Preface

Since its establishment in January 1978, the continual contribution of CERID as a research centre of Tribhuvan University towards the generation and dissemination of new knowledge is discernable to all. It is also familiar to the readers that Education and Development - an annual journal of CERID - has been instrumental in disseminating new knowledge generated by CERID and in bringing out original thinking of Nepalese scholars through their articles. It is a matter of pride that CERID has been successful in building the capacity of its researchers who, later, became capable enough to work in several organizations in Nepal and abroad.

With the beginning of 21st century, CERID has been working for achieving the goals of Education for All (EFA, 2004-2009) and Millennium Development Goals (MDGs) through undertaking researches. Specifically, the research works undertaken by CERID under Formative Research Project with the technical and financial support of Norwegian Government provided technical support to Ministry of Education by bringing forward strategic research-based information on the process of implementation of EFA 2004-2009. Likewise, the findings and recommendations of researches conducted by CERID for UNICEF, UNESCO, IIEP and other organizations should have been quite useful for achieving EFA goals and MDGs.

After the formation of Democratic Republic of Nepal, everybody is watching for creation of new Nepal. Reform in education sector is an essential condition for the creation of new Nepal. In this context, development and implementation of School Sector Reform Program 2009-2015 would, definitely, be the next milestone in the educational reform process in Nepal. In order to facilitate this reform process, CERID would continue its contribution through quality research as done earlier.

Finally, sincere appreciation is extended to the contributors of this issue of Education and Development in which articles dealing with various themes have been included. Likewise, I would like to thank the CERID researchers and administrative staff who worked hard to bring out this journal.

Prof. Arbinda Lal Bhomi Ph.D.
Executive Director

September 2008
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The context

Development and extension of every sector of social services are prerequisites for overall development which can be achieved through production of efficient, disciplined, educated and healthy citizens. It has become imperative to take firm steps for ensuring easy access to education, health services, housing, contamination free drinking water to all classes of people and individuals of the country. Therefore, to materialize the concept of social development there is a need for improvement in management of economic and human resources at all governmental and non-governmental machinery involved in this sector. To ensure and sustain easy access of people of all classes and regions to education, health, housing, pure drinking water and also fulfilling commitments made in international forums regarding rights of children and senior citizens of the country have become the needs of the day. To materialize the concepts of social infrastructure development, it has become necessary to educate general people and make them aware about environmental sanitation and cleanliness, control water born diseases followed by commitment on the part of the government to ensure distribution of clean and fresh water, enforce legal structure relating to gender discrimination and mobilize skilled human resource through employment opportunity. Special programs need to be formulated and implemented to up-lift the living standard of dalit, backward class, tribal people, economically and socially vulnerable groups and make them involved in every social activities (NPC, 2002).

The economic system provides an arrangement for the production, exchange and consumption of whatever is needed to satisfy human wants. In the terminology of economics anything that satisfies a human want is a 'good'. The economy produces goods to satisfy human wants. There are many ways to classify goods. If a good is
scarce and capable of being allocated, it is called an 'economic good' as contrasted with a free good such as air. Economics is concerned only with economic goods and education is an economic good regardless of either it is produced in the public or in the private economy. Johns and Morphet (1975) stated that 'Economic goods' are either 'material' or 'non-material'. A material good satisfies a human want, and education is a non-material good.

