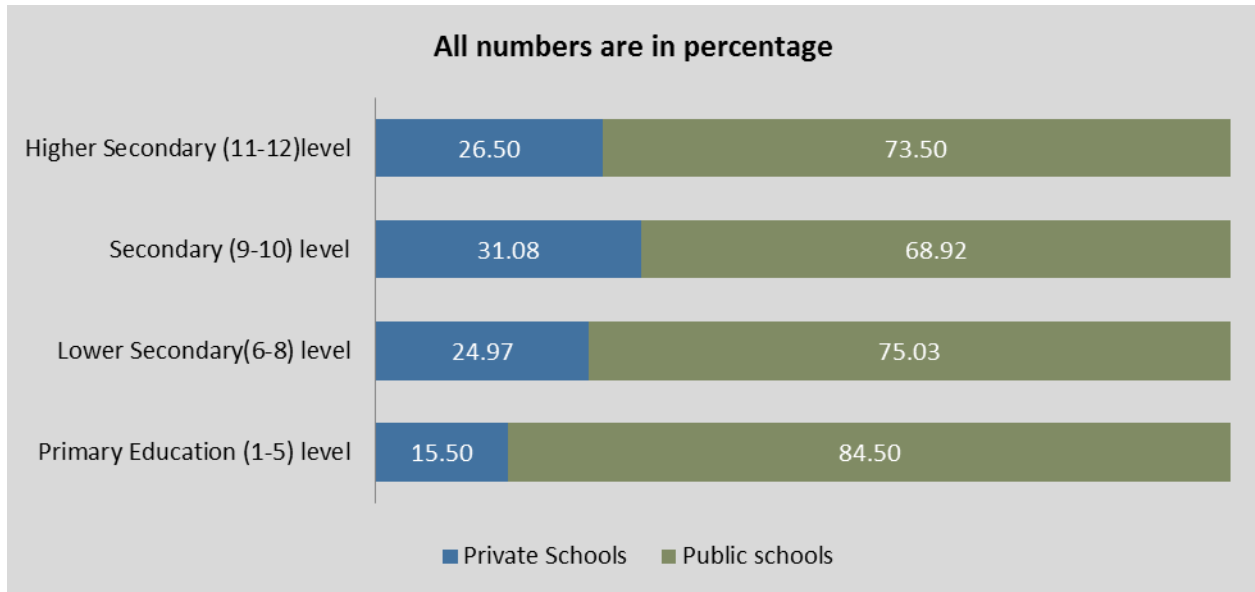
Analysing with the lens of private and public players in the delivery mechanism system, the private player’s presence in basic education(classes 1-8) ranges from around 15% to 25%, and in Secondary education(classes 9-12) ranges from 25% to 30%.⁴⁸ From Figure 13, it is evident the market share of private players in school education sector is around 30% (in terms of number of units). These one-third service providers actually accounts for around 15%-20% of total student enrolments in basic and secondary education segment.⁴⁹ This is primarily because up-to lower secondary is the responsibility of the state and there are many public schools in Nepal compared to private schools. Moreover the fees charged by the private schools are much higher and hence a majority of the population does not have enough disposable income to spend on private schools.

⁴⁷ Flash report – I, Department of Education, 2013, Government of Nepal

⁴⁸ Ministry of Education website, Nepal

⁴⁹ Flash report, Department of Education, Government of Nepal, 2012-13

Figure 13: Private players by percentage in Nepal, 2013

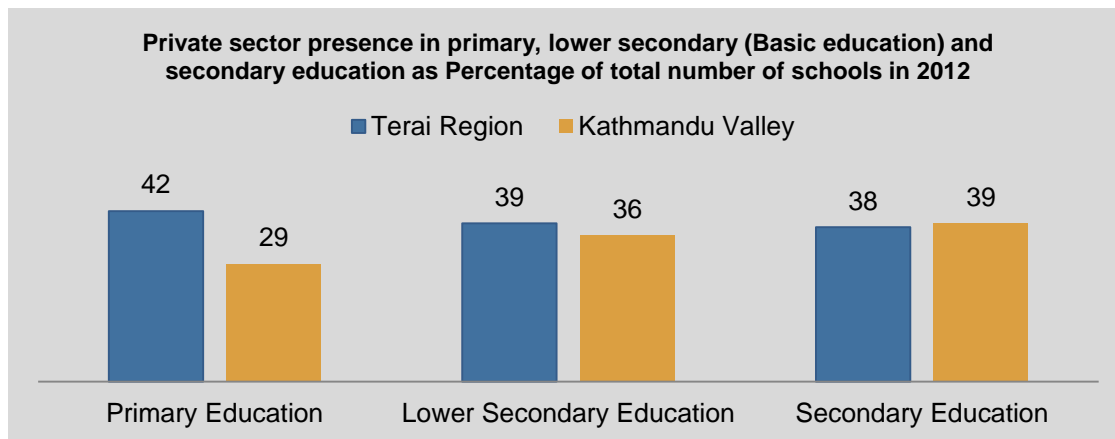


Source: Flash Report, MoE, 2013 and Intellecap Analysis 2014

Private schools in Nepal are concentrated in the terai region with limited presence in the mountainous areas. Terai region accounts for more than 70% of total student enrolments.

There are significant geographical disparities in the distribution of private schools in the country. In general, private schools are concentrated in urban areas and geographically accessible regions (the southern plains known as Terai). The Terai region has the largest percentage of private schools followed by the Kathmandu Valley (refer Figure 14). Though the hilly region has highest number of schools, there is a lower presence of private schools in this region. Geographic constraints for creating infrastructure in the hilly and mountainous areas and concentration of population and demand centres in the Terai region and Kathmandu valley drive the private sector activity in Terai and Kathmandu valley regions.

Figure 14: Private sector presence in various education segments in Terai Region and Kathmandu Valley



Source: Working paper, Privatisation in Education Research Initiative (PERI)

The key centres of private schools education is in the areas of Morang (Biratnaga), Nepalgunj, Kalaiya, Chitwan, Janakpur, Chandragadhi, Parasia, Siddharthanagar and Phidim.

The private schools accounts for only two percent of primary, two percent of lower secondary and one percent of secondary schools in the entire Mountain districts with public schools dominating the landscape. Within these broad geographical zones, there are significant intra-regional variations in the share of private schools. In particular, the Mid- and Far-Western Mountains, and the Far-Western Hills have a very low share of private schools.

This opens up latent opportunity for private players to explore the sector in a more geographically dispersed way and identifying unexplored profit pockets across Nepal.

3.1.1.3 Tertiary Education: Higher Education

The higher education segment in Nepal has seen brisk activity in the last two decades with significant private sector participation. The number of universities has increased threefold from two in 1990s to nine in 2012 including one private university. The private sector activity has been significant with the number of privately operated colleges affiliated with these universities increased by over 10% in the past two years⁵⁰.

The higher education usually comes under the purview of Universities Grant Commission (UGC) which is the apex body in Nepal responsible for allocation and disbursement of grants to the universities and their campuses, regulating their activities and formulating policies and programs on establishment of new universities. There are a number of private colleges (around 700)⁵¹ which are either constituent or affiliated to public universities.

Despite the presence of a significant number of higher education institutes in Nepal the enrolment rate in the higher education segment remains very low. The tertiary education enrolment rate in general is very low in the SAARC region and even lower in Nepal compared to the world average as shown in Figure 15. The gross enrolment rate⁵² in higher education is about 10% and private sector accounts for 24% of total enrolments⁵³.

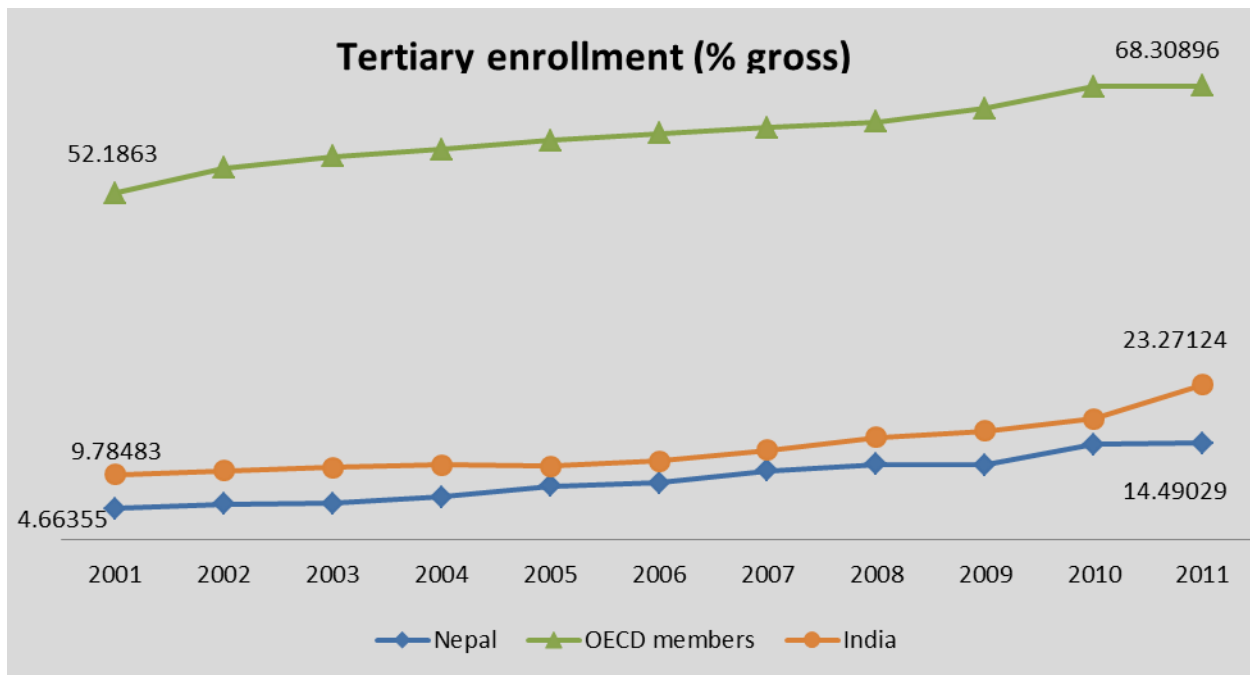
⁵⁰ UGC Report, 2010-11

⁵¹ UGC Report, 2012

⁵² Gross Enrollment Ratio is the total enrollment within a country "in a specific level of education, regardless of age, expressed as a percentage of the population in the official age group corresponding to this level of education."(UNESCO)

⁵³ UGC Report, 2012

Figure 15: Tertiary education enrolment rate in various countries



Source: Flash Report, MoE, 2013

Disparities in access to higher education are significant, with women and individuals from lower income backgrounds, castes and ethnic groups facing discrimination. Only 11% of total female population gets enrolled for tertiary education. Also enrolment share from rural areas is disproportionately small. Rural students account for less than 10% of total tertiary education enrolments.⁵⁴

Enrolment in professional courses is highly skewed. About 90% of students take up non-technical subjects such as education, management, and humanities and social sciences.⁵⁵ There are constraints in number of seats and also in terms of affordability of the technical education.

A low enrolment rate in tertiary education may reflect a mismatch between skills taught to graduates and requirements of the labour and services market in Nepal in general.

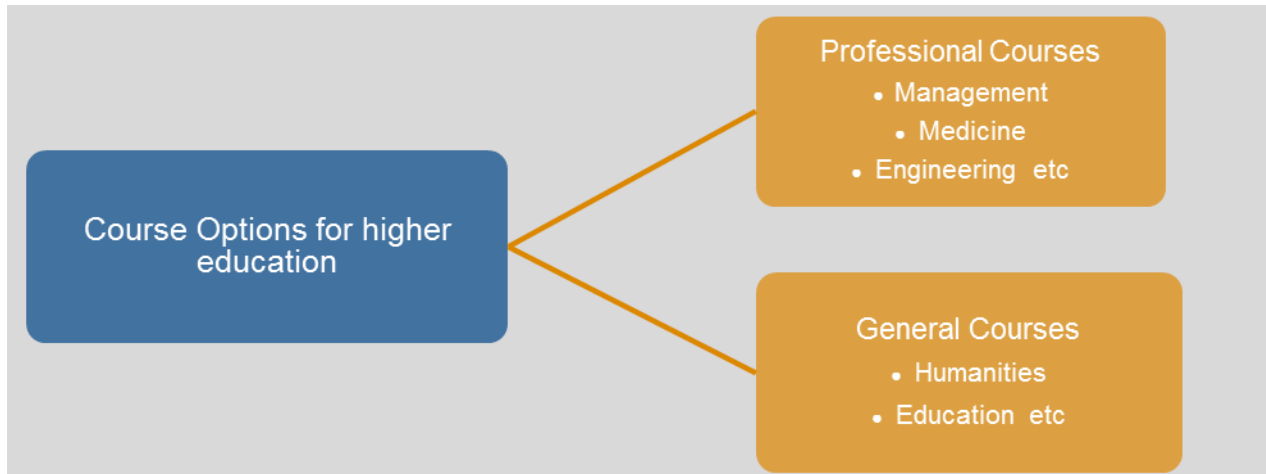
Classification of Higher Education segment in Nepal

The types of courses for higher education in Nepal can be broadly classified into General and Professional courses. General courses includes courses like Arts, Science, Commerce, Education etc. and professional courses can be further segregated into conventional professional courses (like Engineering, Medicine, Law etc.) and Vocation based courses which are industry specific and functional area specific(Nursing, Hotel Management, Air- Hostess training, aviation, sales, IT etc.)

⁵⁴ World Development Indicators, Nepal Accessed on March, 2014

⁵⁵ Sector Assessment(Summary)Education: Country Partnership Strategy Nepal;2013-17

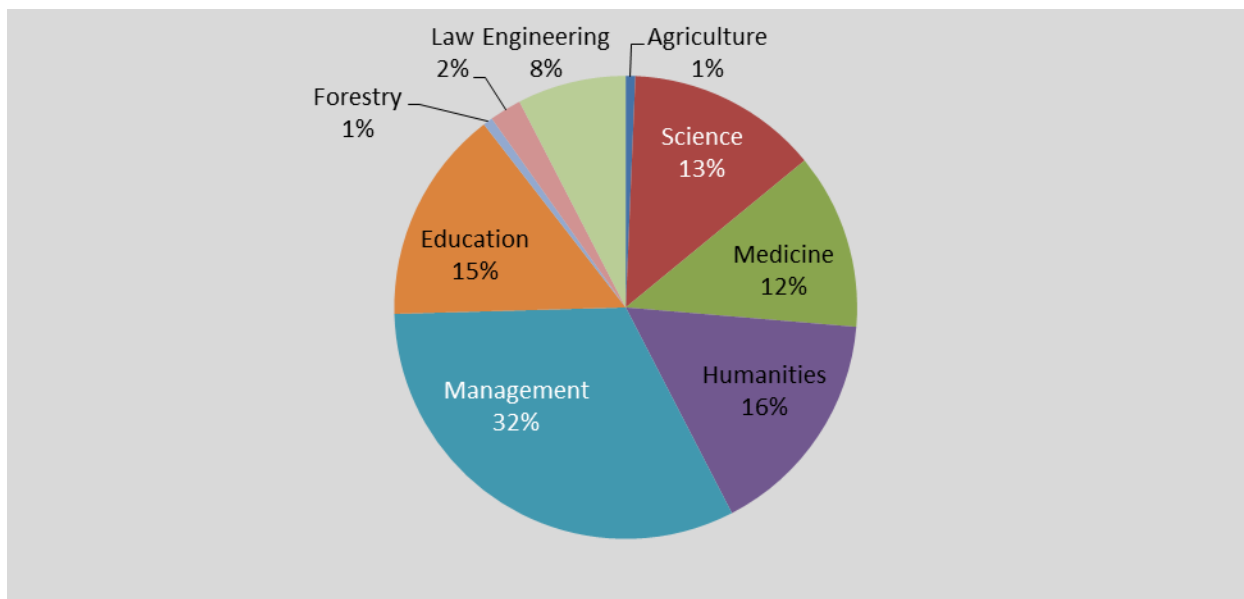
Figure 16: Types of Courses offered in higher education system in Nepal



Source: UGC Annual Report, 2011-12, Intellectap Analysis 2014

In Nepal, the widely available professional course is Management course, followed by science and Medicine. Engineering, Agriculture courses are still a very small component of the total array of courses available. Among general courses Degree program humanities, education is popular and attracts significant student enrolment as depicted in Figure 17.

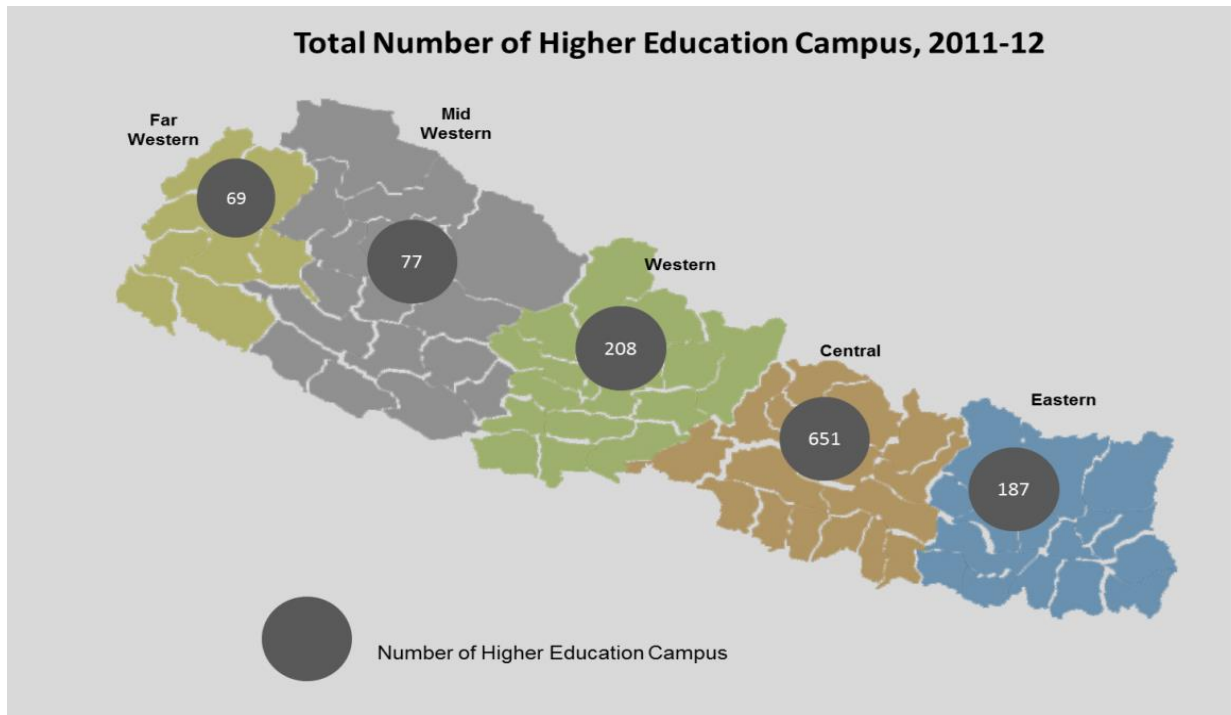
Figure 17: Percentage wise breakup of various conventional professional courses offered in Nepal



Source: UGC Annual Report, 2011-12, Intellectap Analysis 2014

Analysing with respect to geographical presence of higher education institutes, the Central region of Nepal has the highest density of educational institutes followed by eastern and western region of Nepal. The Far-Western and Mid- Western region of Nepal has least number of colleges and institutes listed in the region. The scenario is depicted graphically in Figure 18.

Figure 18: Geography wise spread of total number of Higher Education Institutes in Nepal in 2011-12



Source: UGC report, 2011-12 and Intellecap Analysis 2014

A significant number of higher education campuses (around 273 in total) are found in Kathmandu District alone. By ecological belt, Hills have maximum number of campus (around 61%) followed by Terai (around 35%) and the Mountainous region (around 5%). On the basis of development regions, the highest number of campuses can be found in Central region (50.6%), whereas the number is least in Mid-Western and Far-Western (7.5% and 6.3% respectively) regions while the Eastern and Western regions have 16.85 and 18.85 of total number of campuses.⁵⁶

Private sector presence is concentrated in medicine, management and engineering; there is a limited private sector activity in other streams of higher education.

The private sector activity is concentrated in the courses which offer immediate employment opportunity to the students. Private sector activity is seen in medicine, management schools and engineering colleges. This is primarily because (a) demand is low for other courses (b) private sector can charge higher fees for those courses as which are seen as market relevant and students are likely to land a job after completing the course. Demand for other courses is low as there is lack of tie-ups between the higher education sector and the private companies for them. This is likely to have an effect on the future employment option.

3.1.1.4 Tertiary Education: Technical and Vocational Education

The formal public Technical and Vocational Education and Training (TVET) system in Nepal consists of 14 technical schools, 4 polytechnics, 2 community development vocational training centres, and 30 annex schools under the Council for Technical Education and Vocational Training⁵⁷. More than 450 private technical schools and polytechnics are also affiliated with this council. Since 2006, support from

⁵⁶ UGC Annual Report, 2010-11

⁵⁷ Sector Assessment(Summary)Education: Country Partnership Strategy Nepal;2013-17

development partners, including the Skills for Employment Project (SEP) of the Asian Development Bank (ADB), rapidly increased the number of private providers and the number of graduates who received short-term skills training. In 2009, about 25,000 students were enrolled in the formal TVET system in pursuit of a technical school leaving certificate and diploma. Another estimated 60,000 were receiving short-term training.

Hotel management courses are very popular in Nepal with significant private sector activity

In vocational education segment the degree and diploma programs of Hotel Management are very popular and have high domestic demand. This is because of the immediate absorbance of the graduating students in the job market-both national and international. Around 70% of graduating students from Hotel Management are locally absorbed in domestic hotel management market and around 30% are absorbed in international markets of India, UK and Brunei. Nursing and Pharmacy courses are slowly gaining popularity. There is significant private sector activity in this segment with a majority of players in Hotel Management, Nursing and Pharmacy courses.

TVET segment lacks on equitable spread and quality of education imparted

Access to TVET is far from equitable between urban and rural areas and across different social groups. There is a mismatch between the training provided and the skills the domestic market requires, and also between wages for the same skills in the domestic market and abroad, inducing significant migration of workers. The quality and the market relevance of TVET are crucial factors in efforts to improve the productivity of Nepalese workers. The government adopted a TVET policy in June 2012, but weak implementation capacity and a lack of financing continue to hamper effectiveness and efficiency in the TVET subsector.⁵⁸

3.1.1.5 Non-Formal Education System

Non-formal education consists of literacy and basic education for adults and young people, political and trade union education, 'catching-up' programmes for school drop outs, and various kinds of educational work linked with development initiatives including agricultural extension and training programmes and health education. There is currently no private sector activity in this segment.

3.1.1.6 Informal Education System

The informal education deals with education imparted in religious schools like Madarasas, or in society or in home either by written or oral transmission. In Nepal there are number of Madrasas, Gumba Schools and Ashram schools. In central region itself, there are about 132 madrasas, 30 Gumba schools and 50 Ashrams in 2008.⁵⁹ The non-formal and informal education sector has not attracted much private players because of limited return expectations. However there is significant government activity in these sectors.

3.1.2 Examining the Support services

The major support services which facilitate education delivery in Nepal are (a) Accreditations and Certification Agencies (b) Curriculum Development (c) Teachers Training and Professional Development Services (d) Online Education and coaching services (e) Counselling services (f) Technology/Content providers.

⁵⁸ Sector Assessment(Summary)Education: Country Partnership Strategy Nepal;2013-17

⁵⁹ Formal Education in Madrasas of Nepal: A study on Emerging Trends and Issues, 2008

3.1.2.1 Accreditations and Certification

In Nepal, Accreditations and Certifications sub-sector is at a very nascent stage and is slowly evolving. Lately government of Nepal has recognised the importance of accreditation and certification in ensuring quality standards. This segment is mostly regulated by government agencies specialised for particular education segment. For example, bodies like Nepal Bar Council, Nepal Engineering Council, Nepal Medical Council, Nepal Nursing Council etc. govern and monitor the quality standards at the broad educational segments like Law, Medicine, Engineering and Nursing respectively. There are no certifications as such popular in Nepal. However colleges and institutes get affiliated to foreign entities. For Higher education UGC provides the necessary accreditations along with the councils. There is no private sector activity in the segment now in Nepal.

3.1.2.2 Curriculum Development

The Central level agencies like Curriculum Development Centre, National Centre for Education Development etc. provide major educational services like curriculum development and professional development trainings in Nepal. Curriculum development is not open to non-public players and there is nil private sector activity.

3.1.2.3 Teachers Training and Professional Development Services

The teacher training business involves training teachers on pedagogy and the use of technology in teaching. Many government Information and Communication Technology (ICT) contracts have embedded in them requirements for teacher training on computer usage. This business has only trainers' fee as single cost head, and hence profitability is apparently higher. In countries like India, profitability in this business is around 60%⁶⁰

There is demand for skilled teachers in Nepal and the existing teachers training facilities are inadequately equipped to fulfil the demand. There are almost no private players in this segment and specific government agencies take care of training needs and professional development services in Nepal. Though there is no regulation which restricts private sector players in this segment, the private sector activity is absent. In future, as the demand for trained and skilled teachers and professional grows up, private players are expected to foray into this segment.

3.1.2.4 Online Education and Coaching services

With an emerging middle class, the spending on children's education outside school is increasing. This spending takes two forms: physical classes or online tutoring. While the former segment is highly fragmented, the latter is still evolving and is in the nascent stages of development. Not many players are present in the segment and the demand for online education is slowly recognised. But private coaching classes are fairly present in Nepal but highly fragmented.

3.1.2.5 Counselling services

There are a number of private counselling service providers in Nepal who guide students in Nepal about educational opportunity outside Nepal. These service providers play a vital role in helping out bright Nepalese students to explore outside country opportunities. Hotel Management and Nursing students extensively depend on the services of counselling service provider to get access to Indian, British job market. Though there is significant private sector activity, it is highly fragmented and is at a small scale.

⁶⁰ India Education Services Sector, Credit Suisse, 2007

3.1.2.6 Technology and Content providers

Technology and content providers are those players who supplement the delivery mechanism by relevant content in the form of multimedia or interactive software. Their services are constantly being sought after by mostly private schools because of the service’s role in improving effectiveness of education delivery.

Private schools are ahead of public schools in technology adoption. They generally have computer labs and basic computer training, and look for innovative ways of delivering the content to the students. Private schools tend to use technology and multimedia in teaching general subjects. The market is largely unexplored with significantly less penetration; about 2% of schools (public and institutional included) actively seek multimedia content for the educational content delivery. Four major private sector players are active in the technology and content segment in Nepal with one local player. A few private players in this segment have expanded their service offerings to Management Information System (MIS), Library Management System to schools for effective use of technology for better management and administration of the school operations.

With few numbers of players and low market coverage, the growth potential seems immense in this segment. Figure 19 summarises the education sector; its key players and regulators.

Figure 19: Education sector summary in Nepal

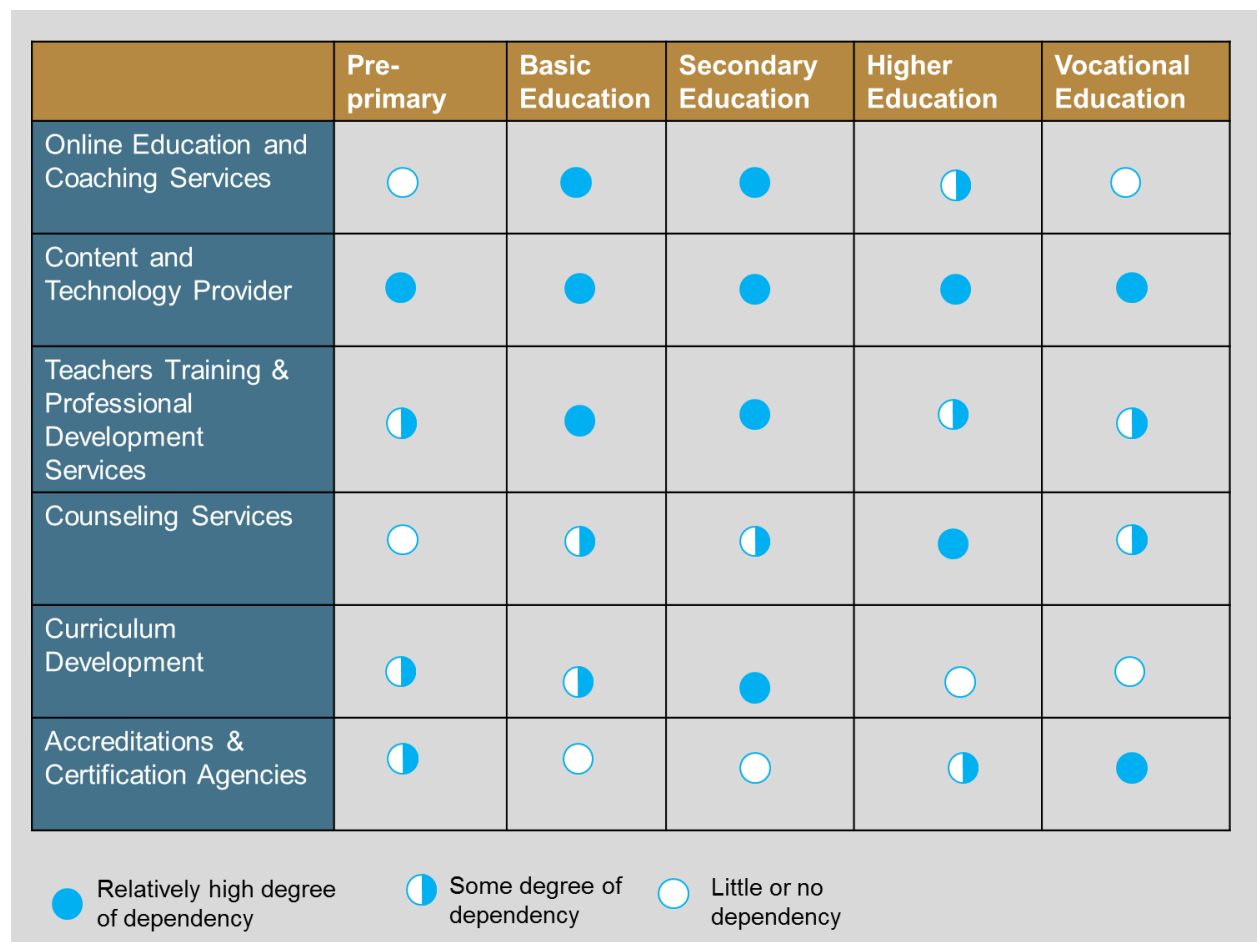
	Formal Education Delivery Models			Non-Formal Education Delivery Models	Educational Services
	General Courses	Conventional Professional Courses	Vocation Based Professional Courses	Skill Development	Counseling Services; Online Education; Technology Provider/Content Provider
Composition	Schools and Institutes of national importance, Universities, Colleges and Polytechnics	Management Schools, Engineering Colleges, Medical Schools, Law, Nursing Colleges	Nursing & Pharma Schools, Finishing Schools, Hotel Management Schools, English Training Schools	Project based training Schools, Private skill development centers, Skill training schools of Govt. of Nepal	Private counseling service Provider, Content Provider, MIS Solution provider
Key Regulator	UGC, Dept. of Education, Ministry of Education	NMC, NBC, NNC, NPC, NEC, NVC	CTEVT	IEDI, UGC	No Regulatory Body
Accreditation Bodies	SHEC, QAAC, UGC	QAAC, UGC	None	None	None

Source: Intellecap Analysis 2014

Support services compliment the delivery mechanism and improve the effectiveness of the education system. The degree of dependency and inter-sectorial linkage differs across sub-sectors.

The support service sector compliments the education delivery model and adds value to it. There are strong linkages and dependencies between the delivery model and the education support services; however the degree and intensity of dependency varies significantly across the sub-sector. The intensity of dependency and linkages indicate inevitable growth of the subsector. In the existing scenario, pre-primary and basic education schools are most profitable in Nepal and hence those services which have strong linkages with these subsectors have high probability of growth and have immense potential to yield returns to the investor. From Figure 20 it is evident that Content and Technology Provider has immense growth potential as it has strong linkage with pre-primary, basic and secondary education.

Figure 20: Dependency and linkage between delivery mechanisms and educational support services



Source: Intellecap Analysis 2014

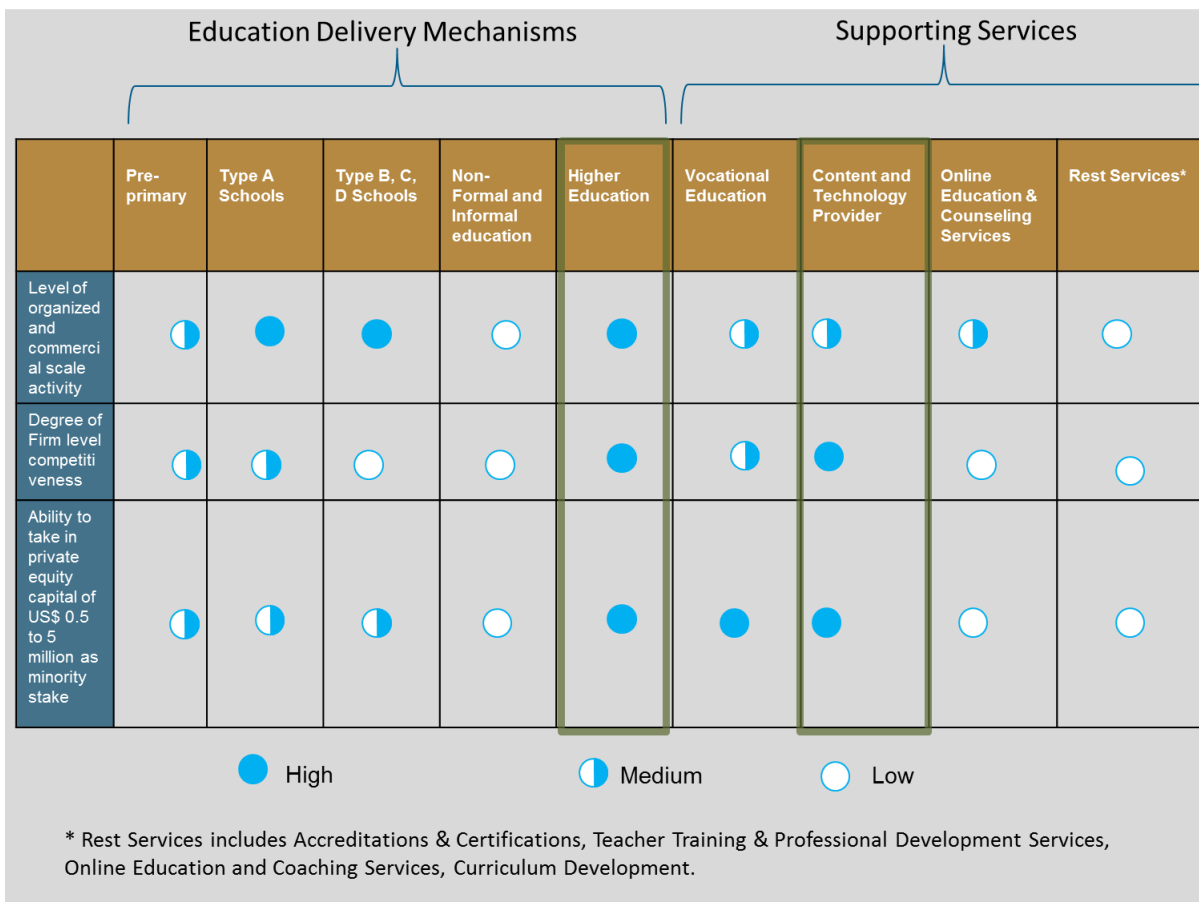
3.2 Current State of Education Sector in Nepal

The current state of the education differs across sub-sectors, with some sub-sectors in the Education delivery mechanism like Higher Education and Content and Technology Provider in Support services being more advanced than others.

Analysing the delivery mechanism and supporting services with respect to level of organised activity and level of private sector activity, Higher education appears to be most competitive sector. The current level of activity in Higher education is highly organised and commercial with significant number of private players. The vocational education segment is comparatively less organised and the current state of private activity is comparatively low; but slowly private players have ventured into this segment as a part of expansion strategy of major players in school segment. Similarly private players in Higher education segment are also venturing into related vocational education courses; for example Kathmandu Medical College has opened Pharmacy and Nursing courses both at Diploma and Degree level.

Among the Educational support services, the level of organised activity is medium for Technology and content provider and the private sector involvement is moderate. There are some government regulations governing the content provider/technology provider space that are discussed in detail in Section 4. As the number of private players is moderate, it holds high growth potential.

Figure 21: Market level competitiveness of Education sector in Nepal



Source: Intellect Analysis 2014

From Figure 21, it is evident that:

- Higher Education and Content and Technology Providers are more advanced and organised sub-sectors and hence are most institutional investment-worthy than other sub-sectors.
- Type A schools have high level of organised and commercial scale activity, medium level firm level competitiveness and ability to take private equity capital of US \$ 0.5 to 5 million.
- Vocational education has high ability to take in private equity capital but has medium level of organised and commercial activity and low level of firm competitiveness.
- Pre-Primary Education has medium level of organised and commercial scale activity, firm level competitiveness and ability to take private equity capital.
- Coaching and Counselling related ventures show little or no organised activity.
- School Education (Type B,C,D schools) show high degree of organised and commercial scale activity but have low level of competitiveness and medium ability to take in private equity capital.

Since this report is focused on analysing the market for investments in private Education sector, only sub-sectors that show high to medium activity across all three criteria will be evaluated for a further deep-dive from this point onwards.

3.3 Market Opportunity in the Education Sector

Market size of the Pre-Primary Schools is estimated at US\$ 4 million with high growth potential in the next 2-3 years

The pre-primary segment in Nepal is still in nascent stage with only 4-5 major private players active in the Kathmandu valley area. The present market size of the pre-primary schools in Nepal is estimated around US\$ 4 million⁶¹. However with increasing disposable income in Nepal and more focus of parents on pre-primary schools as a springboard for admission in reputed primary schools would drive the demand of such schools in near future. In addition increase in the number of working parents especially in the Kathmandu valley region is also expected to drive the demand of pre-primary schools in Nepal due to increase in disposable income and awareness of the benefits of early education. Given the private sector activity in the segment started only in the last 3-4 years, the segment is expected to grow at a higher rate in near future

Market size of the Class A private Schools in Nepal is estimated at US\$ 170 million with medium growth potential in the next 2-3 years

The Class A private schools in Nepal are key to quality primary and secondary education delivery system in Nepal with an estimated 250 fully fledged Class A private schools in major urban and semi-urban centres in Nepal⁶². The present market size of the Class A schools in Nepal is estimated around US\$ 170 million⁶³. There is comparatively less unmet demand in the primary and secondary education segment in Nepal in terms of number of schools, however, some geographies are less served than others indicating demand for such schools in those regions⁶⁴. With increasing disposable income in Nepal, and demand of

⁶¹ Intellceap Analysis 2014, refer Annexure 11.3 for details

⁶² Refer section 3.1.1

⁶³ Intellceap Analysis 2014, refer Annexure 11.3 for details

⁶⁴ Refer section 2.2.1 for details

parents for high quality and technologically advanced education, Class A schools may see a moderate rise in demand and growth rate in the next 2-3 years.

Market size for Higher Education institutes in Nepal is estimated to be around US\$ 55 million for medical colleges, US\$25 million for Business Schools and US\$15 million for hotel management institutes

The private sector activity in the higher education sector in Nepal is considerably higher in professional courses such as medicine, Business (MBA and BBA courses) and hotel management⁶⁵ and these have been considered for estimating the market size. There are 21 Medical, around 20 Business Schools and 21 hotel management institutes in Nepal.

The present market size of the Medical colleges in Nepal is estimated around US\$ 55 million⁶⁶ excluding the hospital service and research income at these medical colleges⁶⁷. There is high demand the medical segment in Nepal with Nepalese colleges attracting Indian students as well⁶⁸. With increasing level of fees and improved number of seats, Medical colleges may see a moderate rise in demand and growth rate in the next 2-3 years.

The present market size of Business Schools in Nepal is estimated at US\$ 25 million⁶⁹. With political stability and predictable economic growth in Nepal the demand of MBA professionals is expected to rise in near future. Business Schools are expected to see a medium to high rise in demand and growth rate in the next 2-3 years.

The present market size of hotel management institutes is expected to be around US\$ 15 million. There has been a high demand of hotel management courses in Nepal in the last 2-3 years with several private players entering the segment. Higher chances of employability both in the tourism industry in Nepal as well as in countries such as UK, the Middle East and India makitutes.es this course popular with students in Nepal with students willing to pay a premium for higher ranked or reputed institutes. With increasing level of fees and improved number of seats per hotel Management College, the segment may see a high rise in demand and growth rate in the next 2-3 years.

Potential market size of technology and content providers focussing on school education is estimated at around US\$ 6million in the next 2-3 years

The technology and content segment in Nepal is comparatively a new phenomenon with only 4 major private players active in the segment primarily serving the schools (primary and secondary) in Nepal. The potential market size of the technology and content segment in Nepal is estimated around US\$ 6 million⁷⁰ in the next 2-3 years. There is a potential high demand in the segment as more schools become technology advanced and utilise audio/visual material for teaching in the classrooms⁷¹. In addition the companies in this segment can also expand their business models to serve higher education institutes and even vocational education institutes. Given the private sector activity picked in the segment only in the last 3-4 years, the segment is expected to grow at a higher rate in near future

⁶⁵ Intellecrap primary research 2014

⁶⁶ Intellceap Analysis 2014, refer Annexure 11.3 for details

⁶⁷ Refer section 6.1.1 for details on the business models of hospitals in Nepal

⁶⁸ Refer section 2.2.1 for details

⁶⁹ Intellceap Analysis 2014, refer Annexure 11.3 for details

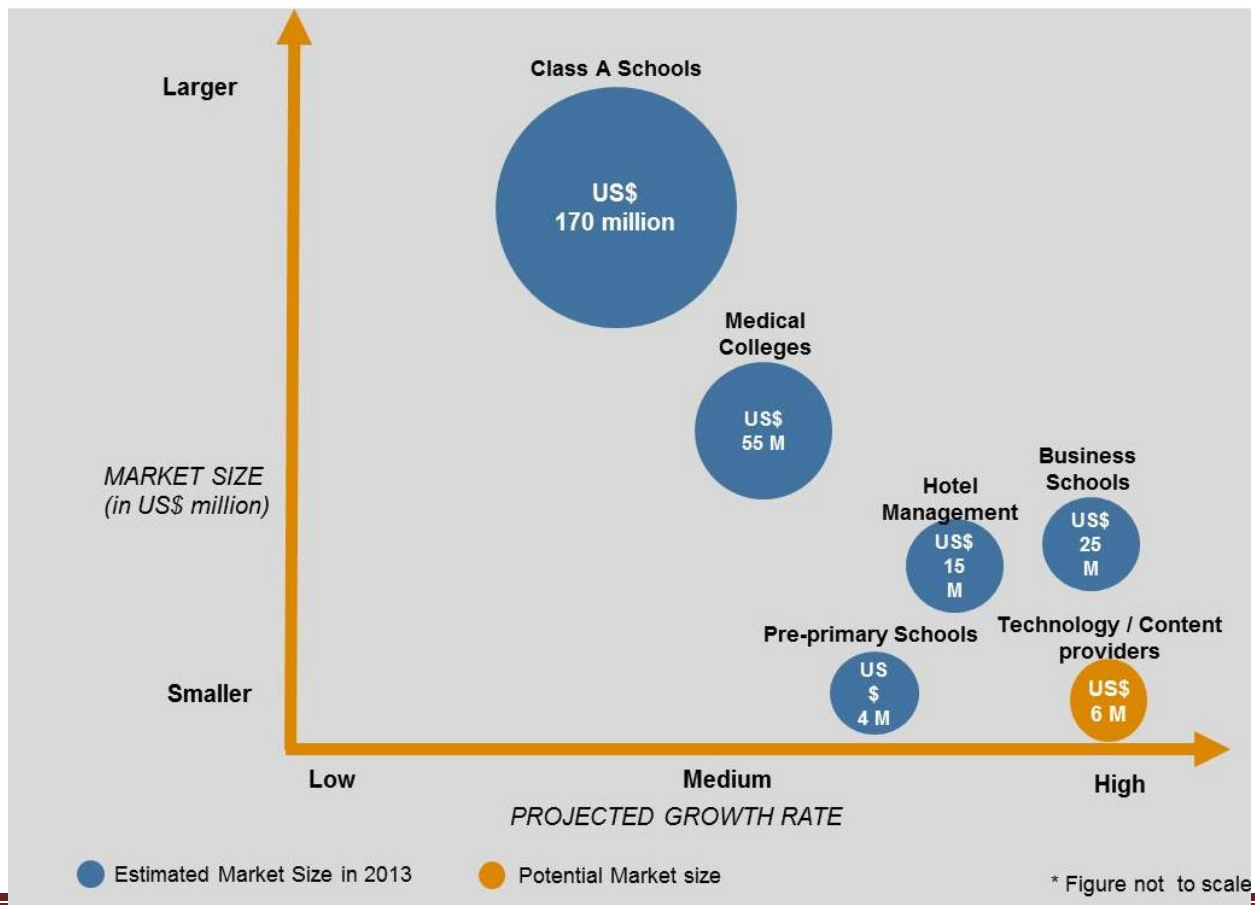
⁷⁰ Intellceap Analysis 2014, refer Annexure 11.3 for details

⁷¹ Refer section 2.2.1 for details

Based on the above analysis and information, the market size and expected growth rate of the education sector enterprises in Nepal has been shown in

Figure 22.

Figure 22: Current market opportunity in education sector in Nepal

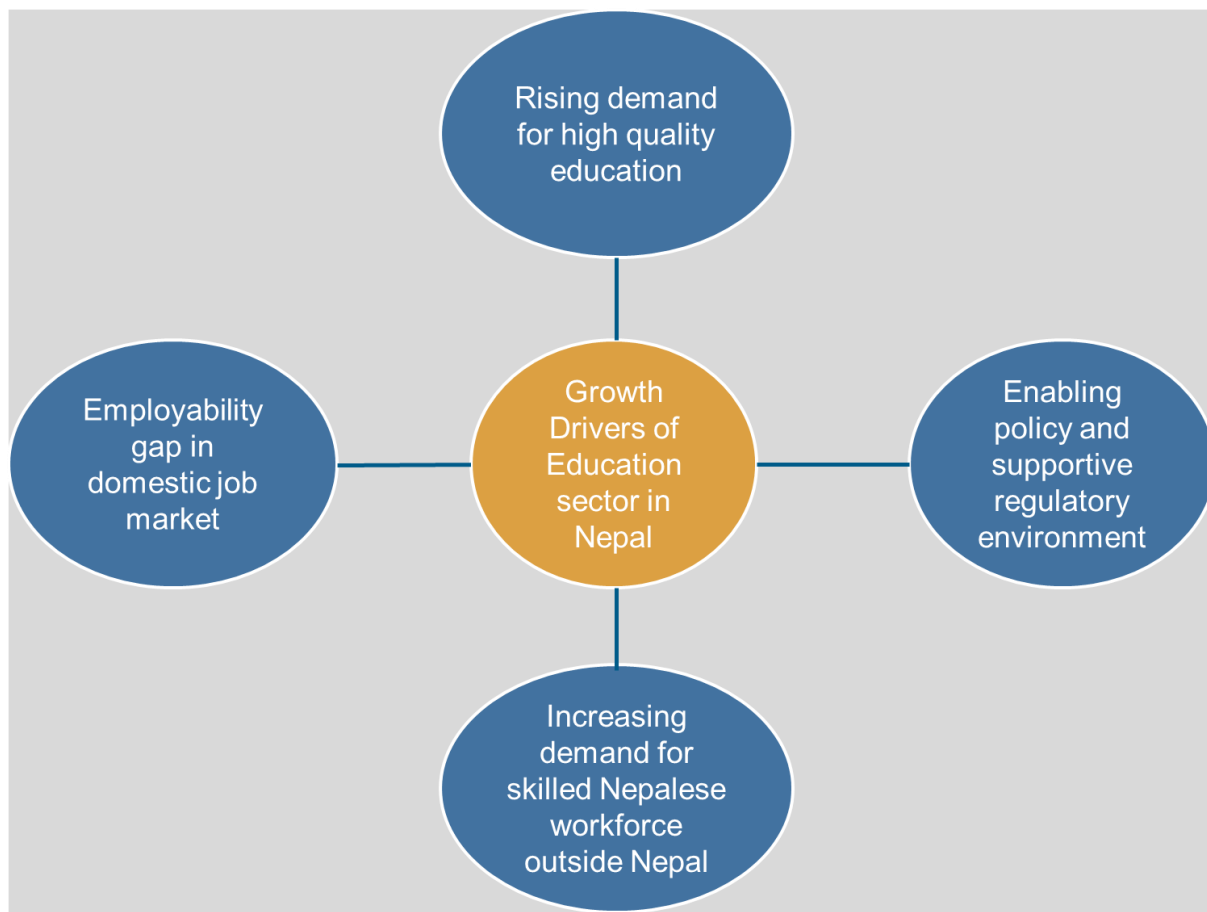


Source: Intellectap Analysis 2014

3.4 Analysing Growth Drivers of Education in Nepal

The key growth drivers of education sector businesses shown in Figure 23.

Figure 23: Growth drivers for Education sector in Nepal



Source: Intellectap Analysis 2014

Demand for high quality education is rising along with the ability to spend for education.

US\$ 805 million was spent on education in Nepal in 2012 and this has significantly improved from US\$ 334 million in 2006. This rise is driven by a growing education seeking population. Nepal’s population has been growing at a rate of 1.4% over the past decade, and a similar growth rate is expected in the future as well⁷² which indicates at a growing education seeking population. In 2012-13 around 20% of the education seeking population was enrolled in private schools as compared to less than 10% in 2000-01.⁷³ The preference for private education is because of the relatively better quality of education offered at these schools.

⁷² World Bank Development Indicators; accessed in March 2014

⁷³ Flash Report, 2000 and 2013

The trend of increasing expenditure on education is also driven by increasing incomes as a result of economic progress and rising remittances. In Nepal over 30% of working age males work abroad who annually remit over US\$ 4 billion or the equivalent of 25% of Nepal's GDP in 2012⁷⁴. As a result, households have more discretionary spending power and are investing in higher quality education. The middle class household spending on education has increased from around US\$ 323 (NPR 32,355) in 2003-04 to US\$ 428 (NPR 42,817) in 2012-13.⁷⁵ Education spending accounts for nearly 6% of the total household expenditure. The urban households spend 7% of the total expenditure on education while rural households spend around 2% of the total expenditure on education.⁷⁶

The overall awareness of importance of education is also increasing which has acts as a driver for the whole sector.

Enabling policy and supportive regulatory environment

The Government of Nepal has a very ambitious and enabling education policy. It aims at “Education for All” in Nepal and actively seeks private sector participation. The government is taking conscious steps and policy directives to increase the education coverage and improve the overall literacy level for which it explicitly seeks private sector participation. To foster an enabling business environment for private players in education sector, the government has designed an amicable taxation policy for the private firms. These factors help drive the overall growth of education sector.

Increasing employability gap in domestic job market

There is significant employability gap in the domestic market. With improving industrial production in Nepal, the demand for skilled and employable workforce increases; creating significant demand supply gap. This unrealised demand for skilled workforce opens up significant growth opportunity for quality education which prepares the workforce for immediate absorbance in job market. The employability gap is a key driver for growth of education sector in general and vocational education in particular.

Increasing demand for skilled Nepalese workforce outside Nepal

There is a rising demand for skilled Nepalese workforce outside Nepal mostly in the field of Hotel Management and Nursing. The prospects of getting employed outside Nepal and the corresponding remittance flow linked with it acts as a major driver. Apart from the remittances, the comparative cost advantage offered by Nepalese white-collared job market also acts as a major push for such demand.

The other drivers of education sector include increased access to internet and computer, increased inclination towards professional development services which opens up scope for variety of educational support services.

The growth drivers of the education sector vary across the sub-sectors. There are broadly two dimensions of the key drivers; internal dimension and the external dimension. The internal dimensions reflect the inherent characteristics of the sub-sector or the segment that are in itself critical driving force and the external dimension include those factors which are extraneous to the sub-sector but influences and catalyses the sub-sector's growth pace.

⁷⁴ World Bank Development Indicators, accessed in March 2014

⁷⁵ Central Bureau of Statistics, 2003-04 and 2012-13

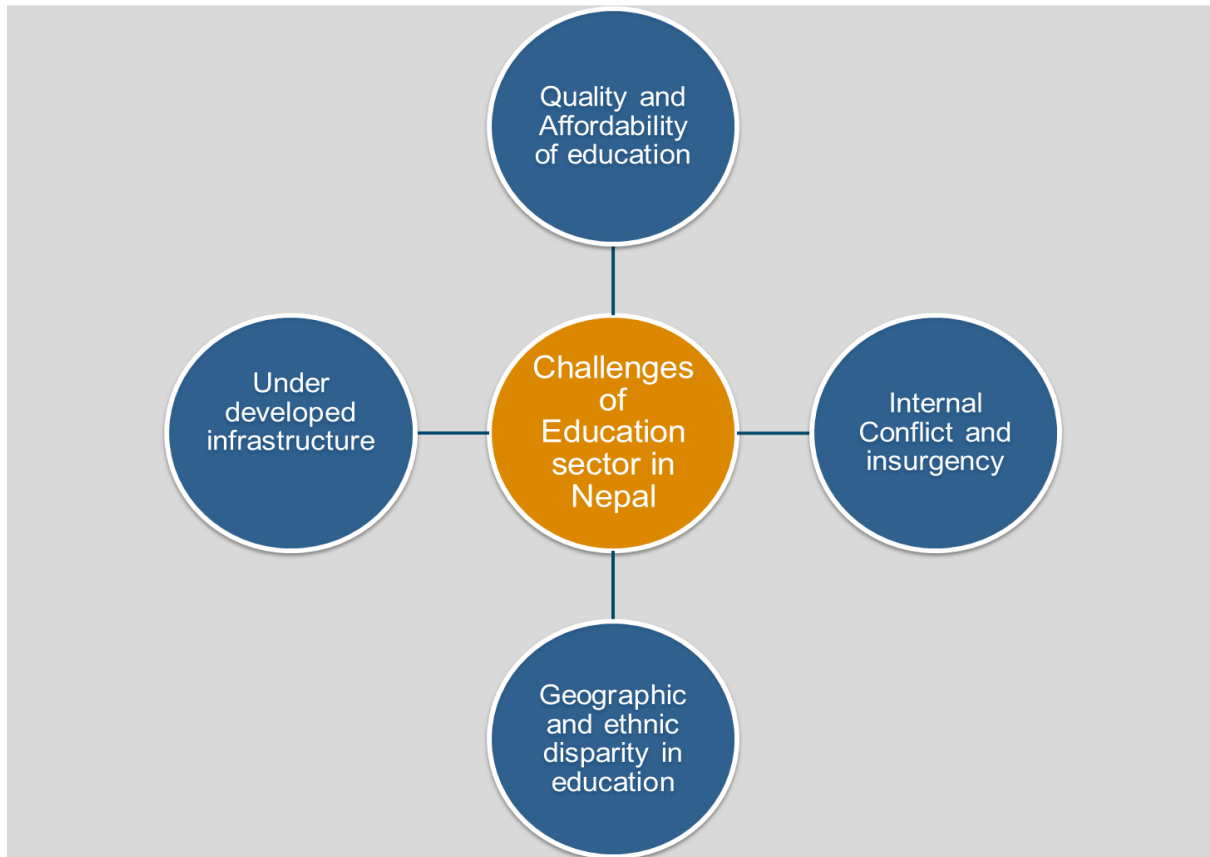
⁷⁶ Central Bureau of Statistics, 2012-13

The national enablers are the broad national level enabling policy, industry specific and sector-specific indicators, policy directives, broad government motive and effort which facilitates the sub-sector growth.