In a primitive (agricultural) civilization, practically all human effort was devoted to the production of 'goods' that satisfied primary wants such as food and shelter. These wants must be satisfied almost entirely by material goods. When an economy has advanced to the point at which it has some productive capacity, after satisfying primary wants, it produces goods that satisfy cultural or secondary wants. Secondary wants are satisfied both by material goods and by non-material goods. As a civilization is advanced in industrialized societies, the proportion of the total economy allocated to the production of non-material goods increases and proportion allocated to the production of material goods decreases. One of the best indicators of civilization of a country is the proportion of the productive capacity of the economy allocated to the production of non-material goods. With the start of the 21st century as an age of "knowledge economy" or information based society, it is true that total value and variety of material goods production continues to increase with also the production of non-material goods increasing at a faster rate. This is inevitable because there is a limit to per-capita consumption of many types of material goods that satisfy human wants, but these seem to be very few that limit the potential per-capita consumption of many types of non-material goods. For example, the human being may consume only a limit number of calories or pounds of food per day if he desires to maximize his chances of survival. However, there seems to be no limits to the amount of education he can consume despite the fact that people vary greatly in their capacity to consume education (Johns and Morphet, 1975).
Japan believes that ensuring sustainable economic growth as well as social development is essential for achieving sustainable poverty reduction in developing countries. Based on these ideas, Japan has been placing importance on promotion of trade and investment through support for economic sector such as development of economic foundations, development of legal systems and human resources, and on support for the economic growth of the recipient countries by fostering the private sector and promoting technology transfer. These policies will promote economic growth and also caring out economic and social infrastructure development, taking into account policies that ensure that the benefits of economic growth would reach the poor regions and poorest segments of society. Support for economic and social infrastructure includes development of transportation, such as ports and roads, communications, energy, river and irrigation facilities, and urban and rural living environments (White paper, 2003).

Therefore, a national economy can get out of ‘equilibrium’ when it produces more material goods than are wants and fewer non-material goods than are needed. The American civilization is noted for its capacity to produce material goods. A nation is capable of producing a surplus of most of the kinds of material goods the citizens consume, which is called materialistic civilization. On the other hand, if the economy has not produced a surplus of any important non-material good like education, mechanical and hospital care, wholesome recreation, good art and music and worthwhile literature always have been in short supply.

The above discussion definitely raises some pertinent questions. For instance, do the production of a great volume of material goods and development of physical infrastructure promote the equilibrium economic growth of our country? Can it make a comprehensive contribution to develop the standard of living of the citizens? Would education contribute to build social/human infrastructure for the balanced development of our national economy? How does one explain those cases where state outperforms their neighbors economically but not educationally? As many countries of the
Arabian states can be the best examples to justify the viability of these questions, this paper attempts to address these issues in terms of different aspects.

The dimensions of social infrastructure

Education plays a major role in the social change and transformation in modern societies through human capital formation such as physical infrastructure like development of road, irrigation, transport, telecommunication, and electricity services, which are the major instruments for the national growth. However, social infrastructure development such as education, health and nutrition, modern attitude towards social/cultural structure, human capital and human resource development (HRD), social equity and inclusion dimensions are so much essential for the equilibrium growth of the nation. For this, improvement in health and nutrition services, literacy, education/training and skill development, relationship between human and environment, changing attitude towards social/cultural modernization, gender equity/equality and empowerment, developing social inclusion and political and economic freedom are significant to lay foundations of social infrastructure.

Education is both economically and socially productive instrument. In many developing countries it is provided predominantly by the government. In this regard, Lohani (2001) argues that education has both investment and consumption components. Similarly, the World Bank (2004) noted that "it has already been pointed out that number of schooling years is positively correlated with the income of individuals. Furthermore, there is considerable evidence that social and economic class has a strong positive effect on level of income independent of the effects of education. Therefore, it can be reasoned that education increases rather than decreases the differences in income.

The World Bank (2005) states that broadly defined human resource development (HRD) relates to the education, training and utilization of human potentials for social and economic progress. The energizers of social development and transition are interlinked and
interdependent, but education/training, literacy and skills are basis for all components.

Many states are signatory to almost all international convention on human, women and children rights as well as to agreements on international goals regarding education, health and poverty reduction including the 'Convention on the Elimination of all forms of Discrimination against Women (CEDAW)'. However, it is pointed out that the desirability of educational opportunity has not been accepted in theory in certain parts of the world. It seems impossible in many of the underdeveloped nations (UNFPA, 2007).

The education for adolescents and young people, which should be evaluated in terms of its ability to guarantee equality most particularly to allow 'young girls' to benefit from a secondary education, needs to be emphasized. A secondary education that is adapted to the needs of young people and of society contributes to the strengthening of a positive self image to social integration and to beneficial effects on the social, cultural and economic development of a country. Also social exclusion is a growing phenomenon worldwide, which increasingly is affecting adolescents and young people, either directly or through a process of "shattered expectations" (UNESCO 2004). Focused on the above contents it can be said that more suitable and comprehensive measures, such as UNDP's Human Development Index (HDI), may indeed show that the overall quality of life is higher in better educated communities, however, another part of the explanation must be that some states have done better than others at creating the economic and political frameworks that allow educated people to work productively for their own and the common people. In this regard, the HDI level of SAARC counties is given in the following table:
Table 1: SAARC Human Development Indicators (HDI), 2004

<table>
<thead>
<tr>
<th>Country</th>
<th>Adult literacy %</th>
<th>Life expectancy (years)</th>
<th>HDI value</th>
<th>GDI value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>50.3</td>
<td>31.4</td>
<td>53</td>
<td>54</td>
</tr>
<tr>
<td>Bhutan</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>India</td>
<td>69.0</td>
<td>46.4</td>
<td>62</td>
<td>50</td>
</tr>
<tr>
<td>Maldives</td>
<td>97.3</td>
<td>97.2</td>
<td>78</td>
<td>78</td>
</tr>
<tr>
<td>Nepal</td>
<td>61.6</td>
<td>26.4</td>
<td>67</td>
<td>55</td>
</tr>
<tr>
<td>Pakistan</td>
<td>53.4</td>
<td>28.5</td>
<td>43</td>
<td>31</td>
</tr>
<tr>
<td>Shri Lanka</td>
<td>94.7</td>
<td>89.6</td>
<td>64</td>
<td>66</td>
</tr>
<tr>
<td>SAARC</td>
<td>71.0</td>
<td>53.2</td>
<td>61.3</td>
<td>55.3</td>
</tr>
</tbody>
</table>

Source: UNDP: 2004, na = not available

The above data clearly shows that South Asia hosts the largest number of poor people in the world. The human development indicator shows the highest development of Maldives and Sri-Lanka with highest literacy and gross enrollment rate with highest health care indicators. In Nepal, a high proportion of people suffer from both income and human poverty, which impacts very unequally on women issues of gender equality and inclusion.

Nepalese context

Nepal is as one of the least developed countries in the SAARC region. The economic growth rate in recent years is low (2.7% in 2004/05 and 2.3 in 2005/06) at constant prices. The most recent Nepal Living Standard Survey (NLSS, 2004) showed a marked improvement (30.8% of the population living below the poverty line in 2003/04 as compared to 42% in 1995/96). Also the per-capita income (per-capita GNP) is estimated to have increased from Rs. 21501 ($302) in 2004/05 to 23032 ($322) in 2005/06. The NLS survey also showed that poverty in Nepal is largely a rural phenomenon, with 34.6% of population of rural areas surviving under the poverty line as against 9.5% in urban areas.

Cultural diversity is one of Nepal’s national treasures with nearly hundred and more ethnic groups and 92 languages and family of dialects. It is one of the most diverse countries on Earth and thus has responsibility to conserve a rich cultural heritage. Minority groups and ethnic communities have been facing marginalization.
Disadvantage groups (DAG) such as women, Dalits and ethnic minorities have low level of participation in education. Also gender equity in society generally and in education, in particular, remains an important goal to be achieved. Raising the participation of these groups has become one of the key challenges for the government (SSR, 2007).

A brief review of the government's development policies, programs and their implementation processes indicates that achievement has been made towards the development of social infrastructure/human capital in the country as also a strong commitment has been expressed and demonstrated by the state in this regards. Social inclusion is high on government's reform agenda (UNFPA, 2007). The Interim Constitution of Nepal (2007) contains provisions pertaining to school education like each community will have right to receive basic education in mother language, each children will have right to get free education up to secondary level as provided by the law, and the coverage of services and facilities in free education at basic and secondary level has to be defined by education act and regulations.

The total population of the country was recorded to be 23.15 million in 2001. (CBS, 2001). The growth rate of population is estimated to be 2.2% per year during the period 2001-2005. Similarly, the population projection of Nepal will be 28.58 million in 2011, 31.32 million in 2016 and 34.17 million in 2021 (CBS, 2003). Such a projection demands an urgent initiative to be taken to build adequate social infrastructure in the country.