3.5 Challenges facing the education sector in Nepal

The sector faces some major challenges as it intends to scale up and meet the educational need of the Nepalese population as shown in Figure 24.

Figure 24: Challenges faced by Education Sector in Nepal



Source: Intellecap Analysis 2014

Nepal faces serious problem of affordability and quality of education.

Nepal education system faces a multitude of challenges at various levels. Provisioning of quality education to all at affordable price remains one of the major issues.

At all levels of education, there is no specific or stringent quality control mechanism that builds checks and balances for quality delivery of education. Apart from few regulations in terms of having compulsory teaching licenses and government controlled curriculum design, there is no significant framework for quality control. The low pass rate of students at higher levels of education indicates the poor quality of

education delivered. The average pass rate is about 35% at tertiary education level.⁷⁷ The data indicate that in the 2011 examination the pass rates were quite low (about 37% of total appeared candidates) both in technical and general studies⁷⁸. Moreover there is no control over the quality of contents of books (apart from standard textbooks) available in Nepalese market.⁷⁹ In Vocational and Skills training, major problems are standardisation of curricula, quality of training and facilities, poor placement support and weak industry linkage of students. Lack of certifying agencies and market acceptance of courses also poses a major problem.

Apart from access and quality issue, the cost of education is high in Nepal. The fee rates in private affiliated campuses and campuses of Kathmandu University, and affiliated campuses of Pokhara and Eastern Regional University are quite high. The fee rates are remarkably high for Medical and Engineering Studies. The high fee structure automatically filters out students from poor economic set up from higher education and thus adds to the overall accessibility woes of the education system.

There is shortage of education supporting infrastructure in Nepal including teachers training institutes.

In Nepal, poor infrastructural set-up is one of the major problems for delivering the educational content and service. There is absence of high class laboratories, libraries and similar educational set up. The education system lacks infrastructure to support quality research as well. Under funded research facilities, libraries and IT systems and low quality research is an indicator of the quality of infrastructure. Nepal faces the problem of constant load-shedding and hence the disrupted quality of services provided by the service provider.

Apart from these challenges, there is shortage of skilled manpower in education sector in Nepal. The hunt for qualified, skilled and quality faculty remains the biggest problem in Higher Education.

Political interference, internal conflict and insurgency also pose threat to private player presence in education segment.

There is some degree of Maoist activity going around in Nepal which constantly threatens the existence of private players in school education segment. Usually private players bear the brunt of internal extremism and have to remain shut off for few days. This externality significantly affects the overall sector level activity in education.

Moreover, there is politicisation of staffing appointments, which brings in inefficiency in delivery of education.

Political instability & interference, lack of a strategic direction, lack of oversight to link education outcomes to productive economic activities and national development priorities undermine the accountability and authenticity of education institutions in Nepal. The underlying issues are: weak governance and insufficient financing, resulting in an education system that offers insufficient access, low quality, and low relevance to economic needs. These challenges affect the profitability of the segment and hampers private sector growth.

⁷⁷ UGC Report, 2010-11

⁷⁸ UGC Report, 2010-11

⁷⁹ Financing of Higher education, Centre for Economic Development and Administration, TU, 2007

Geographic and ethnic disparity in access to education

There is issue of increasing disparity in educational quality and access across school types (public vs. private), locations (urban vs. rural, remote vs. accessible), and population groups (males vs. females, privileged ethnic groups vs. marginalised ethnic groups).⁸⁰

⁸⁰ Flash Report 2012-13

4 Regulatory and Policy landscape

4.1 Licensing

The specific licenses and approvals needed by education enterprises vary across sub-sectors.

There are over 16 registrations and licenses for the education sector in Nepal. The cost of procuring a license ranges from 10 cents (US\$) for VAT registration to over US\$ 2000 for incorporation of a business. The license fee is highest for primary and secondary education. The validity of license usually ranges from a year to the period the company/organisation exists. Different licenses need to be procured from different ministries and departments, taking from 1 day to 6 month in processing time. However for parties applying for opening new educational institutes, the processing time will vary based on the number of applications received for that year; at times it may extend up to 3 years. The details of licensing requirements are mentioned in the Table 4.

Table 4: Licenses required by the education sector enterprises in Nepal

License Name	Primary Education	Secondary Education	Higher Secondary Education	Vocational Education	Support Services
Agency Registration	✓	✓	✓	✓	✓
Company registration	✓	✓	✓	✓	✓
Cottage and Small Industry Registration	✓	✓	✓	✓	
Design Registration	✓	✓	✓	✓	✓
Industry Registration	✓	✓	✓	✓	✓
Partnership Firm Registration	✓	✓	✓	✓	✓
Patent Registration	✓	✓	✓	✓	✓
PAN Registration	✓	✓	✓	✓	✓
Permission to open higher secondary school			✓		
Permission to open primary school	✓				
Permission to open secondary level school		✓			
Permission for foreign investment and technology transfer	✓	✓	✓	✓	
Registration of cooperatives	✓	✓	✓	✓	
Registration of Institutions(Associations)	✓	✓	✓	✓	✓
Trademark Registration	✓	✓	✓	✓	✓
VAT Registration	✓	✓	✓	✓	✓

Source: Nepal Business License e-portal, Accessed in May 2014

4.2 Royalties, Subsidies and Taxation

Government of Nepal charges tax from the education sector players as Education Service Fee (ESF). ESF was first introduced in the tax system of Nepal in 2002 as Rural Education Service Tax in Financial Act 2002. In 2008, amendments were made to the Financial Act, 2002 and the concept of service tax was introduced. From 2009, an Education Service Tax of 5% was charged and in 2010, 1% Education Service Fee was charged.

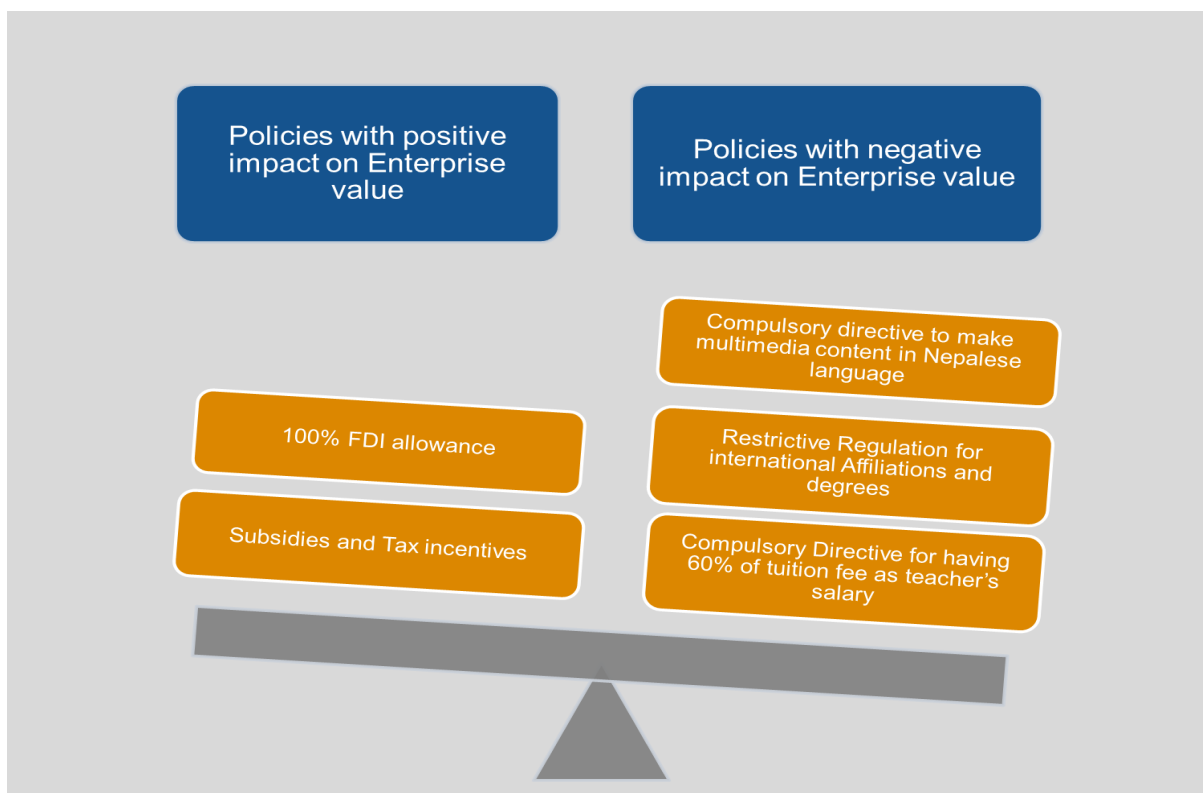
The Education Service fees are an indirect tax paid by the service receiver (guardian of the child). The tax base is all educational institutions operated by private sector within Nepal providing education above Higher Secondary Level (University level education). The tax rate is 1% of education fee which consists of Admission and tuition fees. For students opting for studying abroad, 1% ESF is levied through bank during Foreign Currency Exchange during the payment itself.

The tax is applicable to all institutions operated in Kathmandu Valley, Municipalities, District Headquarters, and area specified by Inland Revenue Department (IRD), Government of Nepal. The larger objective of introducing the ESF was to help and support the students in remote and backward area.

4.3 Impact of regulation on Enterprise value

The regulatory regime in Nepal offers a mixed bag of encouraging and inhibitive impact on enterprise operations and value. The regulatory impact is a function of specific regulations in the sector which directly affects the enterprise value. This is shown in Figure 25.

Figure 25: Impact of regulation on enterprise operation and value in education sector in Nepal



No cap on FDI inflow makes it investor friendly from regulatory dimension.

Government of Nepal allows 100% FDI with 100% ownership of firms in education sector (discussed in detail in Section 5). Such an investment freedom makes education sector private player friendly.

Subsidies and tax incentives also encourages growth of education sector.

As discussed in Section 4.2, government provides subsidised loans to students at a very low interest rate. This ensures a healthy demand for education in Nepal. Moreover, education sectors firms undergo a relatively easy and simpler taxation exercise as compared to firms in other sector.

Both of the policies positively impact education sector.

Compulsory policy directive to make all educational multimedia content in Nepali language; restricts foreign player to enter content provider segment.

There is policy directive in Nepal in the content and technology provider space which mentions to have all the content in Nepali language compulsorily apart from English. This in a way restricts many non-Nepalese players to venture into Nepalese technology and content provider segment.⁸¹

Restrictive regulations for international affiliations and international degrees impacts negatively.

There is also a regulation which mentions the need for approval from Ministry of Education for international courses of duration more than 6 months. Since the number of International courses approval is fixed for an academic year, approval clearance at times takes more than 3 years. This negatively impacts the firm's operation. International degrees in Nepal are popular among non-Nepalese students as they are a cost-efficient option compared to similar degrees offered in home country. For private players, these courses are cash cows and better to float because of more autonomy in terms of curricula design. Any delay in procedural approval affects negatively to the firm.

Compulsory directive for having almost 60%⁸² of tuition fee as teacher's salary limits scope for school to invest in quality and infrastructure therefore affecting enterprise.

In Nepal, the government has issued directive to private schools to allocate 60% of the tuition fees as teacher's salary⁸³. Though there are a number of revenue source for schools apart from tuition fees, but the majority of cash comes from tuition fees only and the 60% allocation to teacher's salary actually impacts the profitability of private sector firms.

⁸¹ Primary interview with private players in Nepal.

⁸² Primary data collected during the course of study

⁸³ Primary data collected during the course of study

5 Foreign Investment Policy and FDI in sector

5.1 Existing FDI Policy

The government is supportive of foreign investments in education sector, and allows 100% FDI in all private education companies

The government allows Foreign Direct Investments (FDI) with 100% ownership in all areas of education while and encouraging the vocational education and training segment in Nepal. As a result of this positive environment, a number of major foreign investments have been observed in the past 3-4 years. For instance in 2012-13 the Lord Buddha Education Academy Ltd. that has owns and operates higher education institutes such as Medical colleges in Nepal received over US\$15 million of foreign investment. Similarly a Kathmandu based management institute attracted over US\$ 1million investment from Uds International Singapore in 201384. In addition private Language learning and skill development centres have continued to attract foreign investment as discussed subsequently in section 5.2.

FDI in private education sector enterprises has been growing at a CAGR of 61.5%.

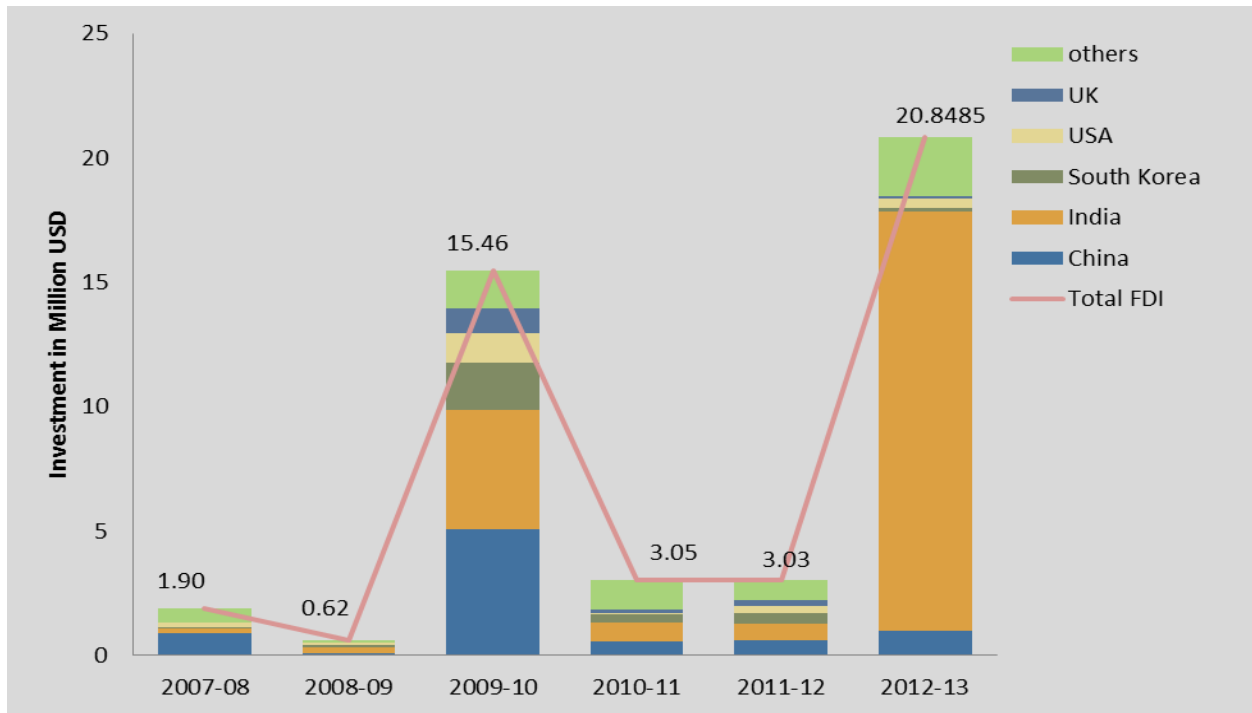
Over US\$ 45 million in foreign investments have been channelled into education from over 20 countries since 2007⁸⁵. Apart from promoters' own equity, FDI capital is the single largest source of risk capital available to the private education segment in Nepal today. FDI in this sector has been growing at a CAGR of 61.5% from 2007-08 to 2012-13, and top contributors have been India and China⁸⁶. The flow of FDI peaked in 2009-10 due to major investments by India in sectors like Language training and Software Development Learning. Similarly there was significant FDI inflow from India in 2012-13 in Higher education segment. Around US\$ 18.6 million was invested in Medical colleges of Nepal from these two countries.

⁸⁴ Ministry of Industries, Industrial Statistics Report, Nepal, 2012-13

⁸⁵ Ministry of Industries, Industrial Statistics Report, Nepal, 2012-13

⁸⁶ Ministry of Industries, Industrial Statistics Report, Nepal, 2012-13

Figure 26: Growth of FDI in education sector in Nepal

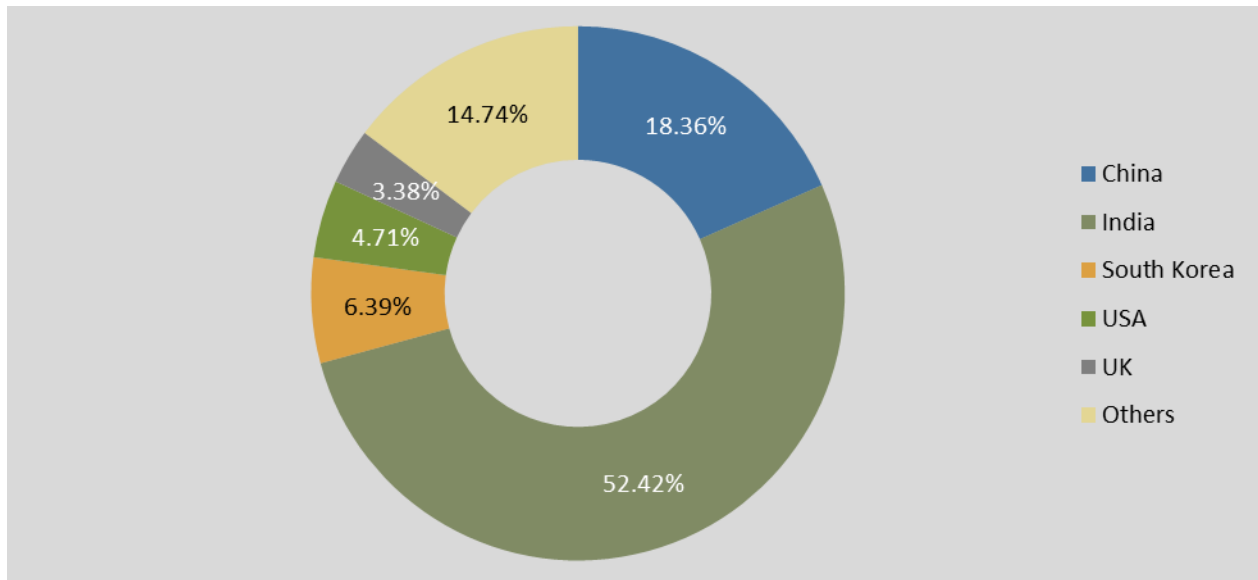


Source: Industrial Statistics, 2007-2013, Government of Nepal and Intellectap Analysis, 2014

5.2 Top FDI Contributors

India and China are the top FDI contributor to education sector in Nepal. Collectively they account for more than 70% of the investments and individually, India around 53% with US\$ 23.5 million, China accounts for around 19% of FDI contributions with 8.24 million USD, and South Korea around 6% with 2.8 million USD. USA and UK have also made significant investments education sector in Nepal. Figure 27 depicts the FDI contribution scenario.

Figure 27: Top FDI Contributors to education sector in Nepal



Source: Industrial Statistics, 2007-2013, Government of Nepal and Intellectap Analysis, 2014

Majority of the FDI in education sector has been channelled into vocational based skill training centres; mostly Language training centres.

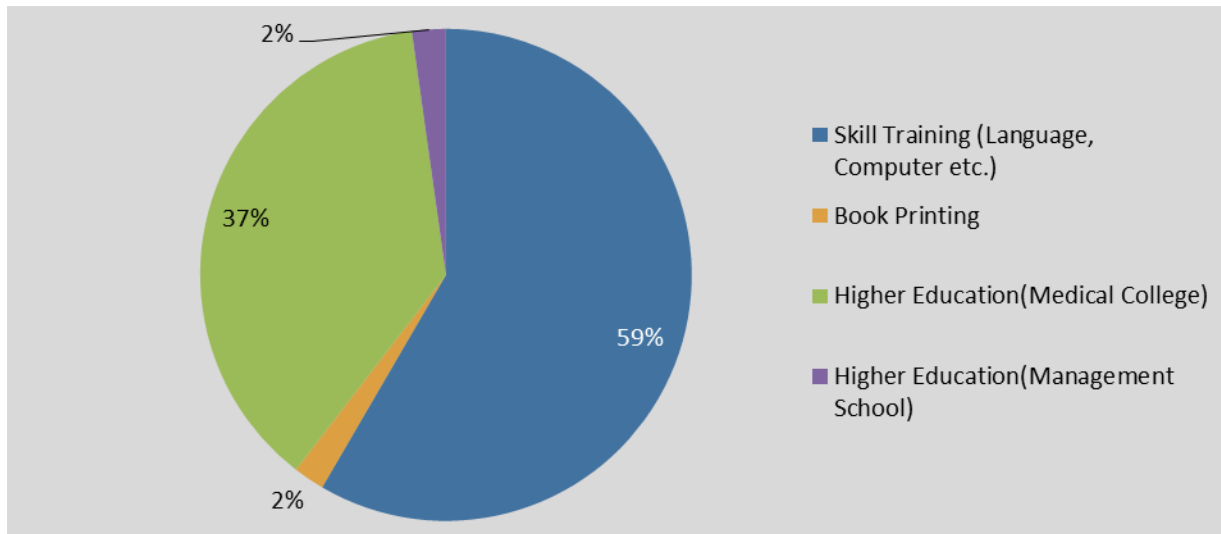
Cumulative capital flows in education since 2009 indicate a strong inclination towards vocational training centres in Nepal as shown in Figure 28. For instance in 2012-13, nine investments in vocational training were recorded with Ceragen India’s investment of around 0.1 million USD in Kathmandu based Vocational Training institute and another similar investment of US\$0.2 million in a Mechanical, Electrical and Plumbing vocational training course some notable examples⁸⁷. Nearly all investments were structured with majority share-holding by foreign investor. In Skill Training sub-sector, a significant chunk of FDI has flown into the Language Training, followed by Computer Training and equipment repairing training. For instance in 2012-13 8 foreign investments in language training were observed with Marise Marriner New Zealand investment of US\$ 0.15 million in a Kathmandu based language training institute and a few high net worth individuals from China investing in the tune of US\$ 0.1 to \$0.2 million for Chinese language courses a few notable examples⁸⁸.

In addition 2012-13 recorded one foreign investment in Medical College sector (Higher Education segment); and two investments in book printing in 2008-09 and 2009-10. Apart from these outliers, there is consistent investment in Training centres providing vocational courses. However the ticket sizes of investment in the vocational segment have been very small ranging from US\$ 2000 to US\$ 150,000 indicating the high level of fragmentation and the need of consolidation in the industry.

⁸⁷ Ministry of Industries, Industrial Statistics Report, Nepal, 2012-13

⁸⁸ Ministry of Industries, Industrial Statistics Report, Nepal, 2012-13

Figure 28: Distribution of Education Sector FDI inflows across sub-sectors from 2009 to 2013



Source: Nepal Industrial Statistics reports 2009 to 2013

JVs with foreign education enterprises can help domestic education sector enterprises not only access latest technical and research assistance but also scale faster

Increased inflows of foreign investments can serve to catalyse growth of the education sector and help to provide latest higher education and vocational education services in Nepal itself. This would bring down the incidence of students traveling to foreign countries for higher education or vocational education that is lost to foreign countries each year. This market can instead be captured by domestic education delivery players if they tie-up with reputed foreign universities / vocational education service providers and provide the same standard of education services in Nepal.⁸⁹ These foreign firms that form JVs with domestic companies are beneficial in bringing in expertise in the form of research expertise, technology and processes and best management practices. They also serve to add to credibility of the educational institutes since many students who travel abroad to countries like US, UK or India for education seek out these very universities or vocational education service providers.

Case Box: CG Education’s venture partnership with Manipal K-12, India and GCE A Level Program with The Cambridge University, UK

CG Education, a unit of Chaudhary Group, Nepal’s first multinational company envisions to be the best in educational sector in Nepal.

Chaudhary Group (CG) in a Joint Venture agreement with Manipal K-12 Education Pvt. Ltd.(now Pearsons Education Services Pvt. Ltd.) started CG-Manipal schools in Nepal. CG-Manipal Schools seek to provide the best of academic standards, provided in a high quality learning environment. As of 2013 CG-Manipal schools is located across 4 campuses in Nepal and has around 1,440 students. Chaudhary Group also has an agreement with The Cambridge University UK on General Certificate of Education (GCE) A Level Program in Nepal. The GCE A level program is highly recognised pre-university qualification in the world, readily accepted as proof of superior academic ability for entry

⁸⁹ Around 7000 students travel to other countries for completing their higher education or undertake VCTE courses to improve their employability.

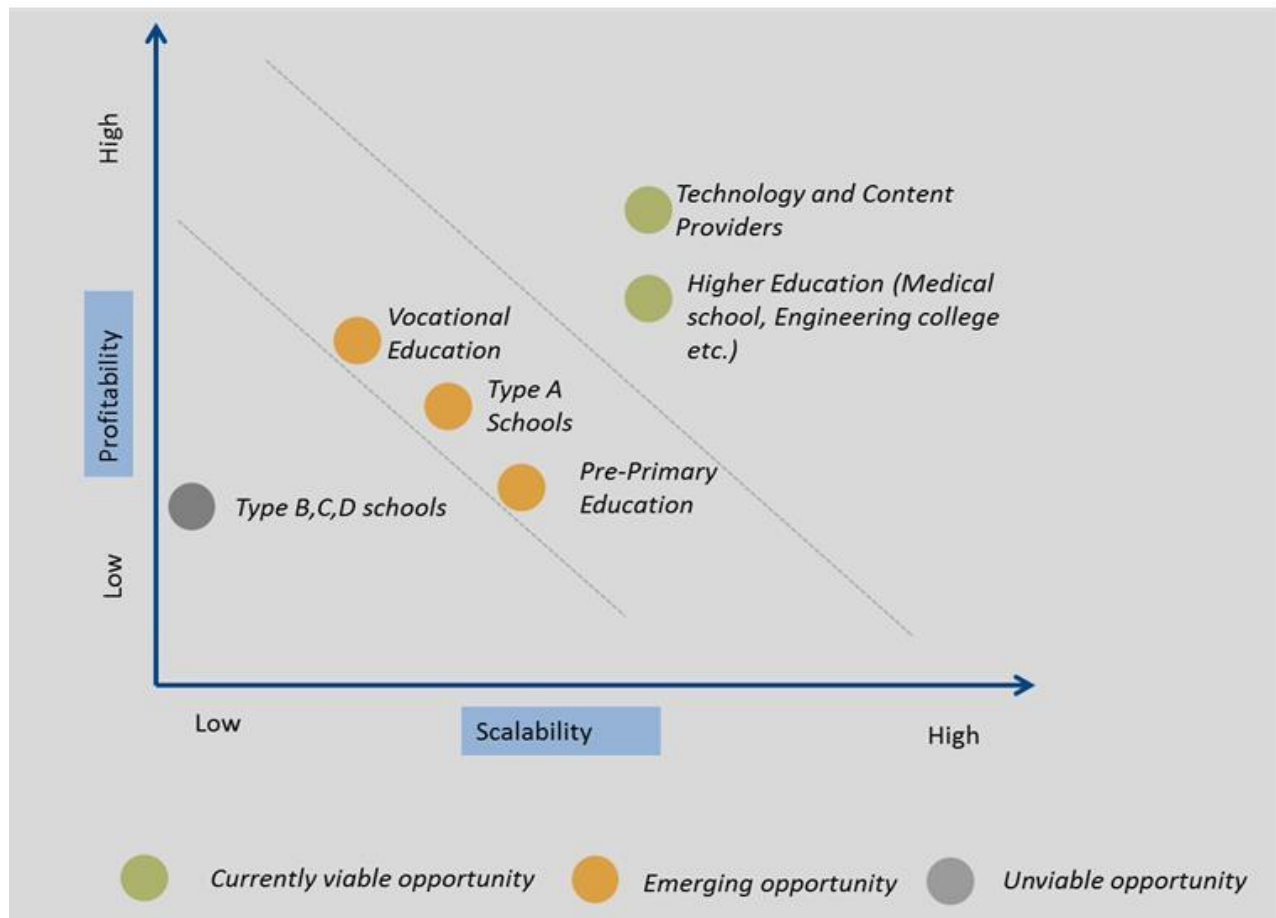
Case Box: CG Education’s venture partnership with Manipal K-12, India and GCE A Level Program with The Cambridge University, UK

into world-class universities around the world

6 Investment opportunities in the sector

Investment opportunities for private equity investors in the education sector in Nepal can be categorised on the basis of currently viable, emerging and non-opportunities as shown in Figure 29. Two lenses have been considered in categorisation of these opportunities – (a) profitability of typical firms seen in each segment in Nepal (that determines the returns for the investor); and (b) scalability of business operation of firms (that determines the market growth opportunities).