### Table 2: A Comparative View of Fertility and Mortality Situation in Nepal

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Birth Rate (per 1000 population)</td>
<td>33.1</td>
<td>30.0</td>
</tr>
<tr>
<td>Crude Death Rate (per 1000 population)</td>
<td>9.6</td>
<td>8.7</td>
</tr>
<tr>
<td>Total Fertility Rate (per woman)</td>
<td>4.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Infant Mortality Rate (per 1000 live births)</td>
<td>64.4</td>
<td>–</td>
</tr>
<tr>
<td>Life Expectancy at Birth Female</td>
<td>60.4</td>
<td>63.3</td>
</tr>
<tr>
<td></td>
<td>60.7</td>
<td>63.7</td>
</tr>
<tr>
<td>Life Expectancy at Birth Male</td>
<td>60.1</td>
<td>62.9</td>
</tr>
<tr>
<td>GDP Per Capita in US$</td>
<td>–</td>
<td>315</td>
</tr>
<tr>
<td>GNI Per Capita in US$</td>
<td>–</td>
<td>322</td>
</tr>
</tbody>
</table>

Source: Nepal in Figures 2006, Central Bureau of Statistics
Building Social Infrastructure

The above table shows that health services in Nepal are to be improved specially to expedite the process of building social infrastructure. Access to health and education services is often taken as an indicator of citizen's social status and achievements. A woman's health and educational achievements are products of many dimensions of her subordination to patriarchal structures and ideology. The social ideology of gender roles determines her access to education, information, division of labor and employment avenues, and ultimately her opportunity spectrum and life options (UNFPA, 2007).

A significant decline in maternal mortality rate (MMR) from 850 to 539 per 100,000 deliveries in the 1980s clearly helped to change the sex ratio in favour of women in 1991 compared to 1981 (Acharya, 2003). Life expectancies at birth show significant improvements in both male's and female's health status. Expansions of health services and outreach have been notable indicating improvement in effort to build the desired social infrastructure.

Table 3: Literacy Rate of 6+ Years

<table>
<thead>
<tr>
<th>Years</th>
<th>B.S. A.D.</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>GPI</th>
<th>Gender Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1952/54</td>
<td>9.5</td>
<td>0.7</td>
<td>5.3</td>
<td>0.07</td>
<td>8.8</td>
</tr>
<tr>
<td>2018</td>
<td>1961</td>
<td>16.3</td>
<td>1.8</td>
<td>8.9</td>
<td>0.11</td>
<td>14.5</td>
</tr>
<tr>
<td>2028</td>
<td>1971</td>
<td>23.6</td>
<td>3.9</td>
<td>13.9</td>
<td>0.17</td>
<td>19.7</td>
</tr>
<tr>
<td>2038</td>
<td>1981</td>
<td>34.0</td>
<td>12.0</td>
<td>23.3</td>
<td>0.35</td>
<td>22</td>
</tr>
<tr>
<td>2048</td>
<td>1991</td>
<td>54.5</td>
<td>25.0</td>
<td>39.6</td>
<td>0.46</td>
<td>29.5</td>
</tr>
<tr>
<td>2058</td>
<td>2001</td>
<td>65.5</td>
<td>42.8</td>
<td>54.1</td>
<td>0.65</td>
<td>22.6</td>
</tr>
</tbody>
</table>

Source: Various publications of Central Bureau of Statistics
Note: Census recorded data of 1971 to 2001 have been verified with the publication of CBS and ICIMOD, "Mapping Census Indicators 2001 and Trends" and are adjusted accordingly.

As the above table shows, Nepal has made significant achievements in education. Literacy levels have increased particularly during the last two decades. Male literacy in six years and above age group reached 65 per cent in 2001 from 34 per cent in 1981. Similarly, the female literacy rate more than trebled from 12 per cent in 1981 to 43 per cent in 2001. However, the gender literacy gap is approximately similar between1981 to 2001 as 22 percent.
Table 4: Enrollment Rate, 2063

<table>
<thead>
<tr>
<th>Levels</th>
<th>Total No.</th>
<th>Girls %</th>
<th>Boys No.</th>
<th>Boys %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECD/PPC*</td>
<td>823106</td>
<td>378437</td>
<td>56.8</td>
<td>444669</td>
</tr>
<tr>
<td>Primary*</td>
<td>4418713</td>
<td>2088085</td>
<td>48.9</td>
<td>2258950</td>
</tr>
<tr>
<td>Lower Secondary*</td>
<td>1301134</td>
<td>606597</td>
<td>46.6</td>
<td>694537</td>
</tr>
<tr>
<td>Secondary*</td>
<td>679387</td>
<td>313216</td>
<td>46.1</td>
<td>366171</td>
</tr>
<tr>
<td>Higher Secondary**</td>
<td>301542</td>
<td>113704</td>
<td>37.7</td>
<td>187838</td>
</tr>
<tr>
<td>Higher Education***</td>
<td>356734</td>
<td>118393</td>
<td>33.2</td>
<td>238341</td>
</tr>
</tbody>
</table>

Source: * Flash Report, Department of Education, 2063  ** HSEB, 2064 and PCL enrolment of various universities  *** TU, NSU, KU, PoK and UGC

Table 4 indicates the despite the encouraging enrollment status, girls have remained behind the boys in educational participation.

The above data shows a very slow and lower participation rate of girls in higher secondary and higher-level education system. Compared to the boys secondary and lower secondary progress is also slow unlike that of primary education.

Table 5: Gross and Net Enrolment Rates (GER & NER), 2063

<table>
<thead>
<tr>
<th>Levels</th>
<th>GER Total</th>
<th>Girls</th>
<th>Boys</th>
<th>NER Total</th>
<th>Girls</th>
<th>Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>138.8</td>
<td>138.4</td>
<td>139.2</td>
<td>87.4</td>
<td>85.5</td>
<td>89.3</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>72.5</td>
<td>65.4</td>
<td>77.9</td>
<td>52.3</td>
<td>47.8</td>
<td>57.1</td>
</tr>
<tr>
<td>Secondary</td>
<td>56.7</td>
<td>53.1</td>
<td>60.2</td>
<td>34.7</td>
<td>32.4</td>
<td>37.0</td>
</tr>
</tbody>
</table>

Source: Flash Report, Department of Education, 2063

As the above table indicates, the overall NER at primary level was 87.4%, which is an increase of about one percent from the last school year. Thus, the growth of NER is continuing. However, the growth of NER is slower than the respective age groups' population growth. The NER of 87.4% suggests that almost four hundred thousand children are still out of formal primary schooling of which most are girls and children from the disadvantaged communities.

Similarly, it is evident that in 2006 the GER at lower secondary level was 72.5% with 65.4% for girls and 77.9% for boys. Similarly, the overall GER at secondary level was 56.7% with 53.1% for girls and 60.2% for boys. At the lower secondary level, the NER has increased.
by 5 percentage points whereas the GER is reduced by 4 percentage points, as compared to the last school year 2005-06. Similarly, for secondary level the NER was 34.7%. In the secondary level, the NER has increased almost by 2 percentage points and the GER almost by 7 percentage points, as compared to the last school year 2005-06.

Gender disparity plays a major role in the unequal access of girls and women to education. Girls face much more discrimination in access to quality education. Gender parity in enrolment has not been achieved even at the primary level. The gross enrolment parity rate was 0.91 and the net enrolment parity rate was 0.97 in 2004 (NLSS, 2004). Boys everywhere are given better educational opportunities by parents, who send them to private schools or to cities while the girls, particularly those from villages, have few such opportunities. Families usually send their boys to India or overseas for further education, but few girls get such opportunities. The primary reason behind this is the social obligation for the natal household to marry their girls off preferably late in teens or early 20s (UNFPA, 2007).