Figure 29: Categorisation of investment opportunities in the Education sector in Nepal



Source: Intellecap Analysis 2014

Based on the above framework, the investment opportunities for private equity investors in financial services sector in Nepal have been shown in Figure 30.

Figure 30: Categorisation of private equity investment opportunities in education sector in Nepal

Currently Viable Opportunities	Emerging Opportunities	High Potential but Absent Opportunities	Non-Opportunities
<ul style="list-style-type: none"> Higher Education Technology and Content providers 	<ul style="list-style-type: none"> School Education (Pre-Schools and Class A schools) Technical and Vocational education 	<ul style="list-style-type: none"> Infrastructure management (Boarding and Lodging services for students) 	<ul style="list-style-type: none"> Stand alone type B,C and D schools

Source: Intellecap Analysis 2014

Currently viable investment opportunities for private equity investors are Higher Education segment and Content and Technology Provider.

Higher Education segment has significant organised and commercial-scale private sector activity. Moreover the firm-level competitiveness of this segment is high and has the ability to absorb in large sums of private equity capital with preference for minority stake investments. Higher education segment is capital intensive and needs significant amount of capital for investment in quality infrastructure, facilities such as research facilities, laboratories, upgrading technology and training centres etc⁹⁰. Moreover the higher education market in Nepal has high potential to grow in locations outside the Central region (mainly in the Kathmandu valley).

The Technology and Content providers segment has significant commercial scale private sector activity and high firm-level competitiveness with 4 major private enterprises active in the segment. The market growth potential in terms of demand for these services is significantly high. Inflow of capital into this segment will vitalise the segment which will improve the profitability. Equity Capital can be used for investment in technology and manpower which will have positive cascading impact on the overall sub-sector.

Emerging opportunities can be explored in Vocational Education segment, pre-primary education and Type A schools.

The Vocational education in Nepal is growing rapidly due to increased governmental focus in the segment and rising industry demands for trained and skilled workers. As a result, the demand for vocation education is steadily rising. Currently, most players on the supply-side are organised as stand-alone entities and operate in market in small and fragmented way; but series of such firms can be expected to emerge in the next few years. This is because private players in Higher education segment are also

⁹⁰Discussed in Section 3.2

venturing into related vocational education courses; for example Kathmandu Medical College has opened Pharmacy and Nursing. Given the high margins in Vocational Education segment; and the economies of scale that result from operating series of such businesses; this segment can emerge as a lucrative investment opportunity for private equity players in the near future.

The pre-primary schools and Type A schools could be another emerging opportunity for PE/VC investors in Nepal. This is primarily due to the emergence of a new middle class⁹¹ with increasing disposable income and high focus on quality education even at a premium price⁹². At present the pre-primary school segment is still in nascent stage but a few private players have entered the market in the Kathmandu Valley.

Unviable opportunities include Type B, C, D schools in primary and secondary education.

Typical businesses seen in Type B, C, D school education segment is unlikely to present investment opportunities for private equity investors since the market is matured in terms of attracting more children and number of publicly funded school entities. Moreover this sub-segment cannot take in large amounts of equity capitals structured as minority stakes as presented in section 3.2.

6.1 Currently viable opportunities

Currently viable investment opportunities exist in higher education segment and Technology and Content providers.

These businesses demonstrate high level of organised and commercial-scale activity; high degree of competitiveness; and the ability to take in large sums of private equity capital with preference for minority stake investments as discussed in Section 3.2.

A deep dive deep in the higher education segment, with respect to the types of courses offered, reveals that there are around five high probability investible opportunities within the segments. These are Hotel Management colleges (Degree level), Management Colleges (Business Schools at Degree Level), Medical Colleges, Pharmacy Colleges (Degree Level), Nursing Colleges (Degree level) and Engineering Colleges.

The different dimensions used to compare “attractiveness” of these five businesses opportunities include current state of consumer demand and degree of “competitiveness” demonstrated by these firms. Competitiveness can be measured as a function of strength of the business model – including margins, brand value, use of technology and modern approaches, access to markets and financial health. Competitiveness is also a function of level of competition from foreign companies that businesses in each of these five segments face.

Based on this analysis, Medical Colleges and Hotel Management were found to be more attractive as it has good level of competitiveness and high consumer demand. The demand for Hotel Management schools is extremely high in Nepal. This is because of the immediacy of absorption in both domestic and foreign job market. Similarly, Medical colleges also offer high return to students in terms of the opportunities opened up because of education. This results in high demand for medical courses as well. With political stability and stable economic growth, many businesses in Nepal are modernising and

⁹¹ Asian Development Bank, The Rise of Asia’s Middle Class, 2010

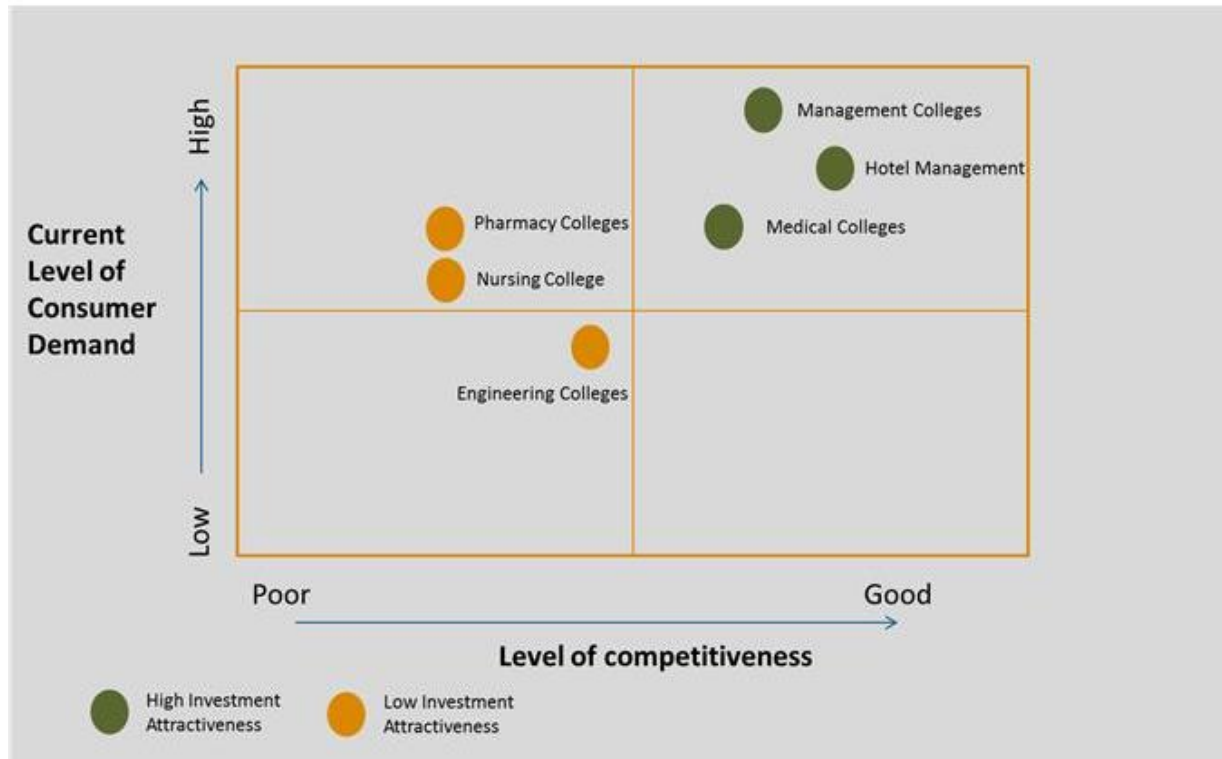
⁹² See Section for details

demand for trained managers to manage these businesses has surged in the country, making management education among the most sought after courses in Nepal⁹³.

Moreover these markets are far from saturated especially in regions outside Kathmandu as indicated in primary research. The investment attractiveness is depicted in Figure 31.

⁹³ MBA Education: The Making of Managers report, 2012

Figure 31: Investment attractiveness of Higher education course options



Source: Intellecap Analysis 2014

Based on this analysis, Hotel Management, Medical Colleges and Management Colleges (or B-Schools) will be explored in detail in subsequent sections.

6.1.1 Medical Colleges

There are around 21 registered medical institutions in Nepal. These are registered under Nepal Medical Council and primarily fall into two categories (a) medical colleges and (b) dental colleges. Among 21 registered institutions 3 are specialised dental colleges and remaining 18 are Medical colleges.

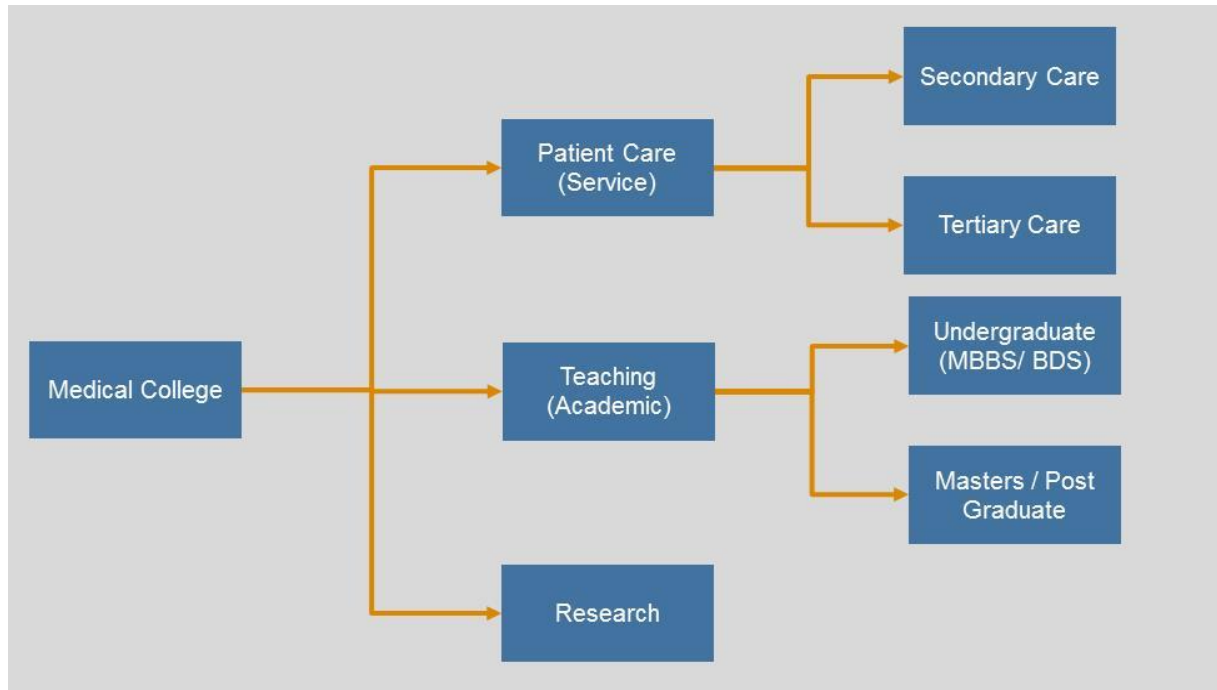
The business model of medical colleges show low degree of differentiation; a few players are exploring horizontal integration by venturing into vocational courses such as nursing and physiotherapy

Currently, the business models of most medical colleges in Nepal show little or no differentiation. Lesser number of medical colleges, high mismatch between demand of medical seats and low supply and greater employability prospects may be the key reasons that the medical colleges in Nepal have not innovated or expanded their business models. For instance some medical colleges in the developing world are innovating by adding community based experience and services programme in their medical education program. In this program medical students are posted to the communities (usually in the rural areas) during specific years of their training with definite learning objectives. The students are thus encouraged to be involved in their own learning process rather than be only recipients of information

given in the classrooms⁹⁴. Medical colleges in Nepal can implement such programs to improve the learning experience of the students and create a niche for themselves in the market.

A typical business model of a medical college has been shown in figure 32.

Figure 32: Typical business model for a medical college in Nepal



Source: Intellecap analysis 2014

In the medium to long term, medical colleges are likely to benefit from expanding their business models. From the growth of private medical colleges in a comparable market like India, some ways that medical colleges in Nepal can build upon their unique selling proposition (USP) include extending their academic services and driving horizontal integration to bring vocation education courses such as Nursing and physiotherapy under their ambit⁹⁵. Another key USP that private medical colleges can bring in is internationally recognised quality certification⁹⁶; which would go a long way towards building trust among the prospective students. Exchange programs with medical colleges in developed world may also help students to work on the latest research in the medicine field.

Private sector activity is significant; private equity investment can help medical colleges channelise funds to boost up competitiveness and build core competency.

Among the 21 registered medical colleges at least eight colleges are privately owned. These colleges offer MBBS and Dental programs to the Nepalese students. Along with teaching facilities these colleges have fully functional patient care services (both secondary and tertiary care) and related services. The

⁹⁴ <http://www.guninetwork.org/resources/good-practices/good-practices-listing/community-based-experience-and-services-an-innovative-medical-education>

⁹⁵ Intellecap analysis, 2014

⁹⁶ For instance, Indian private hospitals are accredited by the National Accreditation Board for Hospitals & Healthcare Providers (NABH), which is a constituent board of Quality Council of India, set up to establish and operate accreditation programme for healthcare organisations

various facilities offered by the colleges include laboratories, research facilities and Provisioning of Medical Equipment's etc. Private equity investment in medical colleges is likely to drive improved infrastructure, technology up gradation and add to strategic core competency of the institutions.

Private medical colleges are geographically concentrated in the central region leaving scope for geographical expansion of the subsector.

Majority of private players (7 out of 8) are located in and around Kathmandu valley region.⁹⁷ It is because of high population density in the region and proximity to the capital town of Kathmandu. This hints at two latent indications (a) the demand for medical education is yet not fully attained to which has resulted in increased number of colleges in the same region and (b) there is immense scope of existing players to diversify geographically into nearby development regions of Eastern and Western Nepal. Private equity capital can be gainfully utilised in geographical expansion.

Medical colleges are capital intensive and to achieve profitability need significant patient inflow to its service delivery and clinics.

Setting up a Medical college is a highly capital intensive activity. Capital requirement may vary from US\$ 2 Million to US\$ 5 million (NPR 200 million to NPR 500 million) based on the type of infrastructure and facilities in-housed in the institute.⁹⁸

The typical cost structure of Medical colleges in Nepal essentially comprises of land, building and medical equipment, staffing expenses (salaries), supplies, repairs and maintenance, administration and general expenses. Of these, the highest contribution to cost structure arises from spend on land, building and medical equipment, and staff salary.

On the other hand, the key sources of revenue are academic fees rate, and income from service delivery channels such as hospitals and clinics. The key metrics that drive revenues in Medical colleges are listed in Table 5 along with the typical trends observed in Nepal.

Table 5: Key revenue drivers in Medical Colleges in Nepal

Metric	Value
Academic Fees	
Number of seats	~150
Average MBBS Fees (consolidated for 5 years exclusive of lodging and boarding) per seat	~US\$ 38000 to 43000
Average Bachelor of Dental Surgery (BDS) Fees (consolidated for 5 years exclusive of lodging and boarding) per seat	~US\$ 18000 to 22000
Income from service delivery channels such as hospitals and clinics	
Typical Number of beds in teaching hospitals	~500-800

Source: Intellectap analysis 2014, based on – primary insights collected during the course of this study in May 2014, Medchrome 2013⁹⁹

⁹⁷ Nepal Medical Council

⁹⁸ Inputs from primary research

⁹⁹ <http://medchrome.com/medicalcolleges/nepal/cost-of-admission-in-private-medical-colleges-in-nepal/>

Key investment opportunities in the Medical college category are summarised in Figure 33.

Figure 33: Key investment opportunities in Medical colleges in Nepal



Source: Intellectap Analysis 2014

Private equity investors can channel risk capital to support expansion of an existing medical college by upgrading infrastructure and facilities of an existing setup.

Medical colleges present an opportunity for private equity investors to channel investments into adding facilities in terms of better infra-structure; as well as upgrading existing technology in order to improve efficiency in operation and revenues. Given that the middle class income group is rising in Nepal, a corresponding rise in demand for medical education is inevitable; and hence the next few years are an opportune time for such investments. In fact, investments in existing and operational colleges are likely to have shorter breakeven and exit time frames since the management teams will have experience of running the institution, and the capex (capital expenditure) requirements would be lower.

Private equity investors can also support expansion of an existing Medical college into newer geographies.

Given the under-penetrated markets for conventional professional education outside Kathmandu valley region; private equity investors may also find lucrative investment opportunities in supporting expansion of an existing medical college which is seeking to build a new campus in a different location. Eastern parts of Nepal and popular destinations like Chitwan and Morang present good opportunities for such expansion moves¹⁰⁰.

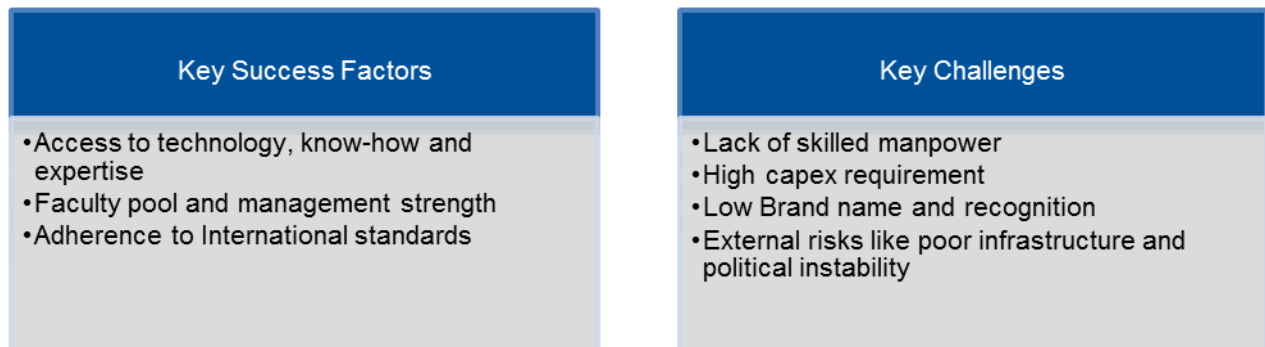
Finally, private equity investors may also channel capital towards horizontal integration which can help the education-sector firm diversify offerings and improve revenues and profitability.

¹⁰⁰ From primary insights garnered during the course of this study in May 2014

A trend of horizontal integration has been observed in the education industry in Nepal¹⁰¹ where Nursing, pharmacy, Physio-therapy schools are opened by existing players in medical college arena. These players are seeking to diversify their offerings and retain a higher share of the formal education seeking population's spending. With investments in their own infrastructure, such colleges are able to offer service to wide variety of student demand while also improving their profitability.

Key success factors and challenges that investors in Medical colleges in Nepal should be cognisant of are summarised in Figure 34

Figure 34: Key success factors and challenges in Medical colleges in Nepal



Source: Intellectap analysis, 2014

Some key success factors that investors can use to evaluate the attractiveness of Medical colleges include:

- Use of modern technology and processes; especially through tie-ups with foreign medical colleges is another critical success factor that investors can use to evaluate attractiveness of medical colleges
- Management strength and Faculty pool skillset is another key success factor; especially in terms of senior management abilities and faculty pool skill set. The best case alignment and combination for high investment worthiness is when the faculty specialisation is aligned with organisation's strategy for scaling up and growth. Strategies could be formulated to divide responsibilities between teams overseeing core medical teaching services and teams overseeing business operations of the patient service channels.
- Finally, adherence to international standards and delivery of procedural skills in line with international practice will help improve the credibility of the degrees offered by these institutes. These standard practices will also help attract international students to the courses who in term can contribute to the revenue significantly.

Some key risks and challenges that investors in Medical colleges in Nepal should be cognisant of include:

- The capex requirement is high for medical colleges, especially in urban centres like Kathmandu and Pokhara because of rising land prices. This in turn impacts the project viability.

¹⁰¹ See Section **Error! Reference source not found.** for details

- Foreign students obtaining Nepalese degrees usually have to go through another set of exams for obtaining Practitioner license in home country. There is need for updating of degrees so that it remains relevant outside Nepal as well. This will improve the overall brand image of institutes.
- Low availability of talent, which causes difficulty in hiring and retaining quality staff
- External risks like poor infrastructure and political instability can have a negative impact on both foreign and domestic tourists

6.1.2 Hotel Management

There are around 21 Hotel management institutes in Nepal who offer degree level courses in Nepal. The course duration varies from three years to four years.

The business models of hotel management colleges show some degree of differentiation; colleges offer both local degrees and international degrees in hotel management

There are two business models existing for hotel management institutes in Nepal: 1) Institutes that provide local degree in hotel management that is recognised in Nepal and 2) institutes offering international degree in hotel management that is recognised in several countries especially in the UK and the Middle East. Some of the key features that differentiate these business models have been shown in Table 6. Institutes providing internationally recognised degree in hotel management seem to be in a better position due to the lesser number of players in the segment and future job opportunities in foreign countries for students.

Table 6: Different business models in hotel management colleges in Nepal

Parameter	Institutes providing locally recognised degree in hotel management	Institutes providing internationally recognised degree in hotel management
Numbers of student enrolled	Cap of around 40-60 students per year per college	Typical number of students may range from 60-80
Affiliation and accreditation policies	Usually affiliated to one or more universities in Nepal	Affiliated to different universities across the world
Royalty payable	Royalty is cheaper with restrictions on number of students	Around 25% of the fees is given for royalty and franchise costs
Number of players	All the Government and private players (21 in number)	1 Government college 4 private colleges

Source: Intellecap analysis 2014

In the medium to long term, hotel management colleges are likely to benefit from expanding their business models. Trends from the growth of private hotel management institutes in a comparable market like India, indicate that hotel management institutes in Nepal can drive vertical integration or tie-ups with reputed hotel and restaurant chains for enhancing employability of the students¹⁰² which would go a long way towards building trust among the prospective students

Private sector activity is significant; private equity investment will boost up competitiveness and can build core competency.

¹⁰² Intellecap analysis, 2014

Among the 21 affiliated Hotel Management colleges, eighteen colleges are privately owned. These colleges offer Bachelor of hotel Management and Bachelor of Hospitality Management to the Nepalese students. Many of the Hotel Management institutes have international affiliations with universities from UK, Switzerland and India. Many institutions provide live classes from Kathmandu to students in countries like UK. The various facilities offered by the colleges include Laboratories like wine labs, coffee labs etc., Libraries, and high class technology enabled kitchens. Private equity investment in hotel management colleges will bring in improved infrastructure, technology up gradation and will add to strategic core competency of the institutions.

Private hotel management colleges are geographically concentrated in the central region.

Majority of private players (15 out of 18) are located in and around Kathmandu valley region.¹⁰³ It is because of high population density in the region and proximity to the capital town of Kathmandu. This hints that there is immense scope of existing players to diversify geographically into nearby development regions of Eastern and Western Nepal especially in tourist locations such as Pokhara. Private equity capital can be gainfully utilised in geographical expansion.

Hotel Management colleges are capital intensive and to achieve profitability, it needs significant student admissions inflow.

Setting up a hotel and hospitality management college is a capital intensive activity. Capital requirement may vary from NPR 10 billion to NPR 30 billion depending on the type of infrastructure and facilities in-housed in the institute.¹⁰⁴

The cost structure of management colleges in Nepal comprises of cost of land, building and laboratory set-up, foreign affiliation charges and related tax, staffing expenses (salaries), supplies, repairs and maintenance, administration and general expenses. Of these, the highest contribution to cost structure arises from spend on land, building and staff salary. On the other hand, the key source of revenue is academic fees from domestic and international students. Typically the royalty from foreign students varies from NPR 5000 to NPR 8000 which accounts for 25% of total fees. Typical profit margins of hotel management institutes in Nepal vary from 16 – 30%¹⁰⁵. The key metrics that drive revenues in Management colleges are listed in Table 7.

Table 7: Key revenue drivers in Hotel management Colleges in Nepal

Metric	Value
Number of seats for domestic students	~60-80
Number of seats for international students	~100
Average Bachelor in Hospitality Management fees (4 years course)	~4-5 lakhs NPR
Average Bachelor in Hospitality Management fees (3 years course)	~3.5 – 4.5 lakhs NPR
Typical operating profits	16% to 30%

Source: Intellect analysis 2014, based on – primary insights collected during the course of this study in May 2014, educateNepal.com¹⁰⁶

¹⁰³ Edusanjal.com, Accessed in May 2014

¹⁰⁴ Inputs from primary research conducted during the course of this study

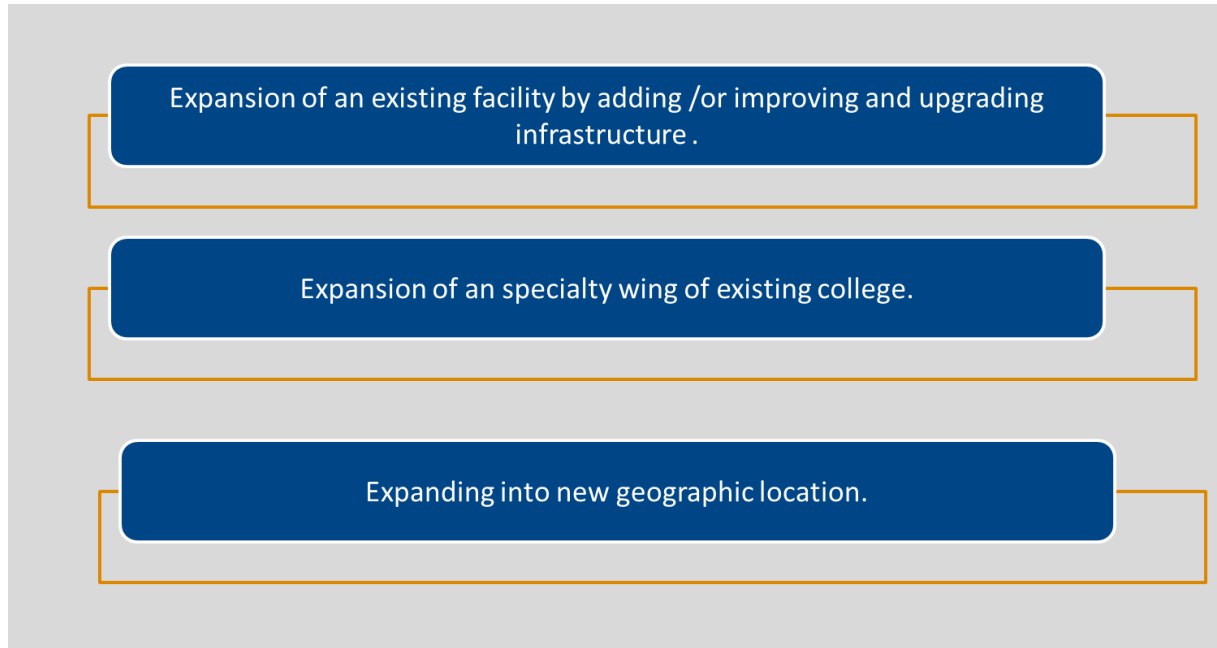
¹⁰⁵ Inputs from primary interview conducted during the course of this study

¹⁰⁶ http://www.educatenepal.com/career_articles/display/creating-skilled-hospitality-professionals

Key investment opportunities in the Hotel Management category are summarised in

Figure 35.