Table 6: Enrolment by social group 2063

<table>
<thead>
<tr>
<th>Levels</th>
<th>Dalits</th>
<th>Janajatis</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Girls</td>
<td>Boys</td>
<td>Total</td>
</tr>
<tr>
<td>ECD/PPC</td>
<td>15.2</td>
<td>14.7</td>
<td>15.0</td>
</tr>
<tr>
<td>Primary</td>
<td>17.7</td>
<td>17.7</td>
<td>17.7</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>9.0</td>
<td>9.9</td>
<td>9.5</td>
</tr>
<tr>
<td>Secondary</td>
<td>4.8</td>
<td>5.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Total</td>
<td>14.6</td>
<td>14.7</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Source: Flash Report, Department of Education, 2063

The above table presents enrolment at lower secondary level by social composition and sex. The enrolment share of Dalit in total is 9.5%. This shows that the Dalit enrolment share at lower secondary level is quite low compared with their population share at national level. Likewise, the share of Janajati enrolment is 38.6% and for others it is 51.9%. Thus, the share of Janajati enrolment remains the same as at the primary level.

One’s caste or ethnicity is the most important factor besides gender in determining educational access. The tables extracted from a recent analysis illustrate the current situation clearly. Higher caste groups
have much better access while the Dalits of the Terai have the lowest access to education. Even in terms of decennial gains between 2001 and 1991, Terai Dalit women, with just 11 percent literacy rate in 2001, had made least progress compared to women of other caste/ethnic groups (UNFPA, 2007).

### Table 7: Female Share in Teaching Force, 2063

<table>
<thead>
<tr>
<th>Levels</th>
<th>Total</th>
<th>Female %</th>
<th>Male %</th>
<th>Total</th>
<th>Female %</th>
<th>Male %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>95903</td>
<td>37.8</td>
<td>62.2</td>
<td>71851</td>
<td>37.0</td>
<td>69.4</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>26716</td>
<td>20.4</td>
<td>79.6</td>
<td>17417</td>
<td>11.5</td>
<td>88.0</td>
</tr>
<tr>
<td>Secondary</td>
<td>19386</td>
<td>10.1</td>
<td>89.9</td>
<td>11113</td>
<td>4.7</td>
<td>92.6</td>
</tr>
<tr>
<td>Higher Secondary</td>
<td>6808</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
</tbody>
</table>

Source: Flash Report, Department of Education, 2063

Similarly, as the above table suggests, the overall share of female teachers is 30.8% of which 37.8% is in primary level, 20.4% is in lower secondary level and 10.1% female in secondary level. Compared to the share of female teachers at primary level, the share of female teachers at lower secondary and secondary is very low. The concept of social infrastructure was also viewed in relation to the composition of teachers by social group (Table 8).

### Table 8: Teacher by social group 2063

<table>
<thead>
<tr>
<th>Levels</th>
<th>Dalits</th>
<th>Janajatis</th>
<th>With disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td>Primary</td>
<td>2.3</td>
<td>2.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>1.0</td>
<td>1.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Secondary</td>
<td>1.4</td>
<td>0.9</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: DoE, 2006

The disaggregated data of teachers by social groups shows that Dalit and Janajati participation in the teaching profession is very low in comparison with their share of the total population. The table shows that the percentage of Dalit teachers at primary level is 2.5%, whereas it is 1.6% at lower secondary and only 1% at secondary level. The percentages of Dalit teacher in primary and lower secondary levels are higher in community schools than in institutional schools. Similarly, the percentage of Janajati teachers by types of schools and level of education is 17.8%, 23.4% and 15.4% at primary, lower secondary and secondary level respectively. Out of the total 141,605
reported number of teachers, 1,288 teachers have a disability. At primary, lower secondary and secondary levels, the number of disabled teachers were 1,011 (1.1%), 161 (0.6%) and 116 (0.6%) respectively (DOE, 2006).