Figure 35: Key investment opportunities in Hotel Management colleges in Nepal



Source: Intellect Analysis 2014

Private equity investors can channel risk capital to support expansion of an existing hotel or resort company by adding to and upgrading infrastructure of an existing institute.

The eighteen currently operational Management colleges present an opportunity for private equity investors to channel investments into adding facilities in terms of better infra-structure; as well as upgrading existing technology in order to improve efficiency in operation and revenues. Investments in existing and operational colleges are likely to have shorter breakeven and exit time frames since the management teams have experience of running the institution, and the capex (capital expenditure) is lower.

The PE/VC investments can help the college invest in bringing in innovations to the business model like setting up of teaching hotel and restaurant fully run by students. This will give students the first-hand experience of the dealing the customers and managing the operation of a functional hotel. This will add value to the skillset learnt by the students. Such innovation will generate more revenues in two ways (a) Institutes can charge fees on the higher end of the usual fees range (b) income from the sales generated from the teaching hotels. Similar innovation will improve brand image and will attract more students.

Private equity investors can assist in the development of hotel management facilities by upgrading specialty specific infrastructure of an existing institute.

Hotel Management colleges and institutes when backed with sufficient capital funding can expand their operations to offer super-specialisation degrees to students. For example in Eastern Nepal, Hotel

Management colleges can offer tea-based hotel management courses. Similarly coffee specialisation, wine specialisation etc. can be developed.

Such super-specialisation degrees should be in sync with international standards so that it remains relevant and often-sought after course in the arena.

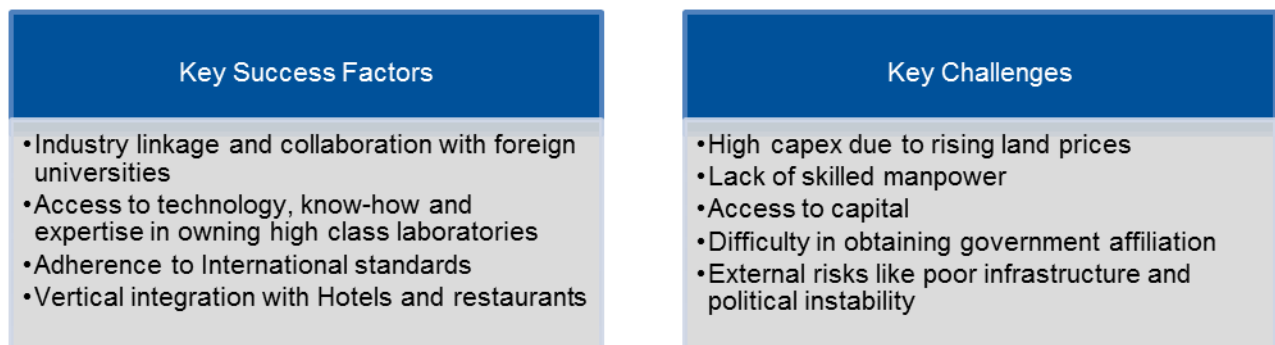
Private equity investors can also support expansion of an existing Hotel management college to newer geography.

Given the under-penetrated markets for conventional professional education outside Kathmandu valley; private equity investors may also find lucrative investment opportunities in supporting expansion of an existing hotel management college which is seeking to build a new campus in a new location. Hotel Management college geographic presence can be linked to tourist destination. This is because, there will be high inward flow of tourists in these places and teaching hotels and restaurants will be a comparatively lower priced and hence will attract budget tourists.

Given that Nepal has over 550 to 600 other tourist destinations; there is an opportunity for the hotel management colleges along with teaching hotels and restaurants to expand to other places¹⁰⁷ - especially in Eastern Nepal region.

Key success factors and challenges that investors in Hotel management colleges in Nepal should be cognisant of are summarised in Figure 36.

Figure 36: Key success factors and challenges in Hotel Management colleges in Nepal



Source: Intellecap analysis, 2014

Some key success factors that investors can use to evaluate the attractiveness of Hotel Management colleges include:

- Industry linkage of courses offered in institutes will add immense value for the students. Such linkages improve the student’s employment probability and hence it is highly likely that the demand for colleges with direct industry linkage will be high.
- Use of modern technology and processes; especially through tie-ups and affiliations with foreign hotel management colleges is another critical success factor that investors can use to evaluate overall attractiveness of the Hotel management institutes.

¹⁰⁷ Nepal Tourism Statistics, 2012; Tripadvisor Nepal; Intellecap analysis, 2014

- Adherence to international standards and delivery of skills in line with international practice will help improve the credibility of the degrees offered by these institutes. These standard practices will also help attract international students to the courses who in turn can contribute to the revenue significantly.
- Finally, vertical integration of Hotel management colleges with hotels and restaurants will improve the chances of students being absorbed in the job market. This will have significant positive impact over the brand image of the institute.

Some key risks and challenges that investors in Hotel Management colleges in Nepal should be cognisant of include:

- The capex for running Hotel management institutes is significantly higher because of rising land prices, especially in urban centres like Kathmandu and Pokhara which have a direct impact on profitability.
- Low availability of talent, which causes difficulty in hiring and retaining quality staff
- Access to capital is a matter of concern in Nepal for Hotel management institutes. This is because gestation period of these colleges for breaking even is around 4-7 years¹⁰⁸ and banks generally prefer lending to short term projects which break even in shorter span, unless the projects are in priority sector.
- Government affiliations are difficult to obtain especially for international courses. For example, only one private college qualified for getting government affiliation for providing four year international hotel management degree level course in Nepal for the first time in 2011¹⁰⁹. Government affiliations attract domestic students and opens up opportunities for governmental funding and related benefits and hence difficulty in obtaining affiliation does pose a risk.
- External risks like poor infrastructure and political instability can have a negative impact on both the overall business environment of Nepal.

6.1.3 Management Colleges (Business Schools)

Management education in Nepal has seen significant growth in the past decade. The demand of management graduates is rising especially in thriving Banking and Financial Industry in Nepal

Management education has seen a steady growth in the past one decade in Nepal. Presently there are around 18-20 Business Schools (B-Schools) offering Bachelor of Business Administration (BBA) programmes or MBA degree courses in the country mainly located in the Kathmandu valley region¹¹⁰. With business and the economy modernising, demand for trained managers is likely to surge in the country, making management among the most sought after courses. In addition with the growing contribution of the service sector in Nepal's economy, emergence of major corporate houses, B-Schools sector may have ample opportunity to thrive in Nepal.

Banks and financial institutions (BFIs) have been the preferred destination of majority of the MBA candidates with a few top universities reporting placement of majority of the batch in the BFI sector.

The Business School segment in Nepal is development stage and opportunities exist for private players to establish industry linkages and expand

¹⁰⁸ From primary interviews conducted during the project

¹⁰⁹ From primary interviews conducted during the project

¹¹⁰ Nepal University Website, Management Colleges

The private sector has played a key role in the growth story of management education in Nepal by setting up state-of-the-art institutions, hiring good faculty and developing latest curriculum. However most of the B-Schools in Nepal seem to lack on international standards when it comes to industry linkages and providing actual industry exposure to the students. The segment is still in nascent stage when it comes to placement of the students as industry linkages are less than developed. Although the trend of institutional on-campus hiring has not started yet, a few companies have been visiting some top colleges to scout for suitable MBAs. Less clarity on the job opportunities for students makes students prefer Medical or Hotel Management colleges over B-Schools..

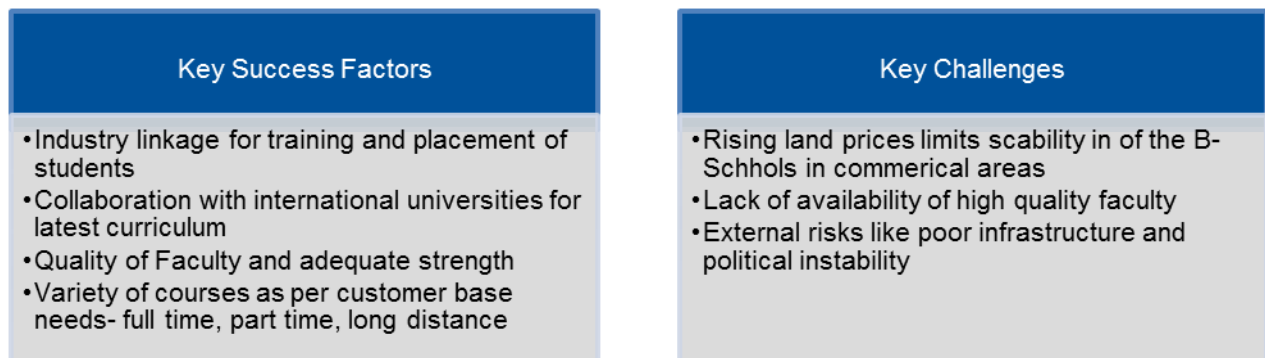
The high investment worthiness businesses in the B School segment may focus on international partnerships with reputed global B Schools and offer tailor made courses for industry verticals.

With competition becoming fierce due to presence of significant number of players, a few B-Schools have started innovating in their business models. B-Schools have started offering various specialisations in business management as per demands in various industries. For instance KFA Business School has started MBA with specialisation in banking and insurance and has established good industry linkages for training and placement of its students. Uniglobe College (UC) offers MBA with specialisation in corporate finance, investment, banking, insurance and micro finance.

B-Schools with such innovative models are likely to have higher demand from prospective students who may even pay a premium price to pursue such courses. For potential investors in the segment, B-Schools with industry specific courses and better industry linkages come out as high investment worthiness businesses.

Key success factors and challenges that investors in Business Schools in Nepal should be cognisant of are summarised in Figure 37

Figure 37: Key success factors and challenges in Business Schools in Nepal



Source: Intellect analysis, 2014

Some key success factors that investors can use to evaluate the attractiveness of Management colleges include:

- Industry linkage of courses offered in institutes will add immense value for the students. Such linkages improve the student’s employment probability and hence it is highly likely that the demand for colleges with direct industry linkage will be high.
- Collaboration with international universities for developing the latest course curriculum and access to latest industry case studies

- Quality faculty is critical for a business school as it plays a critical role in brand creation for the college. A Business School with reputed faculty or even visiting faculty from other top B-Schools in the world will add to its brand image and would be more attractive for students
- Tailor made or customised courses for working professionals (such as part time, long distance courses) or specific industry related courses is likely to open up new business avenues for B-Schools and drive their growth and profitability

Some key risks and challenges that investors in Management colleges in Nepal should be cognisant of include:

- Rising land prices, especially in urban centres like Kathmandu and Pokhara which have a direct impact on project viability. This in turn makes it difficult for business schools to scale their operations in economically active regions of Nepal that may have good industry presence
- Low availability of talent, which causes difficulty in hiring and retaining quality staff
- External risks like poor infrastructure and political instability can have a negative impact on the economic growth and could impact the hiring of MBA graduates

6.1.4 Technology and Content providers

Technology and content providers in Nepal cater primarily to the primary and secondary schools as well as support services to the higher education institutes

The potential market opportunity in Technology and content providers is estimated at US\$ 6 million, and this market is projected to be growing at a higher growth rate¹¹¹ as a result of the growing popularity of audio visual education material among the students as well as improving ability for schools to pay for high quality education.

Technology and content providers in Nepal, design, produce, deliver and evaluate content for a variety of teaching and training situations in Nepal including educational design and multimedia production of text books into audio visual e-learning resources. Multimedia in schools uses digital educational content and infrastructure solutions as a teaching aid in classrooms by using audio and visuals means across various subjects. A few private players in the segment have expanded their services and provide Management Information Systems (MIS) services and solutions to higher education institutes such as medical colleges.

Four major private sector players are active in the technology and content segment in Nepal with one local player: Midas Education and three international players: Educomp (from India), Edurite (owned by Perarson's group), and FedNa (from India)¹¹². Midas education was the first player in this market¹¹³ with other three players' entering the market in the last 2-3 years. Being the first and the only local player in the market, Midas education at present leads the market share reflecting its first mover advantage. Granular details on the average revenue size in the technology and content segment is not available.

The key cost-drivers of Technology and content providers in Nepal consist of the following expenses:1) License cost, 2) Content Development Cost 3) Salary of Staff and 4) Marketing and Distribution Costs.

The key revenue drivers of Technology and content providers in Nepal consist of the following: 1) Education Content (usually audio-visual) to the school and to the students 2) Technology support to the

¹¹¹ Intellectap primary research 2014

¹¹² Government and MoHP sources state that there 300 to 350 private hospitals in Nepal; but this figure includes secondary and tertiary hospitals

¹¹³ Midas Education has been active in Nepal for the past 10 years

Administration and Back office management solutions for schools (for example library MIS) and 3) MIS for higher education institutes.

The typical operating profit margins in the segment in Nepal were found ranging from 50-60%¹¹⁴. While specific data on project cost structure and key metrics for a technology and content provider from Nepal was not readily available, data from an emerging market like India may be used as a broad indicator as shown in Table 8.

Table 8: Typical Technology and Content business metrics in India

Business Metric- Technology and Content providers	Typical Benchmarks from India
Average number of schools institutes served	1000 to 5000
Average number of students covered in India	2 million to 5 million
Business Models (Marketing and Sales)	B2B (direct selling to schools) and combination of B2B and B2C (retail selling)
Education Material language	Mostly English
Revenues*	US \$ 15 to \$30 million
EBIDTA margin*	18% to 37%
PAT margin*	11% to 30%

Source: VC Circle Database, Intellectap Analysis 2014. Exchange rate used was US\$ 1 = 59.18 Indian Rupee.

* Financial details are for the listed technology and content companies in India

Largely untapped market and innovation in teaching methods to overcome shortage of teachers in schools would drive the requirement of technology and content providers in Nepal

Nepal has over 35,000 schools (around 25,000 public and 10,000 private schools) providing pre-primary and primary and secondary education to students. Given the low penetration of technologically content (in form of audio visuals) and innovative teaching methods at present in these schools (The largest private player Midas Education serves around 400 private schools and 300 public schools) the potential of technology and content providers to serve more schools is very high in Nepal. In addition technical content has the potential to educate a number of students with in a class with reduced teacher activity. A study by Rato Bangala Conference on School Education in collaboration with UNESCO has identified a shortage of over 60,000 primary teachers in Nepal. Effective usage of audio visual technical content could cover a wider range of students and put less pressure on the schools with shortage of teachers. In addition using audio visual methods of teaching could be beneficial for schools in mountainous regions of Nepal given the challenges of availability of books and related content in these remote locations.

Technology and content providers prefer B2B business models over B2C business models in Nepal

Presently the business models of technology and content providers seems to focus upon the B2B selling strategy with the technology and content providers directly selling their services and products to the

¹¹⁴ Intellectap primary research 2014

schools or colleges. Students and other retail customers may also utilise the services / products of these companies but are usually routed to the school / college which act as an intermediary between the two parties. The B2C model that is more popular in the traditional content providers (text book publishers) is not preferred by these players as they focus to reduce the number of intermediaries in the supply chain to reduce costs as well reduce the number of payable days to reduce working capital requirements.

The payment models of the technical and content providers seems to vary from fixed price models to 'pay as you go' models or a combination of both depending on the agreement between the service provider and the school . As most of the technical and content providers have front loaded costs in terms of technology and content development, fixed price models are preferred. However many of the schools (especially public sector schools) prefer 'pay-as-you-go' pricing model as these schools may face working capital challenges. For equity investors a fixed price model or combination of fixed price and pay-as-you-go' pricing model is most suitable as it becomes easier to predict the cash flows (and hence profitability of the enterprise).

Publication of education material in Nepalese language and with English translation sets barriers to entry, thus limiting number of players in the segment

One of the key reasons for presence of limited number of players (especially international players) in the technical and content provider segment is the requirement of utilising Nepalese language while developing the content as per the requirement of the curriculum or the school. In addition development of the content that aligns well with the local culture also becomes critical. International players often face problems on both of these aspects that limit their market presence and share. Local companies are in a better position to overcome this challenge and are hence in a better position in terms of market share.

The key investment opportunities in technology and content providers include improving quality of current content and improve management practices.

Even though the technology and content providers have made strides in terms of usage of more advanced technology, modern processes and skilled manpower – the segment still has a long way to go in matching international standards while lowering the costs. Investments in new technology can include USB technology that provides an alternative to the usual CDs and DVDs that have shorter usage span. Investments in processes can include Standard Operating Procedures to increase overall quality of service for end consumers. While many companies in the segment may focus on investments in training technical staff; investments in managerial talent and building strong second line of leadership are also needed to make private companies in the segment more sustainable in the long run.

Key success factors and challenges that investors in technology and content segment in Nepal should be cognisant of are summarised in Figure 38.

Figure 38: Key success factors and challenges in technology and content providers in Nepal

Key Success Factors	Key Challenges
<ul style="list-style-type: none"> •Tie-up with public and private schools •Access to technology, know-how and expertise •Managerial strength •Expansion of services to cover higher education and vocational education segments 	<ul style="list-style-type: none"> •ICT infrastructure in public schools is less developed •Supply of continuous electricity is a problem at many locations in Nepal •Access to debt capital is a challenge due to 'asset-light' model •Risk of payment defaults by the schools

Source: Intellect analysis, 2014

Some key success factors that investors can use to evaluate the attractiveness of technology and content providers include:

- Tie-ups with public and private schools is the key for a company in the technology and content segment as it secures cash flows and predictability in the revenue stream. Given that the private schools (especially Class A schools) have better and predictable revenue streams, tie-ups with such schools is expected to drive up the valuation of the company
- Access to modern technology and processes so as to improve the quality of product and reduce the lead time for development of content is another critical success factor that investors can use to evaluate attractiveness of the companies in the segment
- Managerial strength is a key success factor; especially in terms of senior management skill set and strategies used to divide responsibilities between teams
- Expansion of services to cover higher education and vocational education segment could be a major business opportunity in Nepal. At present higher education and vocational education segment seems to be largely untouched by the audio visual methods of teaching or utilising technology to match the curriculum and latest research information from the developed world.

Some key risks and challenges that investors in technology and content segment in Nepal should be cognisant of including:

- ICT infrastructure in Nepal in many public and private schools is not adequate to support the latest technological content. For instance it is estimated that only 20,000 public schools have basic computer facilities and the situation is even worse in semi urban and rural areas.
- Nepal suffers from severe shortage of electricity that worsens during the period from November to February with over 12 hours of load shedding across all the regions in Nepal. Electricity is a prerequisite for the technology and content providers and its shortage could mean less usage of their material and in turn lower revenues
- Access to capital, especially debt is a challenge for most of the players in the technology and content segment due to their 'asset-light' model. Hence meeting collateral and security requirements would be difficult for companies to meet
- There is an inherent risk of default of payments by the schools (especially public schools) in the 'pay as you go' model. Periodicity of payments and cash flows for schools could mean that the chances of default are high if the school does not manage its working capital properly. Therefore company needs to be cognisant of risks and benefits of business model it chooses.

6.2 Emerging opportunities

6.2.1 Vocational Education

Vocational Education segment is evolving in Nepal

Nepalese student population is slowly recognising the importance and relevance of vocational education in improving the employability prospects. Moreover these courses offer themselves as affordable option for a significant proportion of Nepalese population. The typical fee structure is mentioned in Table 9.

Table 9: Typical Fee structure of Vocational courses in Nepal

Average fees of Diploma level courses	Value
Average fee for Diploma in Hotel/Hospitality Management per year	50,000-1 lakh NPR
Average fee for Physio-therapy courses (Diploma) per year	50000-75,000 lakh NR
Average fee for Nursing courses (Diploma)	Less than 50,000 NR

Source: CTEVT, Nepal

Because of increased demand for vocational courses, quite a number of vocational training institutes have become operational and are fairly doing well in the segment.

The scale of operation is low in vocational education segment though the space is crowded by quite a number of fragmented players.

There is significant number of players in vocational education segment. These are mostly family owned or self-directed businesses. Around 80% of these are concentrated around Kathmandu region¹¹⁵. However the scale of operation is low and highly fragmented. These players are mostly seen in language training centres and apprentice segment of vocation education. The scaling up of apprentice training to Technical specialised institution and language and computer training centres to Language training Institutes would require significant capital investments. The necessary condition for scaling up in this segment is to have a critical mass and scale of operation. Currently the scale of operation is very low and highly fragmented.

However there are a few institutional private players in the vocational education segment who own diploma schools for courses like Pharmacy, Nursing, Physio-therapy, hotel Management etc. These player are still a few in numbers but is expected to grow as the overall demand grows in near future.

A number of incidents of FDI have found their way into the segment albeit small average ticket size; hinting at future growth potential.

As mentioned in Section 5, majority of FDI has found its way to Skill training (mostly in language and Computer Training). The investments in this segment are of very low ticket size; typically ranging from US\$ 2000 to 150,000 USD.¹¹⁶ FDI investment hints at the latent growth potential of these segments. In

¹¹⁵ Industrial Statistics, 2011

¹¹⁶ Industrial Statistics, 2011

the span of past four years, the sector was able to attract only \$ 24 million USD¹¹⁷. This scenario can significantly improve if there is some degree of consolidation of business activity in Nepal. Integration of business entities will boost up the investment worthiness of the segment especially in the area of Language training centres.

Vocational training sector in India is fast growing segment that has attracted a lot of interest from PE/VC investors. The total market size of vocational training in India is 20 Billion USD with the private sector market size being 3.7 billion USD¹¹⁸. The expected growth rate for private sector is around 25% and the average ROE for an indicative training centre is around 14.6%.¹¹⁹

Case Box : Example of Private equity investment in NIIT in India

Orient Global invests USD 48mn to acquire 9.4% of NIIT Ltd

NIIT Limited is India's premier education and training company and a leading provider of global education services. It offers learning and knowledge solutions to individuals and corporations, training 500,000 learners annually in over 3,300 education centres in 30 countries. Through its activities it has touched the lives of 3 million learners in countries across the globe including China, Vietnam, Indonesia, Botswana, Nigeria, Ghana, Kazakhstan, Colombia and Peru. NIIT is the only Asian education and training organisation to feature among the IDC Top 20 Global IT Training leaders.

Orient Global, a Singapore-based investment group founded by Mr Richard Chandler, has acquired over 9 per cent stake in NIIT Ltd. Orient Global's Education Fund bought 2.06 million shares of NIIT Ltd from Intel Capital.

Increased governmental focus in recent past is likely to create enabling operating conditions for private players in near future.

Recent focus of the Nepalese Government on the vocation education segment is expected to drive organised private sector activity and create conducive eco-system for high level of business activity. Innovative and alternative business models to traditional asset heavy training institutes are finding their ways in South-Asian countries like India and China. Similar models in Nepalese vocational education segment will improve the sector level competitiveness.

Nepalese government is consciously putting effort for curriculum revision in the vocation education segment to match the industry requirements and improve employability chance of students. Innovation in content offering by curricula improvement validated by relevant industry vertical will add credibility to the skills and will bring out more visibility of these institutions. Industry linkages and industry participation will help improve the overall health of the segment and thus can attract more investments.

The high investment worthiness businesses in the segment are hotel management (diploma), physio-therapy and nursing courses based on demand for the courses and future market growth potential.

Among the various options available, based on consumer demand and the level of competitiveness in the industry investment worthiness is analysed.

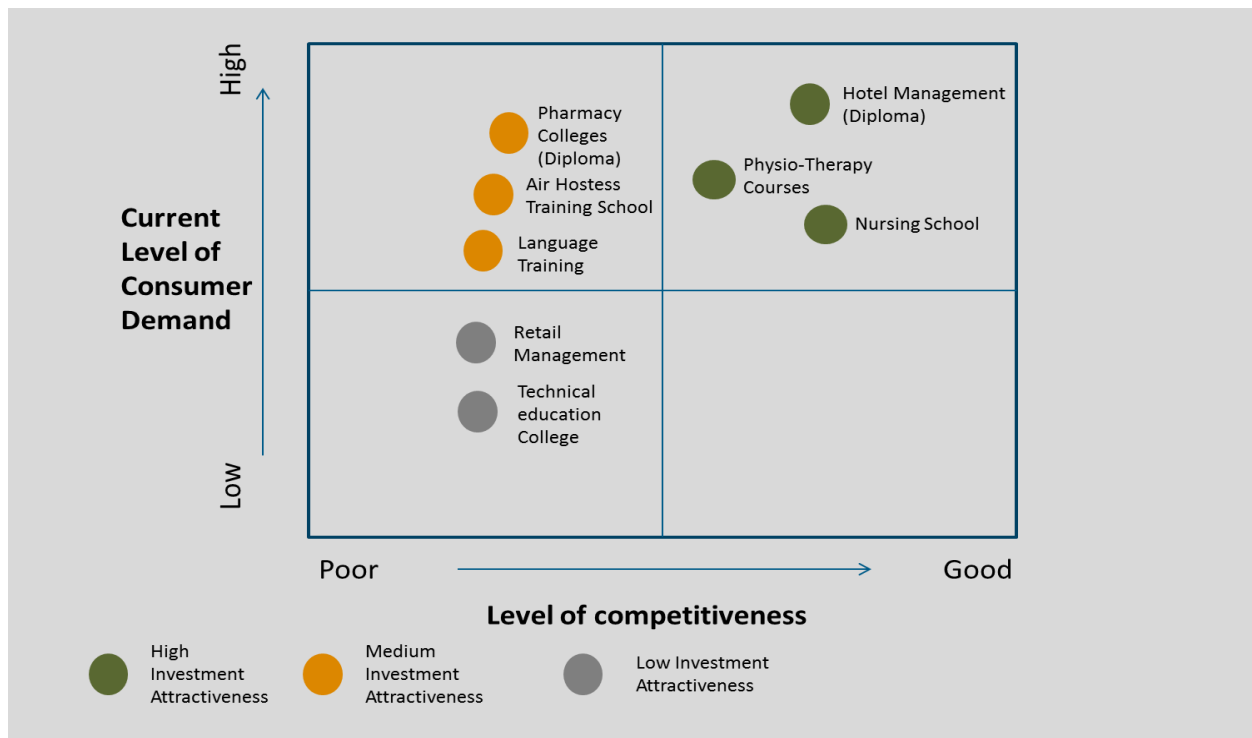
¹¹⁷ Industrial Statistics, 2007-2011

¹¹⁸ Kotak Equity Study, 2011

¹¹⁹ Intellectap Analysis 2014

In the event of consolidation of segment and collaboration with industry and international vocational training institutes, the investment worthiness of Hotel Management diploma courses can become high. (Hotel management diploma is categorised under vocational course where as degree in this discipline is categorised under higher education¹²⁰.. The demand for Hotel Management courses is extremely high in Nepal. This is because of the immediacy of absorption in both domestic and foreign job market. Physio-therapy and Nursing school are very popular among students of low-medium income bracket households. Typically the demand for Air Hostess training course is also increasing in Nepal. This is because of the high air-traffic that Kathmandu is serving to currently. Around 22 airlines operate in Nepalese air and they require trained domestic staff for keeping their operating cost low. With rising tourist inflow and air traffic density, Air-Hostess training course is gaining demand lately. The level of competitiveness is significantly higher for all the sub-segments mentioned above. This is depicted in Figure 39.

Figure 39: Investment attractiveness of vocational education options



Source: Intelcap Analysis 2014

6.2.2 Pre-Primary schools and ‘Type A’ Schools

Pre-primary education is an emerging industry in Nepal with recognised international chains entering the market

Pre-primary schools (or pre-schools) are relevantly recent phenomenon in Nepal, having witnessed significant private sector activity in the last 4-5 years with major private players from India such as

¹²⁰ A three year program in Hotel management is usually categorised as vocation course and a four year program categorised as higher education (degree based) course in Nepal

Eurokids, Shemrock entering the Nepalese market. The present market activity in the segment is concentrated in the Kathmandu valley region with around 50 pre-schools active in the market¹²¹.