The share of the total government budget for the social sector in general and for the education sector in particular has increased substantially. For example, the total government expenditure increased by 2.8 percent annually, whereas expenditure in education increased by 5.8 percent at constant price between the period of 1988 to 2003. When taken in constant price (1995/96), the average annual growth rate of the total government expenditure (1992/93 – 2000/01) was 5.4 percent, while for education it was 8.0 percent (MOF, 2003). In 1988, the education sector received a larger share of the budget than the police and defense, whereas in 2003 the share of education was lower than the police and defense sector as shown in Table (9) below (MOF, 2004). This shift indicates that the possibility of the education sector receiving more funds from the government during the conflict situation was little and hence, an efficient and equitable management of available funds was a necessity.

Table 9: Comparison of Government Budget Shares Sector-wise, 1988-2003

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>as % of total Budget</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sector</td>
<td>21.9</td>
<td>33.3</td>
<td>31.3</td>
<td>30.9</td>
</tr>
<tr>
<td>Education</td>
<td>9.7</td>
<td>15.7</td>
<td>14.1</td>
<td>15.8</td>
</tr>
<tr>
<td>Health</td>
<td>4.8</td>
<td>4.4</td>
<td>5.2</td>
<td>4.3</td>
</tr>
<tr>
<td>Police / Defense</td>
<td>8.0</td>
<td>10.4</td>
<td>10.2</td>
<td>16.2</td>
</tr>
<tr>
<td>Debt Servicing</td>
<td>9.6</td>
<td>17.2</td>
<td>15.1</td>
<td>19.3</td>
</tr>
<tr>
<td>as % GNP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sector</td>
<td>4.3</td>
<td>5.4</td>
<td>5.7</td>
<td>5.5</td>
</tr>
<tr>
<td>Education</td>
<td>1.9</td>
<td>2.6</td>
<td>2.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Health</td>
<td>1.0</td>
<td>0.7</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>Police / Defense</td>
<td>1.6</td>
<td>1.7</td>
<td>1.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Debt Servicing</td>
<td>1.9</td>
<td>2.8</td>
<td>2.7</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Source: MOF, 2004
Moreover, the average annual growth rate of revenue has been 20 percent at constant price between 1998-2003, whereas the growth rate of debt servicing ratio has been 26.5 percent during this same period (MOF, 2004). The difference in these growth rates indicates a difficult situation for internal revenue mobilization for the state to provide counterpart funds for new projects. The debt servicing ratio has almost doubled between 1998 and 2003 in terms of the percentage of GNP.

Virtually in every country the government spending covers all levels of education. The government spending on education accounts, on average, more than 3.05% of a country’s GNP and more than 15% of a country’s total government expenditure (DOE, 2006).

The potential capacity of governments and parents to finance education has been limited by the fact that the macro-economic situation of the country has not improved as anticipated and Gross National Product (GNP) per capita has often not shown satisfactory growth in recent years. For example, per capita GNP in 2004/005 amounted to Rs 21,322 (approximately US$300) as compared to Rs. 20,554 (US$278) in 2003/004 (MOF, 2005:15).

Table 10: Trends in Public Expenditure on Education at Current Prices (Rs in million)

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP</th>
<th>Gov Expend</th>
<th>Education Expend</th>
<th>Share of govt. budget in GDP%</th>
<th>Share of ed in GDP%</th>
<th>Share of edu in Govt. budget%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999/00</td>
<td>36651</td>
<td>66273</td>
<td>9329</td>
<td>18.1</td>
<td>2.5</td>
<td>14.1</td>
</tr>
<tr>
<td>2000/01</td>
<td>393566</td>
<td>79835</td>
<td>11045</td>
<td>20.3</td>
<td>2.8</td>
<td>13.8</td>
</tr>
<tr>
<td>2001/02</td>
<td>405632</td>
<td>80072</td>
<td>13050</td>
<td>19.7</td>
<td>3.2</td>
<td>16.3</td>
</tr>
<tr>
<td>2002/03</td>
<td>435531</td>
<td>84006</td>
<td>13287</td>
<td>19.3</td>
<td>3.1</td>
<td>15.8</td>
</tr>
<tr>
<td>2003/04</td>
<td>472424</td>
<td>92107</td>
<td>14526</td>
<td>19.5</td>
<td>3.1</td>
<td>15.8</td>
</tr>
<tr>
<td>2004/05</td>
<td>493683</td>
<td>111690</td>
<td>18060</td>
<td>22.6</td>
<td>3.7</td>
<td>16.2</td>
</tr>
<tr>
<td>2005/06</td>
<td>582950</td>
<td>126885</td>
<td>21250</td>
<td>21.8</td>
<td>3.65</td>
<td>16.75</td>
</tr>
<tr>
<td>2006/07</td>
<td>628506</td>
<td>143912</td>
<td>23005</td>
<td>22.9</td>
<td>3.66</td>
<td>15.99</td>
</tr>
<tr>
<td>2007/08</td>
<td>773437</td>
<td>168995</td>
<td>28390</td>
<td>21.8</td>
<td>3.67</td>
<td>16.80</td>
</tr>
</tbody>
</table>