The pre-schools traditionally cater to children of 2 to 5 years of age group and prepare them for formal primary education. With the population of children in the age bracket of 2-5 years estimated to be around 2.4 million¹²² (or 8% of total population) in Nepal the sector has high potential to grow. Increasing level of awareness in parents (especially in the urban areas) about the benefits of preschool education and rising middle class with significant disposable income¹²³ is expected to drive this segment in Nepal in future.

The pre-schools is an attractive segment for the investors as the business model is easily replicable and scalable, especially the franchise model,

Since India also has similar demographics of high no of young population and rising middle class, a parallel can be drawn as far as growth prospects are concerned. This segment has seen great market growth in India in the recent past. The market size of pre-primary education in India is estimated at around 1026 million USD in 2011-12 and is growing at a CAGR of around 36% in the past 3-4 years¹²⁴. Also significant PE/VC investment has been observed in this segment in India¹²⁵. Similar trends can be expected in Nepal also and the pre-schools have potential to emerge as an investment attractive business in future.

Case Box : Joint Venture between Serra International and EtonHouse International Education in pre-school segment in India

Serra International Pre-school has entered into joint venture with EtonHouse International Education Group of Singapore to launch a chain of international pre-schools across India.

The Singapore-based group is well-established in Asia with 52 schools and pre-schools across Singapore, China, Indonesia, Malaysia, Korea, Vietnam, Japan and India with students from 54 different nationalities.

Serra International Pre-school decided to invest Rs 100 crore for setting up 100 franchised international pre-schools by 2012 and 1000 franchised international pre-schools in the next seven years across India(from 2011). The aim is to revolutionise the early childhood education in the country by providing world-class curriculum.

The expansion plans included Chennai, Bangalore, Hyderabad, Secunderabad in the South Delhi/NCR and Punjab in the north, Mumbai, Pune and Gujarat in the west. Because they believed that they are key markets that value high quality international pre-school education and would enthusiastically welcome such offering.

Type A schools in Nepal may present significant opportunities for investors in near future with rising focus on quality education in Nepal

Type A schools in Nepal cater to higher end of socio-economic group in Nepal (typically top 20% of the households in urban areas in disposable income¹²⁶) and are known for their high quality education and international standards though at a premium price. The profitability of Type A school is expected to be the

¹²¹ Only organised and registered pre-schools have been considered. The number of un-organised per-schools could be significantly higher

¹²² National Population and Housing Census 2011, Central Bureau of Statistics, Nepal

¹²³ ADB, Asia's New Middle Class, 2012

¹²⁴ Ernest & Young study 2012

¹²⁵ Refer section 9.1 for details on a few investments in the segment

¹²⁶ Intellectap primary research and analysis 2014

highest in the primary and secondary schools in Nepal due to their high pricing. Since these schools cater to an economically progressive demographic segment of Nepal, they usually have an assured revenue flow and higher profitability levels. The premium price charged by Class A schools (indicating a higher profit margin¹²⁷) coupled with their predictability of cash flows makes them an attractive investment opportunity in Nepal.

Presently a high proportion of the Type A schools are located in the Kathmandu valley region and in high population centres in Terai region such as Butwal, Nepalgunj and Kalaiya. Majority of these schools operate on stand-alone basis with a few schools venturing into the more scalable franchisee or multiple location models. However some of the major industry groups in Nepal such as Chaudhary Group have ventured into the school education segment in Nepal and have opened multiple branches in new locations under a single brand name. Hence 'Type A' schools with reputed brand name in Nepal (or even in the Kathmandu Valley) may plan to scale their operations by utilising their brand name and expand at other locations in Nepal. These 'Type A' schools upon scaling their operations to other locations are expected to be more investor attractive compared to the stand-alone 'Type A' schools.

6.3 Currently missing but high potential business

Currently missing but high potential business models include Boarding and lodging services for students as Nepal has high number of boarding schools in India, the business segment has also gained traction in neighbouring countries like India

While Nepal currently does not show significant activity in these areas, comparable South and South East Asian countries like India have shown significant business model innovation in these segments to address critical market gaps. For instance, Higher education companies in India have ventured into Student living services and facilities infrastructure segment. Similar market gap exists in Nepal. This is because a majority of Higher education campuses (50.6%, refer Section 3.1.1.3) are situated in Central region resulting in huge inflow of students for non-central regions. Apart from domestic student movement, a significant proportion of students come from outside Nepal. Quality hostel services and facilities for this un-served customer segment will definitely attract business activity in future. Given the success of these models in countries like India, they are bound to find their way to Nepal through organic or inorganic means; and when they would they could emerge as high potential investment opportunities for private equity investors.

Case Box : IDFC investment in Manipal's student living services and facilities management

IDFC Alternatives is a wholly-owned subsidiary of IDFC, the finance company that provides infrastructure financing and project implementation services. It manages funds of \$2.2 billion.

IDFC and Manipal Group have struck a joint venture to offer student living services and facilities management to universities and other education providers. It will focus on building quality accommodation to house students in what's a nascent business, riding on the potential of India's young population and a robust education story.

IDFC Alternatives has invested Rs 100 crore in Manipal Servicecorp Facility Management (MSFM) for a minority stake and two board seats. It will extend another Rs 650-crore debt financing to get the

¹²⁷ Intellectap's primary research indicated that Class A schools had the highest profit margins among all the 4 categories of private schools in Nepal

Case Box : IDFC investment in Manipal's student living services and facilities management

venture moving.

Global private equity biggies like Blackstone have backed student living businesses globally, and have explored investing in greenfield ventures in India too. MSFM plans to establish student living facilities with 20,000 beds to support the group's educational institutes and an additional 10,000 beds for third-party universities in India and abroad.

Currently, MSFM offers soft services such as housekeeping, security and catering as well as hard services like engineering and water management to corporate clients. It manages over 12 million sq ft across 70-odd sites and provides institutional catering services to over 13,000 people a day.

6.4 Non-Opportunities

Unviable opportunities include Type B, C, D schools and online education and counselling services.

Typical businesses seen in Type B, C, D schools and online education and counselling services are unlikely to present investment opportunities for private equity investors since they have poor firm level competitiveness and cannot take in large amounts of equity capitals structured as minority stakes as presented in Figure 21 .

7 Access to Capital for Education Businesses

Setting up a new infrastructure or expansion of facilities drives capital requirement of higher education providers. Developing latest education content and licensing costs for expansion drive capital requirement for technology and content providers

Higher education institutions in Nepal usually require capital for two purposes: 1) to acquire land and build infrastructure by setting up a new college or expanding onto another site and 2) Developing the existing infrastructure of the college entailing provision of facilities such as setting up latest labs ,upgrading technological infrastructure and expansion in capacity. In addition short term working capital needs such as paying for salaries for the staff, latest content (books / digital) for students and organising seminars/ events may be also funded from external borrowing.

Technology and content providers in Nepal usually require capital for two purposes: 1) developing latest content as per the curriculum or customers requirement and 2) licensing costs for utilising the software platform for developing the content. In addition short term working capital needs such as paying for salaries for the staff, sales and marketing costs and expansion of delivery channel to expand to new markets may be also funded from external borrowing

Higher education service providers in Nepal have moderate access to debt but low access to institutional and private equity. Technology and content providers have difficulty to acquire debt capital due to 'asset-light' model and therefore prefer equity capital.

Higher education service providers interviewed during the course of this study reported that access to debt is comparatively easier due to the asset heavy nature of the segment where fixed assets (buildings, labs) can be collateralised with a few firms even qualifying for low-interest rate loans at 10% to 11%. While the higher education institutes such as medical colleges have traditionally had easier access to low-interest debt, many of the family owned institutes prefer to utilise their own equity when compared to debt. Long lead times for loan approvals and requirements of disclosure of the financial details were

mentioned as the key reasons for preference of equity capital by a few of these family owned higher education institutes.

Technology and content providers in Nepal have difficulty in accessing debt capital due to their 'asset-light' model and minimum presence of fixed assets that can be collateralised. The technology and content providers interviewed during the course of this study reported utilising minimum debt capital for short term basis to meet their working capital requirements. Access to equity capital (primarily through local investors or through the international parent firm) is the preferred way to meet capital requirements in this segment.

Equity funding in higher education in Nepal primarily consists of promoter capital with some instances of FDI. Technology and content providers have better access to domestic equity

There has been some equity funding activity in the higher education sector with medical colleges, hotel management institutes and Business studies institutes attracting domestic and foreign equity in the last 4-5 years. Over US\$ 10 million come in through FDI route from institutional investors in the medical colleges and business studies institutes whereas the hotel management institutes have seen some activity from the domestic equity investors¹²⁸. However, access to institutional equity capital is very low.

Technology and content providers in Nepal seem to have access to equity channels primarily through by well-established business groups or pooled-together capital from High Net worth individuals or through the international parent firm with very low access to institutional equity.

In general enterprises in the education sector may face several challenges in accessing institutional equity capital which include:

- **Low supply of organised equity funding** which means that promoters with existing relationships/networks built with financiers are more likely to be evaluated for investments
- **Low awareness about the pros and cons of raising external equity** which leads many education promoters to be apprehensive about losing control of their institutes to an external investor
- **Very little activity in “investment intermediation”** from incubators, angel networks, investment advisors and others who typically link investors and entrepreneurs in more mature markets
- **Lack of clarity in valuations** and nature of investment agreement
- **Lack of exit platforms**

¹²⁸ See Section 5 for details

7.1 Grants and Resources

There are several international financial and non- financial assistances available to businesses which Nepal can explore to bring in measurable operational efficiency and success within a company. Some of the relevant grants and resources along with their criteria have been listed below:

1. Austrian Development Co-operation – Business Partnerships

In cooperation with the Oesterreichische Entwicklungsbank (OeEB) the Austrian Development Agency (ADA) promotes Business Partnerships.

Activities that can be undertaken with the support of ADA:

- Improvement in initial training and vocational training
- Know-how transfer
- Use of renewable energies or increase in energy efficiency
- Improvement in water supply and waste water treatment
- Improvement in waste disposal and/or recycling
- Promotion of rural development and responsible management of natural resources
- Increase in production, competitiveness and quality
- Consolidation of supply chains
- Improvement in social standards and working conditions
- Improvement of the health of workers and their families, fostering gender equality

These measures can be supported as part of a business partnership with a non-repayable grant. Funding amounts to up to 50% of direct project costs (not exceeding EUR 200,000), which must total at least EUR 100,000. The term of a Business Partnership is limited to three years. The programme is open for applications all year round.

Criteria

ADA is interested in innovative and sustainable projects. To be eligible for funding, a project must meet the following conditions:

- Applicant is a European company in partnership with a company from a developing country.
- Generation of local added value, turnover and profits.
- Long-term commitment in developing country.
- Benefits for local population beyond the applicant's core business.
- Compliance with national laws and internationally recognised environmental and social standards.
- The project includes flanking measures that contribute both to improving the local social, ecological or economic environment and the success of the company.

Eligible costs

The application includes a budget according to ADA format. The following costs can be included:

- Time spending of project partners.
- Salaries of staff hired for the project.
- Local and international travelling and accommodation costs.
- Capital goods investments (only the annual depreciation costs are covered for the duration of the project).
- Costs of training, advisors, certificates, marketing, studies etc.

2. German Development Co-operation - DeveloPPP

The develoPPP.de programme provides up to 50% grant (maximum of Euro 200,000) to selected projects proposed by a European company or a company in a developing country in which European companies or nationals own at least a 25% share. The programme is funded by the German government and administered by its agencies DEG, GIZ and Sequa. These agencies hold ideas competitions four times a year for the develoPPP.de programme with the following closing dates: 31 March, 30 June, 30 September and 31 December.

Criteria

To qualify for develoPPP.de grant funding under the ideas competition, a project needs to have the following features:

- The applicant is a company registered in Europe or a company registered in a developing country with at least 25% European ownership.
- The applicant is at least 3 years active, has at least 10 employees and a turnover exceeding Euro 1 million.
- The applicant has a long-term entrepreneurial commitment in the target country and demonstrates a commercial interest in the project.
- The project should be completed within 3 years from contract signing.

Activities

DeveloPPP will co-finance exclusively projects that prepare or accompany long-term private sector commitments, like:

- Design and introduction of new products, technologies and services relevant to development; demonstration or pilot projects.
- Improvement of range of courses offered at training institutes.
- Improvement of energy and water supply.
- Improvement of healthcare.
- Job creation.
- Improvement of labour and social standards.
- Measures to boost environmental and climate protection.
- Supply chain management.
- Economically and socially responsible value chain management.

Eligible costs

The application includes a budget according to DeveloPPP format. The following costs are eligible:

- Time spending of project partners.
- Salaries of staff hired for the project.
- Local and international travelling and accommodation costs.
- Capital goods investments (only the annual depreciation costs are covered for the duration of the project).
- Costs of training, advisors, certificates, marketing, studies etc.

3. German Development Co-operation – Up-scaling

With the special programme “Up-Scaling”, DEG finances pioneer investments of small and medium enterprises (SME) in developing and emerging countries that intend to scale up innovative business models. The programme addresses companies whose financing needs lie somewhere between micro financing and the traditional financing by commercial banks.

Target group

SMEs that are registered in the developing country- This may also be local subsidiaries of German or European companies. The applicant company has to provide the resources in terms of finance and manpower as well as the relevant know-how to implement the project and needs to be able to present at least one annual financial statement.

Funding

DEG finances a maximum of 50% of the total investment volume (max. EUR 500,000) under the condition that there are private sponsors who contribute a substantial share of equity (at least 25%). The DEG share must be repaid in the event of success of the project (depending on pre-defined financial criteria such as cash flow, revenue or profit).

Conditions of co-financing

- The project is based on an innovative business approach.
- A pilot phase has already been successfully completed with proof of concept as regards to technology and business model at local level.
- The project must generate profit (proof by means of business plan and financial projections).
- The project shows high growth potential owing to the size of the market and the target group.
- The project may generally be planned in all developing or emerging-market countries, with individual limitations owing to political or other risks. Projects in Africa and in LDCs (least developed countries) will be considered preferentially.

Interested companies may deliver their proposals for the co-financing to DEG at any time.

4. Dutch Development Co-operation – Food security and private sector development programme (public-private partnership)

The programme aims to stimulate public/private partnerships of Dutch and local partners within the sphere of food security and private sector development in developing countries. There is one tender round in 2014, closing on 1 December 2014.

Target group

Grants are available to public institutions, businesses, NGOs and knowledge institutions, within a cooperative partnership which encompasses at least one business. The public component in the partnership will, in every case, comprise the Dutch Ministry of Foreign Affairs. Participation by an NGO is mandatory. Preferably, other public institutions will also form part of the cooperative partnership.

Sub-themes

For food security:

- Improved local/regional availability of affordable and qualitative good food.
- Efficient markets and sustainable chain improvement in local/regional markets.
- Not eligible: projects exclusively aimed at non-food crops

For sustainable entrepreneurship:

- Inclusive business proposals with demonstrable impact on low income groups
- Improvement of female entrepreneurship
- Not eligible: proposals aimed at the financial sector (excluding insurance)

Grant

Maximum 50% of budget with project budget of minimum EURO 2 million. Minimum 25% of project budget must be financed by private enterprise.

5. Norwegian Development Co-operation – Application-Based Support for Private Sector Actors

Activities

The programme is primarily aimed at businesses / commercial companies seeking funding for:

- Feasibility studies (maximum 50% of budget with maximum grant of EURO 60,565). Norad primarily covers the costs made in the development country.
- Preliminary studies may include market, technology, legislation, etc.

- Training related to establishment (maximum 50% of project budget with maximum grant of EURO 60,565). Support can be given to training of local employees for a limited time in connection with establishment, in cases of major expansions or restructuring.
- Pilot production/demonstration in connection with private investment projects / business establishment (maximum 50% of total costs with maximum of EURO 121,000). In the starting phase of production in a developing country, there may be doubt on whether the chosen technology is appropriate to the local conditions.

The purpose of the programme is to reduce the risks present before an investment decision is made and to secure the sustainability and feasibility of the investment project.

For companies seeking funding it is important to note the following:

- Some sectors are prioritised (renewable energy, climate and environment-related technology, agriculture, forestry, marine and maritime sector).
- Requirements of at least EURO 1.2 million in turnover for the last year.
- The applicant should normally have, or plan for, an ownership of at least 25% in the established/ planned company.
- The applicant must show a high development effect to be probable.
- Sales and representation offices will not be supported.

Applications can be submitted continuously.

6. Swedish Development Co-operation – Innovation Against Poverty (IAP)

Applicants can be based in any country, but their inclusive business must be in a low-income country (OECD/DAC list). The programme functions as a risk sharing mechanism for sustainable business ventures (commercial companies or market oriented organisations) which have a strong potential to reduce poverty. Companies can be active in all sectors where innovation leads to poverty reduction, from agriculture and infrastructure to health and education.

Grants: Innovations Against Poverty has two parallel application processes:

- **Small grants** (maximum 50% of project costs with maximum of EURO 20,000) for the purpose of exploring an innovation or a new market. The grant can be used for travel and pre-feasibility studies; stakeholder needs assessments, and networking with local organisations. This programme focuses on smaller organisations which have a wealth of good ideas with great potential, but need the support of their business strategy and resources to penetrate new markets.
- **Large grants** (maximum 50% of project costs, in the range of EURO 20,000 – EURO 200,000) for the purpose of undertaking a development project aimed at a product, service, system, business model or a concept ready to be put to market test, or adaptation of existing products to be affordable and accessible by the poor. IAP also seeks to work with larger companies, to help support the development of “inclusive business” models for these markets, which expands opportunities for the poor and disadvantaged in developing countries. Such business models can engage the poor as employees, suppliers, distributors and consumers.

Key criteria: development effects, commercial viability, innovation, cost sharing and additionality.

The process is of a competitive nature, where grants are awarded to the best business plans which meet the criteria of the programme. The programme works with 1-2 tender rounds per year. No tender round has been announced at present.

7. USAID

There are several programmes under USAID that are applicable for Nepal such as:

- Powering Agriculture
- Development Innovation Ventures
- Partnering for Impact
- Partnering to Accelerate Entrepreneurship
- Partnering for Innovation

8 Typical Capital Structure for education businesses

Higher education sector is a capital intensive industry. Typical Debt to Equity ratio of 70:30 is prevalent in the Higher education sector with debt component steadily decreasing as the business grows.

The higher education enterprises typically depended on debt for their capital needs for expansion or extension of services. This debt is usually long term, and is paid back within a 5 to 10 year window depending on financial health of the business. During this period, the debt: equity ratio is typically 70:30 in emerging market economies like India and frontier markets such as Nepal ¹²⁹. As the business grows and matures and long-term debt is paid off; the overall debt component decreases. However, businesses will continue to need short term debt from time to time for operational expenditure like building maintenance, and staff salaries. As a result, the steady-state debt: equity ratio can be around 60:40¹³⁰.

However, promoters of family run higher education enterprises seem to prefer equity raised through promoters or the “friends and family mode” to debt. Typical capital structures of 20:80 were observed in few family run higher education enterprises especially in the hotel management category. Lack of transparency, availability of capital with-in the family and less fear of losing control seem to be the key reasons for these family run higher education enterprises to prefer equity over debt. It also seems that due to low know-how around capital structuring and business valuation, it is possible that promoters do not fully understand the real cost of equity which is much higher than debt.

Typical Debt to Equity ratio of technology and content providers is skewed in favour of equity whereas vice versa for higher educational institutes

The typical capital structure for the firms in technology and content space in Nepal was found to be in the range of 10: 90 (Debt to Equity) primarily due to low access to capital for the reason of these businesses being asset light. However, this capital structure is very similar to the technology firms in India. The typical capital structures for both higher education and technology and content providers have been shown in Table 10. Both these sectors in Nepal show a close alignment with the Indian benchmarks¹³¹.

Table 10: Comparison of education sector companies capital structures in Nepal against emerging economy benchmarks from India

	Typical Capital Structure in Nepal ¹³²		Typical Capital Structure in India	
	Debt	Equity	Debt	Equity
Higher education service providers	60 to 70%	30 to 40%	70%	30%
Higher education service providers- Hotel Management	10 to 20%	80 to 90%	NA	NA
Technology and content providers	5 to 10%	90 to 95%	20%	80%

Source: India data from Venture Intelligence and Intellectap analysis, Nepal data from primary interviews conducted during the course of this study in May 2014

These can be analysed further once more market and financial data becomes available in Nepal; but are only suggested as broad possibilities in this report due to lack of sufficient data.

¹²⁹ Venture Intelligence and Intellectap analysis, 2014

¹³⁰ Venture Intelligence and Intellectap analysis, 2014

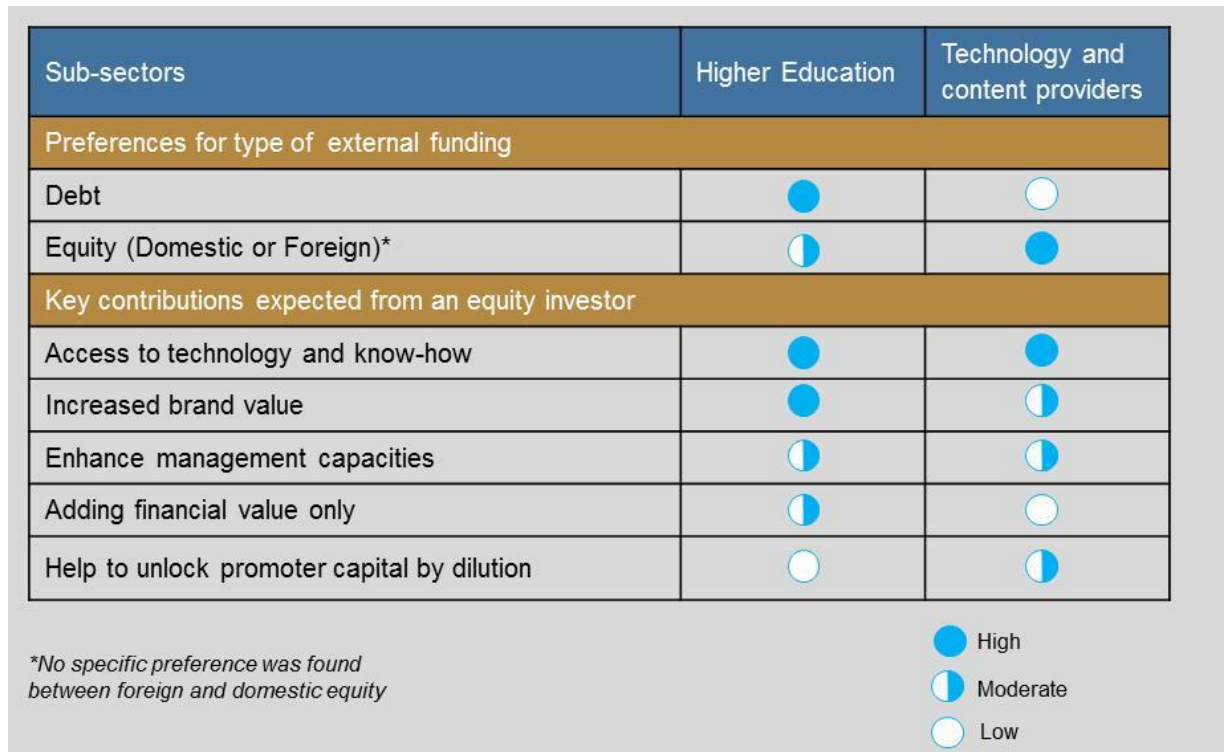
¹³¹ From primary interviews conducted during the course of this study in May 2014

¹³² Ranges have been used instead of median value due to the small size of the sample set

Education company promoters who prefer institutional equity often do so for strategic reasons like accessing better technology, improving brand value and enhancing management capacities

As described above, the higher education service providers seem to prefer debt-heavy structures and technology and content providers seem to prefer equity-heavy structures. Not surprisingly, even amongst promoters who prefer equity seemed to do so for the “non-financial” value-add it created; and sought access to technology and enhanced brand value and management capacities as key contributions expected from an equity investor as shown in Figure 40.

Figure 40: Typical education business promoter preferences in capital structures



Source: Primary interviews conducted during the course of this study in May 2014

9 Valuation Trends in Education Businesses

Enterprise valuation in Nepal in the education sector is challenging because – (a) there is limited historical data; (b) there is a lack of adequate industry benchmarks, and (c) the use of comparable data from SAARC countries is only partially adequate.

There is little public information available on past equity investments into education sector in Nepal. The lack of data is primarily due to infancy of the investment value chain and support infrastructure such as research and ratings. Further, sparse research coverage of capital markets in Nepal has resulted in limited availability of historical data and limited access to updated industry benchmarks.

However, the investment landscape is witnessing brisk activity, with 2-3 institutional investment funds setup over the last three years. The status of investment landscape presents an opportunity for early entrants into the venture capital space in Nepal to make investments at lucrative valuations.

In absence of adequate industry benchmarks relevant proxy, comparable data and hurdle rate methods may be used to guide valuation.

Since adequate industry benchmarks from Nepal are not easy to access; valuation data from comparable countries like India may be used as broad guides by investors. India can be a good comparable country for education firms because of the similarity in the education eco-system in Nepal and India. In addition the education sector in India has seen good level of interest from PE/VC firms and a number of private placements have happened in the last few years.

At the same time, countries like India have much higher market capitalisation and better investment value chains. Hence, even though some comparable valuation ratios can be used from these countries, they can at best be broad guides since the regulatory regimes, banking infrastructure, market capitalisation and other macro-economic indicators vary widely from country to country

9.1 Comparable valuation in India & SAARC

Valuation multiples from comparable countries like India may be used as broad indicators by investors for evaluating opportunities in the education sector as shown in

Table 11. Data from India has been used due to inadequacy of public data on valuation trends in Nepal. India is found to be comparable because – (a) Significant private sector activity in the education sector especially technology and content providers; (b) focus of the government on the education sector and comparative higher spending on education in the urban areas (c) consumer profiles are similar with large low to mid-income populations. However it has to be noted that the education companies in India are more diversified and active in several segments in the education sector. For instance many vocational education service providers in India have diversified into technology and digital space and vice versa. Comparatively private sector activity in the education space in Nepal especially in the digital and content provider and vocational education is in the development stage and less diversified.

In addition the returns for investors in the education sector companies in India shows a high variation with some companies not performing well on investor's expectations¹³³.

Table 11: Comparable valuations for education sector companies in India

Sub-Sector	ROE (%)	EV/EBITDA	EV/Sales	EBITDA margin (%)
Technology and Content provider	6.3% to 16%	5.3 to 11.3	1.97 to 1.99	18% to 37%
Vocational Education	8.6%	7.9 to 9.8	0.6 to 1.5	7% to 15%
Pre-Schools	11.7%	13.87	7.53	54%

Source: Data for valuation ranges is based on financial statements of publicly traded companies in India,. Information on financial statements was accessed from Capital IQ, Bloomberg and MoneyControl databases in May 2014.

Note: Due to limited size of sample set, this should only be taken as a broad guide to valuation multiple ranges. Specific valuation multiples may differ significantly from company to company.

There are no listed or publicly traded higher education institutes in India (since higher education enterprises in India are expected to be a non-profit entity) or in the SAARC region and hence the valuation multiples for the sub-sector are not available.

Valuation of education sector companies through private placement in India

Technology and content providers, Higher Education enterprises and VCTE enterprises in education space are emerging as lucrative investment options to private investment funds. There are a lot of private investment activities in the education space in India. As evident from the few major deals concerning private investments in India, holding a minority stake is the preferred most by most private equities. Some of the major cases of private investments have been presented in Table 12.

Table 12: Private investments in education sector in India

Target Company	Investors	Amount Invested (US\$Million)	Year	Investment Details
Educomp Solutions (Technology and Content provider, Vocational Education)	IFC, Mount Kellett, Proparco	60	2012	IFC invested \$25 Million (INR 138 Cr) for 6.33% stake ; Mount Kellett via its 3 different arms invested \$30M (INR 166.8 Cr) for 8.35% stake and Proparco invested \$5M (INR 27.2 Cr). There was also an external commercial borrowing of \$70 Million from IFC and proparco. IFC lent \$30 Million while Proparco lent \$40M
MindShaper Technologies (Technology and	Fidelity Growth Partners	15	2011	Fidelity Growth Partners India would invest up to INR 60-Cr for a 38.32% stake.

¹³³ Refer Annexure 11.5.4 for details

Content provider)				
iDiscoveri (Advisory services)	Lighthouse	10	2010	INR 50-Cr is the investment commitment. Transaction includes a secondary purchase of shares worth INR 2.5 Cr from the promoter. Combined stake estimated at 17.5%
Centum Learning (Vocational Education and training)	Mayfield	8.7	2010	Issue of 100 equity shares and 220,488 CCPS to Mayfield FVCI for a 15% stake. The Conversion ratio for CCPS to equity share is 1:1
Universal Training Solutions (Online Education, Content provider)	Kaizen PE	7.1	2011	The investment is projected to enable the company to expand its current operations which include providing various education services to academic institutions in the field of management, science, engineering, arts and commerce. Co. posted Revenues of INR 13-Cr for FY11
Ideacount Education (Vocational Education and training)	India Alternatives	6	2010	India Alternatives holds 34.44% stake in the target. At the end of FY 2014, there would be a readjustment in the equity valuation of the target based on the actual performance of the company. Consequently, the shareholding of the Promoters and Investors would be re-adjusted accordingly. India Alternatives would hold a final stake of 50% post step up in valuation.
Attano (Technology and Content provider)	Helion Ventures	1	2011	Issue of 100,000 CCPS to Helion Venture Partners. CCPS Conversion Price is not known. Target brings content to students through the digital medium.
Mind Edutainment (Vocational Education and training)	Accel India, Others	0.6	2012	Accel India, via Accel India III (Mauritus), invested INR 2.1 Cr, while the angels invested INR 0.6 Cr. Accel India subscribed to 100 Equity shares and 64,161 CCPS. The angel Investors subscribed to 300 Equity shares and 18,060 CCPS. The CCPS are convertible in 1:1 ratio
InOpen Technologies (Technology and Content provider)	Ventureast	0.5	2011	Seed Investment. Ventureast will invest over multiple tranches. Investment via VenturEast Tenet Fund II.

Source: VC Circle (accessed in June 2014)

Note: A small note under each Target Company indicates the areas in which the company is primarily active in

9.2 Estimating the hurdle rate

Hurdle rate is proposed as an indicator of minimum expected return from investments in Higher education and technology and digital companies in Nepal

In absence of consistent data on valuation ratios in the education sector, hurdle rate can serve a good indicator of minimum expected return from investments in the sector. The two benchmark rates considered for the analysis include (a) Cost of Equity and (b) Weighted Average Cost of Capital (WACC) for a given financing mix of equity and debt. Finance literature offers multiple methods of calculating the hurdle rates; the current report uses the Damodaran Model. As Nepal's investment value chain is in early stages of its development, investors may seek premium for illiquidity and size of the investments.

Cost of Equity in higher education (primarily medical colleges) is estimated from 38% to 44% and 22% to 24% for hotel management enterprises; Cost of equity for technical and content providers ranges from 21% to 23%

Based on the data from the education sector in Nepal and comparable proxies, the Cost of Equity for investments in higher education sector is estimated to vary from 38% to 44% and from 22% to 24% for hotel management enterprises that are mainly family run. A very high value of the cost of equity indicates that the companies in the higher education segment prefer debt for their capital needs. The Cost of Equity in Technology and content providers ranges from 21% to 23% indicating their preference of equity for capital needs. The key assumptions for the estimations are listed in Table 13 and ranges for Cost of Equity are presented in Table 14.

Table 13: Key assumptions taken to calculate WACC in education sector companies in Nepal

Parameter	Assumptions
Market value of Debt (D)	The capital structure in the education segment varies across higher education segment and technology and content providers. Data for debt component presented in Table 10 has been used.
Market Value of Equity (E)	The capital structure in the education segment varies across higher education segment and technology and content providers. Data for debt component presented in Table 10 has been used.
Tax rate	Corporate tax rate of 25% has been taken ¹³⁴
Cost of debt in Nepal	The data from major banks in Nepal such as SBI Nepal and Bank of Kathmandu has been utilised to obtain the cost of debt. The range of cost of debt has been taken at 10% to 12% for higher education segment; and 12 to 14% for technology and content providers as per information gathered during primary interviews conducted in the course of this study
Risk Free Rate	Taken at 9% based on the bond rates reported by Nepal Rastra Bank

¹³⁴ Inland Revenue Department, Nepal statistics

Parameter	Assumptions
Beta estimation	<ul style="list-style-type: none"> Beta for the education sector in frontier markets has been estimated to be 0.79 based on data analysed from comparable geographies The beta has been levered using Debt equity ratio for higher education segment in Nepal as shown in Table 10. The levered beta for higher education segment in Nepal is around 2.18; while that of pharmaceutical manufacturers is 0.86
Market Risk Premium (Rm)	The market risk premium ranges from 13.66% to 16.25% ¹³⁵

Table 14: Cost of Equity across education sector companies

	Higher Education	Higher Education-Hotel Management	Technology and Content providers
Cost of Equity (min)	38.8%	21.8%	20.7%
Cost of Equity (max)	44.5%	24.3%	22.9%

Source: Intellectap analysis, 2014

Two clear trends in cost of equity stand out – (a) Higher Education segment trade at a higher premium due to preference of debt capital by the enterprises, less profit seeking and more social impact nature of business; and (b) Technology and content providers’ trade at a lower premium due to high unmet demand for their services and low competition in the market.

Cost of Equity and leverage are considered together to estimate the Weighted Average Cost of Capital (WACC)¹³⁶ using the formulae shown in Table 15.

Table 15: Estimated hurdle rate for education sector in Nepal

	Higher Education	Higher Education-Hotel Management	Technology and content
D/E	2.33	0.25	0.11
Beta Unlevered	0.79	0.79	0.79
Beta Levered	2.18	2.18	0.86

¹³⁵ See calculations in annexure

¹³⁶ See Section 7.2 for details on calculation of hurdle rate

	Higher Education	Higher Education-Hotel Management	Technology and content
Total Equity Risk Premium	13.66% to 16.25%	13.66% to 16.25%	13.66% to 16.25%
Risk Free Rate	9%	9%	9%
Cost of Equity (min)	38.83%	21.88%	20.75%
Cost of Equity (max)	44.48%	24.32%	22.98%
Cost of Debt (min)	10%	10%	12%
Cost of Debt (max)	12%	12%	14%
Tax Rate	25%	25%	25%
Weighted Average Cost of Capital (min)	16.9%	19%	19.57%
Weighted Average Cost of Capital (max)	19.64%	21.26%	21.73%

Source: Intellectap analysis, 2014

WACC for investments in higher education sector is estimated to vary from 17% to 20% and from 19% to 21% for hotel management enterprises that are mainly family run. The WACC for investments in Technology and content providers ranges from 20% to 22%. The WACC calculations may be utilised as the hurdle rate for these key segments in the education sector in Nepal.

9.3 Non-financial metrics in valuation

The most important non-financial metrics for valuation of education companies are strength of management and technical teams, robustness and scalability of the operational model, brand recognition and B2B market linkages for access to technology and expertise

Valuation of education sector firms especially in frontier markets must take into account both quantitative and qualitative indicators of firm value. These include “firm-level” criteria and “macro-economic and market-level” criteria.

A small group of early stage equity investors from India were asked to evaluate the relative importance of these valuation drivers to understand investor sentiment on this issue. Not surprisingly, investors rated strength of management and technical teams, robustness and scalability of the operational model, brand recognition and use of modern technology and approaches as the most critical aspects of an education business and favourable metrics against these were likely to drive up valuation. Issues such as market for products / services and “systemic issues” like regulation and policies and even political stability were not considered very critical and investors were likely to make more concessions here unless there was a direct impact on revenues and profitability. Table 16 shows a “high”, “moderate”, and “low” sorting of these criteria.

Table 16: Investor sentiment non-financial valuation drivers in education firms

Valuation Drivers	Investor Sentiment on Relative Importance		
	High	Moderate	Low
Firm-Level Drivers: Internal			
Faculty and Management	✓		
Strength of operational model – margins, scalability	✓		
Brand recognition	✓		
Market linkages with domestic and international firms for access to technology and creation of job opportunities for students	✓		
Demand for courses being offered			✓
International collaborations with Universities		✓	
SME-Level Drivers: External			
Regulation – sector-level policies, legal structures, taxation		✓	
Exit opportunities – like secondary sale, promoter buy back and IPO	✓		
Macro-Economic and Market-Level Drivers			
Political stability		✓	
FDI policies		✓	

Source: Primary interviews and Intellectap analysis; 2014.

Note: A rating of “high” indicates that investors do not compromise on these drivers, of “moderate” indicates that they sometimes compromise if all other critical drivers seem favourable, and “low” indicates that investors compromise almost always because they expect these drivers to improve in the short-to-mid-term.

1. Faculty and Management

Quality and experience of the faculty and management team is the most critical aspect for private equity investors since they are mostly betting on the team’s ability to turn a business plan into a profitable venture and the ability of faculty to provide high quality services to students. This is especially true in Nepal where the larger supporting environment for businesses is missing; and the ingenuity, networks and skills of founding team members are called upon to bridge this gap. Presence of a strong management and faculty team with diverse skillsets and clearly established roles and responsibilities will help to drive up valuation.

Governance and accountability practices of the management team are critical as well; especially in cases where education institutes are run by groups of promoter who have less technical know-how but higher management expertise. Good governance practices like maintaining audited financials, good book-

keeping, and presence of a few external and well-reputed individuals on the Board of Director or Advisors help to drive up valuation.

2. Strength of operational model

The strength of operating level cash flows help to determine financial state of an education sector company, and investors analyse these to estimate the predictability of revenue. Key metrics to measure operational efficiency for education delivery mechanism such as pre-primary, primary / secondary schools, higher education and VCTEs is the scalability of the model to either create a new facility or expansion of existing facilities to attract more students. Key metrics for technology and content providers include healthy cash flows and optimal account receivable days.

Such healthy metrics indicate predictability in revenue; such that it sufficiently covers operational costs and services debt. An operationally efficient business that shows healthy metrics is likely to have a higher valuation.

3. Brand Recognition

Brand building in the education sector is complex because end consumers often take decisions based on influence of either a third-party like a coaching centre or driven by more nebulous influences like word-of-mouth. Hence, higher education delivery centres that invest in multi-pronged brand building efforts are more likely to have higher valuations. For the technology and content providers brand recognition is driven by trust, word-of-mouth and past track record of services. Brand enhancement through tie-up with a reputed foreign firm for best in class products/services can help to drive up valuations.

4. Market linkages with domestic and international firms for access to technology, expertise and creating job opportunities for students

The use of modern technology and setting up of latest labs/ technology centres are critical to attracting new students as well as building a recognised and trusted brand in the market. In addition market linkages with domestic and international firms with assist the higher education institutes to create job opportunities and industrial training facilities for their students.

Hence, higher education enterprises and technology and content providers that invest in these areas are likely to have higher valuations since private equity investors are able to have greater confidence in their ability to deliver consistent high-quality services.

5. Market for products / services

The market for education sector and especially higher education, VCTE and technology and content providers is expected to be higher in near future¹³⁷. Moreover the education sector in general is driven by the high demographic dividend in the frontier markets and aspirations that the younger generation has to use education as a vehicle for social mobility and prosperity. Optimal coverage of geographic location to mitigate location-related risks may drive up valuation for higher education enterprises.

6. International Collaborations

¹³⁷ Refer section 2.2.1 for detail discussion

International collaboration with reputed universities is expected to improve the quality of education as the research dimension in higher education institutes is improved. In addition the higher education institutes can increase their knowledge capacity, share/access techniques and skills, access foreign or joint facilities and latest equipment's as well as access foreign markets. For Technology and Content providers international collaborations could mean access to new technology to reduce the product lead time as well as improve upon its quality. Thus Investors are likely to have greater confidence on enterprises with international collaborations to deliver consistent high-quality services.

7. Regulation – sector-level policies, legal structures, taxation

Facilitative government policies like encouraging FDI and ease of doing business increase education sector valuation, while inhibitory policies decrease valuation. The current regulatory regime is likely to either drive up valuations or have minimal impact on higher education enterprises and technology and content providers; but negative impact does not seem likely in the education sector apart from the primary and secondary education schools that have some limitations on profit making¹³⁸.

8. Exit opportunities – like secondary sale, promoter buy back and IPO

Clarity on potential exit opportunities is important as well. The secondary sale value-chain in Nepal is underdeveloped¹³⁹ so the only two strong possibilities that investors have are promoter buy-back and trade sales. Thus far, no track-record of secondary exits or public listing is available, and early entrants in the private equity field in Nepal may have to plan for longer investment time-period than in more mature markets. This could drive down valuations due to higher risk perceptions.

9. Political stability

Confidence in the macroeconomic environment and political stability drives up firm valuations as it gives financiers confidence that the business environment for their portfolio will remain reasonably conducive, and at the same time their investment will be protected. Since Nepal has only regained political stability over the past 6-7 years, investors are likely to attach greater risk premium to opportunities they evaluate as shown in Table 15.

10. FDI policies

Long-term regulatory stability around FDI policies is likely to drive investments at greater valuation since investors can be confident that they will have the freedom to exit a business when it's most lucrative for them. The recent decision by NRB to disallow FDI in commercial banking could potentially drive investors to attach a higher risk premium. However, on the flipside the government and regulator have stated their intention to support greater FDI inflows in Nepal. In a March 2014 address, NRB Governor indicated that domestic banks and financial institutions would be allowed to provide supplementary capital to foreign investors. Approaches like this would give more confidence to investors and drive up valuations.

¹³⁸ Refer section 4.3 for details

¹³⁹ See Section 10 for details

10 Exit opportunities for Investors in Education Sector

The flow of private equity investments in the education sector in Nepal has seen a brisk activity in the last 3-4 years with vocation education segment attracting majority of the investment as discussed in section 5. However the ticket size of these investments is small very small ranging from US \$ 2000 to US\$ 150,000¹⁴⁰. There have been a few cases of investments in the higher education segment in the medical colleges and management institutes. However the remaining investments in the education segment seem to have largely involved domestic promoter equity. This creates a challenge in predicting exits trends as there is a lack of historical data as well as lack of financial industry infrastructure to facilitate exits.

10.1 Spectrum of Exit routes

A key role that private equity firms are expected to play in the education sector Nepal is to help businesses invest in technology, processes and manpower to streamline and standardise their work, and thereby scale effectively. These are also expected to help drive greater focus on quality assurance processes and internationally accepted certifications.

With these investments; higher education enterprises and technology and content providers are likely to grow faster, increasing their revenues and profitability and thereby increasing firm value. This in-turn results in making such businesses attractive to other investors – ranging from investment funds to larger education businesses from neighbouring countries such as India - that can buy-out stake of first investor at a higher valuation. It is also possible that enough value is created for the promoter or the management team to buy-out investors' stake. A broad overview of the various possibilities in exits are discussed here, followed by a hypothesis on which are likely to be popular exit routes in Nepal.

Generally speaking, the process of an equity investor selling stake to another investor at a higher valuation is termed an "exit", and the spectrum of possible exit opportunities includes – (a) Management / Promoter buyout, (b) Secondary Sale, (c) Trade Sale, (d) Initial Public Offering (IPO)¹⁴¹.

- **Management / Promoter buyout:** Management / Promoter buyout involves the repurchase of the private equity investors' shares by the company and/or its management. The management buyout method is popular in several sectors in Nepal where profit margins and liquidity are on the higher side. In such situations, promoters to utilise the cash earnings for buying back the stake of PE / VC investor.
- **Secondary Sale:** Secondary sale is the purchase of the private equity investors' or others' shareholdings by another investment institution. Private equity investment activity in Nepal is still an emerging phenomenon; however development financial intuitions such as IFC have been active in making risk capital investments in Nepal in recent past. Secondary sale would be an

¹⁴⁰ Industrial statistics reports 2010 to 2013

¹⁴¹ Intellectap primary research

attractive method to exit in Nepal once the investment eco-system develops and matures. Section 10.3 recommends some of the ways on how the PE/VC enabling ecosystem in Nepal can be created.

- **Trade Sale:** A trade sale involves selling the company's shares to another company (structured as a merger or an acquisition) usually in the same industry sector when the acquirer needs the company to supplement its business areas¹⁴². The numbers of publicly available Merger and Acquisition (M&A) transactions in Nepal are on the lower side¹⁴³, but the activity is picking up in recent years after the political stability in the country especially in the financial services sector. Many companies in Nepal have started to realise the benefits of economies of scale and scope, increased revenue and market share, cost reduction through consolidated operations. The trade sales therefore in general could offer opportunities for private equity funds for exits in Nepal.
- **IPO:** IPO is used to publicly share the equity offering that is followed by the listing of shares on stock exchange. The capital markets in Nepal are in nascent stage and are dominated by banks and financial institutions where presence of real sector on the capital markets is very low (excluding the hydropower sector)¹⁴⁴. IPO route in general may not be the best possible way for exit of education sector private equity investors in Nepal.

10.2 Likely Exit Routes for Education Firms in Nepal

Promoter buy-back likely to be most popular approach for equity exits in Nepal in the next 4-5 years in the technology and content provider segment and higher education segment

Re-purchase of private investor's shared by promoter(s) is likely to be the more prevalent approach for exits in Nepal; in the technology and content provider segment and higher education segment which are mostly promoted by established business groups or high net worth individuals. The technology and content provider segment enjoys higher margins and has a high market opportunity as well. While promoter ability to buy-back will be one driver; the other will probably be the prevailing promoter sentiment where existing promoters want to ultimately retain complete control of the firm. There seems to be a high degree of apprehension about loss of control that could result from diluting management stake¹⁴⁵.

Secondary-sale may be possible in the technology and content provider segment in the next 3-4 years

Secondary-sale requires the establishment of a value-chain of equity investors who have differing but complementary investment sizes, risk appetites and preferred stages of investment. The practice of equity investing in Nepal is very nascent and this value-chain will take time to emerge. However the technology and digital segment in Nepal has seen considerable investor activity with many investors preferring growth-stage enterprises with high profitability margins. Secondary sale therefore may be a good exit option for the PE investors in the segment.

¹⁴² A trade sale is similar to 'strategic' sale

¹⁴³ Excluding Banking, Financial Services and Insurance sector

¹⁴⁴ Refer Annexure 11.4.1 for detailed discussion in capital markets in Nepal

¹⁴⁵ From primary interviews conducted by Intelicap during the course of this study in May 2014

Trade sale may be observed in the higher education- hotel management segment

Acquisition by a large education groups or merger of two complementary smaller higher education businesses is somewhat likely especially in the hotel management segment. This is expected to be driven by the expansion drive that most hotel management institutes seem to displaying to capture greater market share by attracting students regions outside the Kathmandu valley area. The hotel management enterprises met during the course of this study expressed interest in the possibility of capital investment driven partnerships or mergers/ acquisitions in the segment.

Exit through IPO is highly unlikely for education sector enterprises in Nepal in the near future

There are no publicly listed education sector enterprises in Nepal¹⁴⁶, and low inclination to list their companies was seen amongst promoters of the higher education enterprises interviewed during the course of this study. The technology and content providers expressed their interest in the IPO route but only in a long term of 3-5 years given the less developed secondary capital markets in Nepal. Hence, public listing is not likely to be a viable strategy for majority of the equity exits in the education sector in Nepal.

10.3 Exit Trends Observed in education firms in India

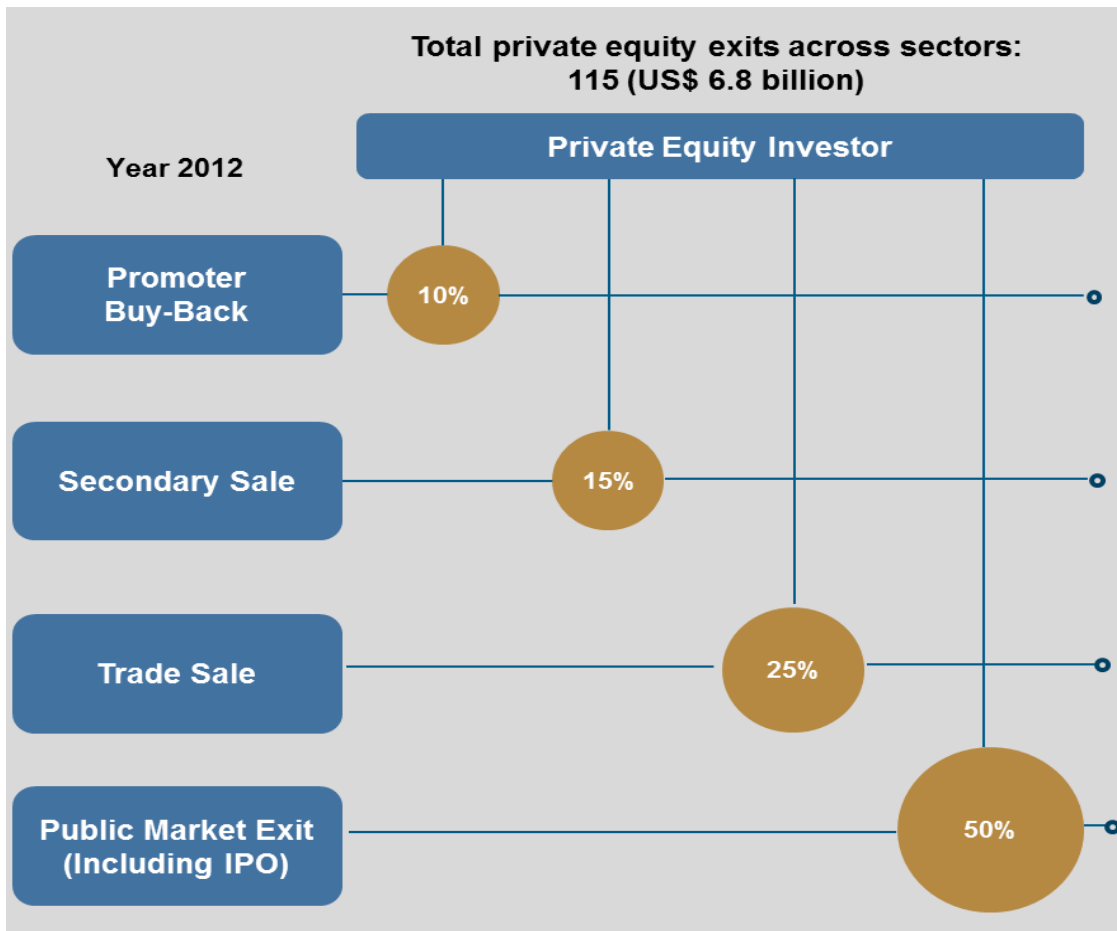
The capital markets in India are much more developed compared to Nepal¹⁴⁷ and the private equity investing activity is at a more advanced level. The most popular exit route for both venture capital and private equity investments in India is through public market sales, including IPOs. Out of the 115 equity exits reported in India 2012, more than 50% were through public market sales, including IPOs¹⁴⁸. The trends in exits in India have been shown in Figure 41 below.

¹⁴⁶ Nepal Stock Exchange Limited database, accessed in March 2014

¹⁴⁷ Refer Annexure 9.4.3 for details

¹⁴⁸ IVCA; India Private Equity Report 2013, Bain and Company

Figure 41: Distribution of private equity exits in India



Source: IVCA; India Private Equity Report 2013, Bain and Company

Public market sale and secondary sale are popular modes of exits from education sector companies in India

Out of the total 29 exits reported in the education sector in India from 2007 to 2013, public market sale and secondary sale have been the prevalent forms of exit; which can be attributed to the presence of a mature investment value chain in India.

Return multiples across the education sector exits in India in the last 3-4 years have ranged from as high as 28x in case of public market sale to 18.87x in case of secondary sale to as low as 0.48x in case of management buy-out¹⁴⁹

Table 17: Selected education sector exits observed in India from 2009 to 2013

Company	Year	Seller	Deal Size (US\$ million)	Exit Status	Exit Procedure	Return Multiple
Sub-Sector: Technology and content providers						
iDiscoveri	2009	Richard Chandler Corp	1.67	Complete	Promoter Buy Back	0.48x
Educomp Solutions	2011	Gaja Capital	1 (total deal size 10 million)	Complete	Public Market Sale	28.00x
Sub-Sector: Education Services and vocational training						
Everonn Education	2009	New Vernon	1.8	Partial	Public Market Sale	0.60x
IL&FS Education and Technology Services	2009	IIML	4.18	Complete	Secondary Sale	18.87x

Source: IVCA; India Private Equity Report 2013, Bain and Company

Case Box : Gaja Capital's exit in Educomp Solutions

Gaja Capital is a mid-cap Indian private equity firm with its investment focus on education sector in India has current investment portfolio of US\$ 180 million. In 2005, it had invested US\$ 1 million in Educomp Solutions, a leading technology and content provider to the education sector in India. Educomp Group has its outreach to over 34,500 schools and 22.8 million learners and educators across the world.

Gaja Capital made an exit from Educomp Solutions in 2011 generating 19.2x returns, by selling 25,000 shares at US\$ 0.2 million. Earlier in 2011, Gaja Capital had completed a couple of similar kind of transactions with Educomp shares generating 19x returns. It had also sold some shares in 2007 before these transactions. Gaja capital has been able to encash US\$ 14 million out of this deal, with its remaining stake valued at US\$ 7.5 million.

10.4 Challenges in Exit

The key challenges to private equity exits in Nepal fall under three broad categories as shown in Table 18: systemic, equity investor-related and education sector promoter-related challenges.

¹⁴⁹ Venture Intelligence India database, accessed in April 2014

Table 18: Challenges in exits in Nepal

Systemic Challenges
Nascent industry and secondary capital markets , so higher risk and longer return horizons are possible
Little or no regulatory oversight for private exit markets
Lack of investor-entrepreneur connection platforms and investment intermediaries
Currency devaluation risk
Lack of exit platforms designed for secondary-sale
Lack of ecosystem enablers like incubators, angel networks
Equity Investor-Related Challenges
Less experience of managing portfolio companies in economies like Nepal
Difficulty in building deal-flow
Lack of risk assessment frameworks customised for Nepal
Education sector related challenges
General view of education sector as a not-for-profit business
Lack of awareness about the comparative benefits of debt and equity
Apprehensions around working with external boards and fear of losing control of company ¹⁵⁰

Source: Intellectap analysis, 2014

In addition to these, some regulatory hurdles that could be challenges for education sector investors are:

Promoter lock-in period of 3 years: This is a key challenge for exits of private equity companies in Nepal. The existing provision and law states that “the shares subscribed by the shareholders in the groups other than public (group of promoter and other) of the body corporate which is eligible for going public, shall not be qualified for sale unless a three years period after the allotment of such shares is complete”¹⁵¹. The three years lock in period for private equity investors is on the higher side in the SAARC when compared to one year in India¹⁵² and Sri Lanka¹⁵³ and no lock in period in Bangladesh¹⁵⁴.

The repatriation of capital is a challenge for foreign equity investors in Nepal: at present the repatriation of capital to a foreign country (except India) requires approval from the different departments

¹⁵⁰ Especially in higher education enterprises which are largely family-run and can have a traditional approach to doing business (as per observations from primary interviews conducted during the course of this study in February and May 2014

¹⁵¹ SEBON Annual report 2011-12

¹⁵² SEBI annual report 2012-13

¹⁵³ CSE directive 2012

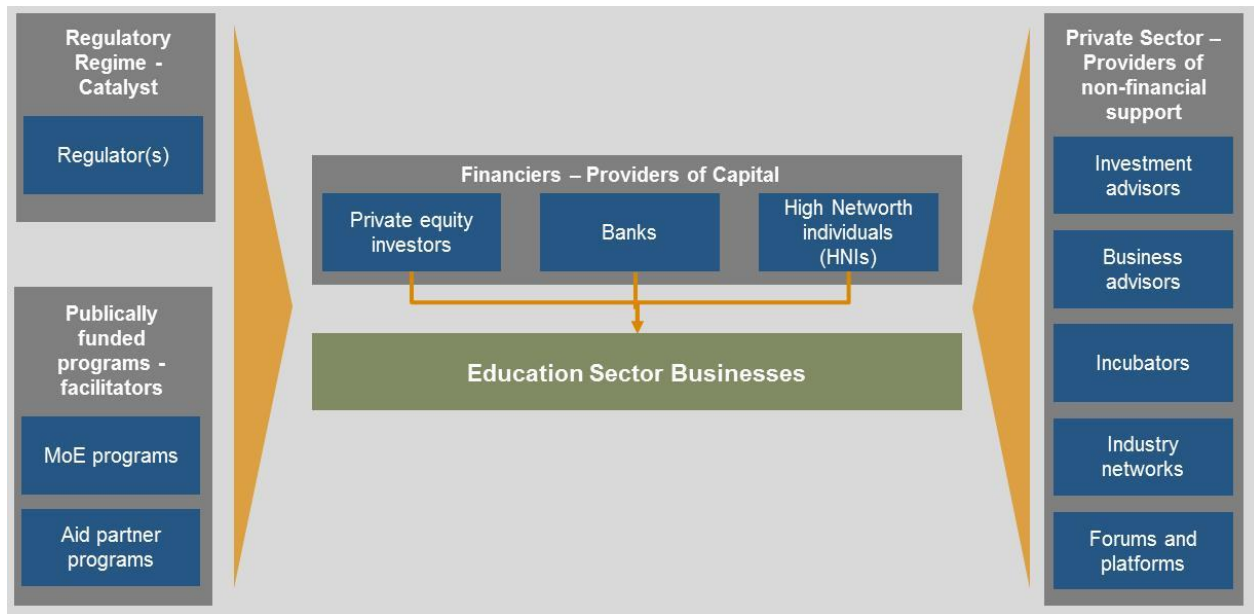
¹⁵⁴ SECBD website, 2013

in the NRB and department of industries and is often discretionary¹⁵⁵. Given the uncertainty in the policies and regulations of future governments due to political instability, this discretion could be major hurdle for foreign investors in exits.

10.5 Enablers Needed for Exit

The government and its aid partners, the regulatory regime, and private sector can work in a complementary fashion to build enablers needed for exit for PE/VC investors in Nepal. When these actors begin to harmonise their functions, an “ecosystem” for equity investments begins to emerge as has been observed in the case of India and parts of East and South Africa.

Figure 42: Typical ecosystem for private equity investments in emerging economies



Source: Intellectap analysis, 2014

Government and aid partners can create more impact by playing a facilitative rather than direct role

Government and aid partners could potentially create most impact by helping to decrease risk of investments; acting as anchor investors in funds; and bring in facilitative regulation like tax breaks and other incentives for education sector companies.

The creation of ‘Guarantee funds’ by public sector institutions can help to channel more debt and equity capital into education companies

Creation of guarantee fund by Public sector institutions, both for debt and equity products could provide commercial banks and private equity funds with partial coverage of risk exposure against investment made in education companies. This would ensure that the capital supply to such companies is not affected in the long term and this would facilitate further investments in the sector.

¹⁵⁵ Intellectap primary research

Building an ecosystem for the secondary markets to facilitate private equity investment exits through open offer would create more exit opportunities

More awareness about the nuances of equity investing would be beneficial for both entrepreneurs and investors. Industry networks, forums and conferences, incubators and investment intermediaries have a key role to play in building this awareness and creating a better ecosystem for equity investments. Historically given the low trading volumes in secondary markets in Nepal, an enabling environment for promoting secondary market transactions should be created¹⁵⁶. The key drivers that would facilitate the trading volumes in the secondary markets in Nepal are a) introduction of reliable online trading system making trading affordable and b) settlement of transactions to be shortened to a few days from the present duration that could last for few weeks.

Regulatory regime can play a key role in putting in place regulatory structures to allow exit platforms to emerge

Recognising equity investments as a separate asset class creates more formal structures and higher degree of organisation in the private equity market, which helps investors to navigate the processes of incorporation, licensing and approvals. This recognition can also pave the way for special concessions to private equity investors as well as create the foundation for public and private exit platforms to emerge.

Private sector actors like incubators, angel networks, and investment intermediaries can help to reduce duplication of efforts in deal sourcing and early stage capacity building; and highlight best case practices for the industry

Private sector actors like incubators, industry networks and forums like conferences and workshops are greater aggregators of businesses. By playing this role, they can decrease duplication of effort in pipeline discovery across different private equity funds and also ease the process of fundraising for entrepreneurs by helping them navigate through different choices. This trend has been observed in India, where industry networks like TiE, FICCI and NASSCOM; private and public incubators; and forums like TIECON and Sankalp Forum have played a key role in helping the venture capital and private equity spaces grow.

¹⁵⁶ Refer Annexure 9.4.3

11 Annexure

11.1 Demand and Supply Assessment Methodology

- In formal education sector (Pre-primary, Primary Education, Secondary and Tertiary education) demand was calculated on the basis of 5 years age break-up of population. The primary source of data for the analysis was Census data of Nepal for the year 2011.
- Demand for vocational education was calculated on the basis of dropout rate at secondary level.
- For educational delivery services the primary sources of information was primary interview.
- Supply of delivery mechanism and services were estimated based on information from government data, industry reports and indicators published by World Bank and UNESCO.

11.2 Calculation of Hurdle Rate

Cost of Equity and leverage are considered together to estimate the Weighted Average Cost of Capital (WACC) using the formulae shown in Figure 43 and Figure 44.

Figure 43: Formula for calculating WACC

$$WACC = \frac{D}{D+E} \times (1-\text{tax rate}) \times Kd + Ke \times \frac{E}{D+E}$$

Where -

D: Market value of Debt, **E:** Market Value of Equity, **Tax rate:** corporate tax rate in Nepal, **Kd:** Cost of debt in Nepal, **Ke:** Cost of equity calculated by the formula:

Figure 44: Formula for calculating cost of equity

$$Ke = Rf + \beta \times (Rm - Rf)$$

Where –

Rf: Risk free rate (treasury bond rate), **β:** Predicted equity beta, **Rm:** Market risk premium

Cost of preferred stock has not been included while calculating WACC as the capital market information on the same was not available in Nepal. The key assumptions made while calculating WACC for the education segment in Nepal have been discussed in section 9.2.

The following methodology has been used to assess Market Risk Premium and Hurdle rate:

- Current risk premium was taken for a mature equity market at 5%
- No shadow rating is given by Moody's or S&P for Nepal. Based on ratings given by IFC at CCC+ (CAA1 in Moody's) the default spread is 7.5%. This has been multiplied by volatility factor of 1.5 for frontier markets to reach country risk premium of 11.25 % for Nepal. This is done because equity markets are about 1.5 times more volatile than bond markets.
- Alternately we can calculate country risk premium using volatility of stock markets.

$$\text{Default Spread} = \text{US bond rate} * (\sigma \text{ Nepal Stock} / \sigma \text{ US Stock})$$
- US bond rate is taken as 5% and 5 years standard deviation of Nepal Stock was calculated using stock market data and comes out to be 219. The corresponding 5 years standard deviation of US Stock market comes out to be 190. Utilising this data default spread has been estimated is 5.77%. This has been multiplied by volatility factor of 1.5 for frontier markets to reach country risk premium of 8.66 % for Nepal.
- We take minimum and maximum values obtained from both methods to get a range of Total Equity risk premium to be 13.66% to 16.75%.
- Through our primary research, we found that the average D/E ratio for higher education is around 2.33. For higher education hotel management institutes it was 0.25 and for technology and content providers it was around 0.1
- Unlevered Beta the sector is around 0.79 in comparable countries like India, Bangladesh, Pakistan and Sri Lanka. Hence a conservative estimate assumption across sub-sectors was taken, and further levered using the aforementioned D/E ratio and following formula -

$$\beta \text{ levered} = \beta \text{ unlevered} * (1 + (1 - \text{tax rate}) * D/E)$$
- The risk free rate can be obtained from major banks in Nepal such as SBI Nepal Rastra Bank and Bank of Kathmandu and comes out to be around 9-10% as yielded by most of the banks on bonds issued.
- Cost of equity can be calculated by using following method-

$$K_e = R_f + \beta (\text{mature market equity risk premium} + \text{country risk premium})$$
- Through our primary research in Nepal we found out that most higher education enterprises companies may access debt in range of 10-12% interest. The same interest range for technology and content providers was in the range of 12-14%
- WACC or the hurdle rate can then be calculated using the following formula-

$$\text{WACC} = E/(D+E) * K_e + D/(E+D) * (1 - \text{tax rate}) * K_d$$

11.3 Market Opportunity Assessment Methodology

The potential market size estimation of the education sector businesses has been explained in table below¹⁵⁷.

¹⁵⁷ All the information presented in the table was obtained through primary research

Table 19: Market Opportunity Assessment methodology

S. No	Sub-Sector	Demand Estimation	Market Size Estimation
1	Pre-Primary Schools	There are at-least 50 pre-primary private schools active in Nepal mainly in the Kathmandu valley region. Average number of students per school is around 100	Average Fees per student per month is around NPR 6000
2	Class A Private Schools	There are around 250 fully fledged Class A private schools active in Nepal providing education from class 1 to class 12. Average number of students per class is around 100	Average Fees per student per month is around NPR 4800
3	Medical Colleges	There are 21 medical colleges in Nepal. The average number of students per college is around 400 (for five year bachelor course and 3 year masters course)	Average Fees per student per year is around NPR 6,50,000
4	Hotel Management Institutes	There are 21 hotel management institutes in Nepal. The average number of students per year is around 560 (for 4 year course)	Average Fees per student per year is around NPR 1,25,000
5	Business Schools	There are 20 Business Schools in Nepal. The average number of students per college is around 320 (for four year bachelor course and 2 year masters course)	Average Fees per student per year is around NPR 400,000
6	Technology and content providers	The potential demand for services can be extended to at least 5000 schools (1000 Class A and remaining private and public sector schools)	The average revenue generated per school per year is around NPR 120,000

11.4 Investment Markets in Nepal and Impact on SME Valuation

11.4.1 Overview of Capital/Investment Market in Nepal

Role of capital in economic growth for any country is universally accepted and the fluctuations in the index of capital market could be seen as the barometer of economic performance. The capital markets in Nepal are sustained by the shares of banks, financial institutions and insurance companies that contribute to over 75% of the market capitalisation¹⁵⁸. There is minimum presence of real sector in the capital market in Nepal but off-late there is an increasing presence of hydropower companies on the stock exchange.

The Nepal stock market or NEPSE since its establishment in 1992-93 has seen the number of companies listed in 1994 at 66 to 230 companies in 2013¹⁵⁹. Despite the increase in the number of listed companies, it is estimated that only 10% of the companies registered on Office of the Company Register are listed on NEPSE¹⁶⁰. This in turn could indicate that firms in Nepal tend to avoid stock market as an alternative source of long-term capital¹⁶¹.

Primary capital market in Nepal is quite diversified and securities such as Debentures, Ordinary Share and Right Share are used for training the market place. Out of the total approvals for public issues in 2013 as shown in Table 20; 30 companies got approvals for initial public offering (IPO) of NRs. 3113.49 million a substantial increase of over 130% on the amount when compared with the previous year. Political stability and institutional support was considered as the key reason for the spurt of activity in the primary capital markets in Nepal.

Table 20: Primary approval issued by SEBON for the FY 2012/13

S. No	Types of Securities	FY 2012-13		FY 2011-12	
		No of Issues	NRs In Million	No of Issues	NRs In Million
1	Debenture	7	3550	3	1200
2	Ordinary Share	30	3114	15	1298
3	Right Share	5	3939	7	452
	Total	42	10602	25	2950

Source: NEPSE Annual report 2012-13

The general investors in Nepal are still are attracted only toward primary shares. The fact that initial public offering (IPO) is listed many times more than that invited by the companies making IPO in the primary

¹⁵⁸ Nepal stock exchange website

¹⁵⁹ Nepal stock exchange website

¹⁶⁰ Department of industry, Industrial statistics 2012-13

¹⁶¹ Stock Market Development and Economic Growth report, Dr. Udaya Raj Regmi, 2012

markets but the transactions in the secondary market is very low. This in turn shows the lack of awareness about capital market and trading in general in Nepal.

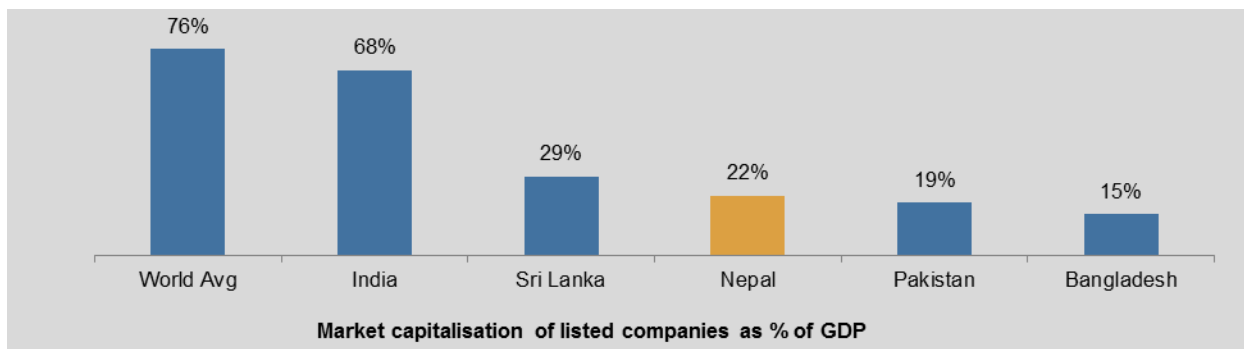
Trading in secondary markets in Nepal is a major challenge due to high trading and transaction costs, long duration of settlements and lack of reliability in the transactions.

11.4.2 Nepal Investment Market Valuation and Key Drivers

The three key parameters to measure the capital market development for Nepal have been discussed briefly below. They are a) Market Capitalisation Ratio (MCR), b) Total Value Traded Ratio (TVTR) and c) Turnover Ratio (TR)

In terms of Market Capitalisation Ratio (MCR), Nepal ranks the third best in the SAARC region after India and Sri Lanka. However the MCR in Nepal is very low in comparison to the world average and India as shown in Figure 45. A lower MCR in Nepal indicates that the stock market is yet to show its impact on the economic activities of the country.

Figure 45: Market Capitalisation Ratio (MCR) for SAARC countries

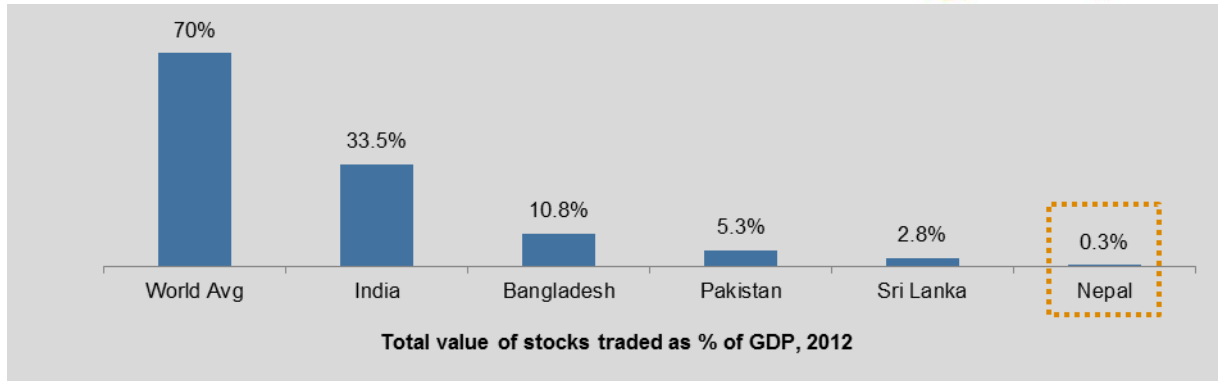


Data Source: World Bank Development Indicators database, accessed in March 2014

Total Value Traded Ratio, as a market liquidity indicator, shows that Nepal has one of the lowest values of shares traded in the world when compared to its GDP as shown in

Figure 46. This indicates the illiquidity in secondary markets in Nepal and that trading is very costly and difficult. One of the key reasons for increased cost of trading is the reliance on legacy based data systems for trading and absence of an online platform for trading.

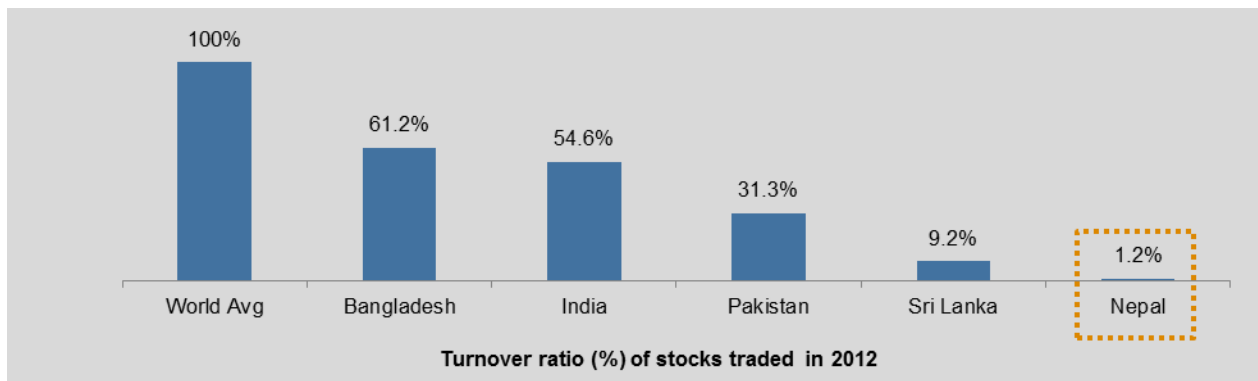
Figure 46: Total Value Traded Ratio (as % of GDP) in SAARC countries



Data Source: World Bank Development Indicators database, accessed in March 2014

The next measure of stock market development Turnover Ratio shows that Nepal has one of the lowest total values of shares traded to the average market capitalisation as shown in Figure 47. This indicates that trading and transaction costs are high in Nepal and buying and selling of shares in secondary markets is very difficult. Of all the three parameters, there are ample opportunities for Nepal to develop its capital markets fast by increasing turnover ratio even though market capitalisation is very low.

Figure 47: Turnover Ratio in SAARC countries

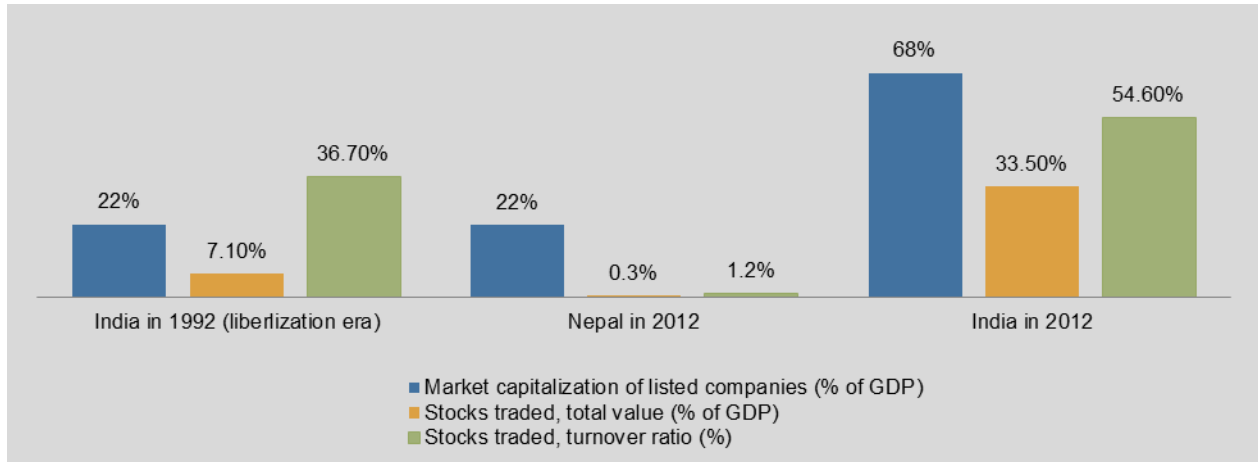


Data Source: World Bank Development Indicators database, accessed in March 2014

A comparison with the present stock market development indicators in Nepal with the Indian stock markets just after the liberalisation era in 1991-92 shows some similarity in the two stock markets. India has come a long way on secondary capital markets in the last two decades as shown in

Figure 48. Nepal could witness the same pace of growth given the requisite institutional framework and investor friendly eco-system is put in place. Allowing foreign institutional investors to trade in secondary markets in Nepal could put the country on fast track development in capital markets.

Figure 48: Comparison of capital market development in Nepal with India



Data Source: World Bank Development Indicators database, accessed in March 2014

The key drivers that would facilitate the trading volumes in the secondary markets in Nepal are - a) introduction of reliable online trading system making trading affordable b) settlement of transactions to be shortened to a few days from the present duration that could last for few weeks and c) with higher GNIs per capita and increasing literacy levels emergence of a social class that is aware of the benefits of wealth creation through the secondary markets d) an expected long-term political stability would boost the confidence of investors to invest in the capital markets.

11.5 Miscellaneous

11.5.1 Legal Structures for Businesses in Nepal

Table 21: Legal Structures available to Businesses in Nepal

Structure	Description	Implications for financing
Sole Proprietorship	Only 1 shareholder allowed, registered with the Department of Cottage and Small-Scale Industry	Cannot issue shares or debentures and hence cannot take in equity investments
Private Limited (Pvt. Ltd.)	1 to 50 shareholders can register a Pvt. Ltd. company with the Office of the Company Registrar under the Companies Act. A company that intends to trade also needs to register with the Department of Commerce.	Can issue different types of shares and debentures with limited liability to shareholder; and hence is an appropriate structure for equity investments

Structure	Description	Implications for financing
Public Limited (Ltd.)	At the time of incorporation 7 shareholders can register a Ltd. company, but the actual number of shareholders should exceed 51. Also registered with the Office of the Company Registrar under the Companies Act. A company that intends to trade also needs to register with the Department of Commerce.	Can issue different types of shares and debentures with limited liability to shareholder; and hence is an appropriate structure for equity investments, and can also raise capital from public markets.
Cooperative	Minimum of 25 members can register a Cooperative under the Cooperative Act.	Can issue shares and debentures and net profits are distributed to members after retaining 25%; however dividend cannot exceed 15% of the paid up capital per share. This is a less appropriate legal structure for equity investors expecting a market rate of return.

11.5.2 Institutional Setup for Education sector in Nepal

Table 22: Institutional Set-Up for Education sector in Nepal

Sl.No	Type of Agency	Name of Agency
1	Central Level	<ol style="list-style-type: none"> 1. Department of Education (DoE) 2. National Centre for Educational Development (NCED) 3. Curriculum Development Centre (CDC) 4. Office of the Controller of Examination (OCE) 5. Non-formal Education Centre (NFEC) 6. School Teachers' Record Office (STRO) 7. Education Review Office (ERO)
2	Regional Level	1. Five Regional Education Directorates (REDs)
3	District Level	1. Seventy-five District Education Offices (DEOs)
4	Local Level	<ol style="list-style-type: none"> 1. One thousand fifty-three Resource Centres (RCs) 2. Thirty-two Thousand One Hundred and Thirty Schools and Twenty-nine

Sl.No	Type of Agency	Name of Agency
		Thousand Eighty-nine ECD/PPC centres
5	Commissions	1. University Grant Commission (UGC) 2. Teacher Service Commission (TSC) 3. Nepal National Commission for Education, Science and Cultural Organisation (NATCOM)
6	Universities	1. Tribhuvan University (TU) 2. Nepal Sanskrit University (NSU) 3. Kathmandu University (KU) 4. Purbanchal University (PU) 5. Pokhara University (PoKU) 6. Lumbini Buddha University (LBU) <i>(Just approved to open)</i> 7. Agriculture and Forestry Science University 8. Mid-Western University 9. Far-Western University
7	Councils/Boards	1. Council for Technical Education and Vocational Training (CTEVT) 2. Higher Secondary Education Board (HSEB)
8	Libraries	1. Kaiser Library (KL) 2. Nepal National Library (NNL) 3. Dilliraman Kalyani Regmi Memorial Public Library (DKRMPL)
9	Others	1. Janak Education Material Centre Limited (JEMCL)

11.5.3 Glossary of Terms

Table 23: Glossary of Terms used in the report

Adult Education Program	An instructional program below the college credit level for persons over the age of compulsory school attendance who are not enrolled in the regular public school program, including adult basic education, credit programs,
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	cultural adult education, external diploma programs, general adult education and general educational development programs.
Apprenticeship Training	A formal process by which individuals learn their jobs through a combination of classroom instruction and on-the-job training from a skilled expert in their specific job.
Dropout Rate	Measures the proportion of students who drop out in a single year without completing high school.
Enrolment Rate	Enrolment rates are expressed as net enrolment rates, which are calculated by dividing the number of students of a particular age group enrolled in all levels of education by the number of people in the population in that age group.
Human Capital	Knowledge, skills, and abilities of the men and women who comprise a workforce; often related to an organisation's efforts to realise and enhance its human capital potential.
Literacy Rate	The total percentage of the population of an area at a particular time aged seven years or above who can read and write with understanding.
Skill Certification	A formal process used to ascertain and distinguish the mastery of a set of skills according to predefined standards. May be linked to either a particular occupation or trade, or a particular job or process.
Skill Standards	Performance specifications that identify the knowledge, skills, and abilities an individual needs to succeed in a workplace; they define a common language of quality and level of achievement.

11.5.4 Comparable Valuation Multiples from SAARC Countries

Table 24: Comparable Valuation Multiples in the Education sector from SAARC Countries

Company name	Area of business	ROE (%)	EV/EBITDA	EV/Sales	Revenue (Mn US\$)	EBITDA margin (%)	PAT (Mn US\$)
MT Educare Limited	Coaching Services, Content provider	16%	11.34	1.99	27.7	18%	0.11
Career Point Limited	Content provider, Coaching Services	6.3%	5.31	1.97	14.8	37%	0.29

Tree House Education & Accessories Limited	Pre-Schools	11.7%	13.87	7.53	21	54%	0.28
Jetking Infotrain Limited	Training service, Vocational Education	8.7%	7.99	0.57	5.99	7%	0.11
Aptech Ltd.	Vocational Education	8.6%	9.83	1.49	31.2	15%	0.19

Source: Data for valuation ranges is based on financial statements of publically traded companies in India,. Information on financial statements was accessed from Capital IQ, Bloomberg and MoneyControl databases in May 2014.

Note: Due to limited size of sample set, this should only be taken as a broad guide to valuation multiple ranges. Specific valuation multiples may differ significantly from company to company.

11.6 References and Field Research Data

The organisations interviewed during the course of this study have been listed in

Table 25.

Table 25: List of primary interviews

Organisation	Sector
Government Bodies and International Organisations	
SEBON (Securities Board of Nepal)	Sector agnostic
International Finance Corporation	Sector agnostic
Banks and Financial Agencies	
Laxmi Bank	Sector agnostic
Excelling Investment	Sector agnostic
Nabil Invest	Sector agnostic
Private Sector Organisations	
Midas Education	Technology and Content Provider
Maitree School	Primary and Secondary Education
Kathmandu Medical College	Medical College

Organisation	Sector
Gandaki Medical College	Medical College
Silver Mountains Hotel Management Institute	Hotel Management
Bridge Water Schools	Primary and secondary education