Source: DOE, 2007

The above table shows that over the past nine years 1999/00 to 2007/08, about 16.8% of government expenditures have been devoted to the financing of the Education Sector. In 2004/05, a sum of Rs.
100,937 million was actually spent by the government on various programmes and activities of various sectors. Expenditure on the Education Sector was 16% of the total government expenditure.

A total of Rs. 126,885 million was allocated in the total government budget for 2005/06. Of this 16.75% was allocated for the Education sector. This proportion is the highest for the past several years. The budget allocation for Education Sector in 2006/07 is Rs. 23,005 in million. That was 15.99% share of government total budget to education. In 2007/08 the total government expenditure allocated is Rs. 168,995 million and education budget receives 28,390 million rupees. The share of education is 16.8% and the share of education in GDP is 3.67% as well.

Issues and challenges

The above analysis obviously reflects the ground reality of Nepal’s real social status in terms of social infrastructure. However, it is interesting to note that a significant achievement has been made in education and health sectors. If examined objectively, there are still several gaps between different sections of people such as man and woman, poor and rich, gender and caste etc. Nepal is facing a number of challenges with regard to building social infrastructure. More importantly, the government of Nepal has accorded low priority to social infrastructure development. Next, it is exercising weak process for mainstreaming, and still discrimination exists against various castes and ethnicities. Similarly, the disadvantaged groups’ access to the country’s political and administrative power does not seem encouraging. As a result of this, they cannot influence decisions of national importance that ultimately affect themselves. In addition, Nepal is still fighting to improve child health, nutrition and reproductive health for which it needs to initiate awareness programs in a great scale. Finally, it is struggling to resolve the psychological problems caused by conflict and displacement due to weak monitoring and evaluation system put in place.
Future direction

Based on the government policies, planning, programming and implementation strategies, the following recommendations are made to support the process of building social infrastructure of a developing country like Nepal:

1. The government should focus on gender mainstreaming and empowerment so that women can be instrumental in building social infrastructure that is required for sustainable development of the country.

2. The government should work towards incorporating gender equity in the process of public resource transfers and macro and micro-economic policies.

3. Nepal seems weak in institutional structures and program orientation. To accomplish this, both institutional structures and program orientations should be reformed.

4. Gender sensitization by the government machinery should be initiated to address the major needs of the disadvantaged groups in the county.

5. The country’s weak agriculture and rural infrastructure needs to be developed and strengthened.

6. Quality education should be guaranteed and provided to all on Rights Based Approach (RBA) and the principles of equity and equality.

7. The government should work as a catalyst for providing training so that people in need can be equipped with necessary "Knowledge and skills".

8. Provisions should be made to provide quality health services to all.

9. The policy and program improvements should be adjusted to make all of them more inclusive.
10. Monitoring and evaluation system should be made integral part of policy and program implementation.

Conclusion

All in all, the concept of 'building social infrastructure' has come up with newly emerging issues such as inclusion and poverty along with gender exclusion of poverty and gender, which are considered as overlapping circles. Each circle is larger than the overlapping parts. But they reinforce each other. Empowerment has been conceived as a three-dimensional process covering social, health and political aspects and involving not only participation at various levels of decision-making, but effective participation and presence. Similarly, the inclusion sensitivity of the institutions, policies and plans structures and programs has been evaluated from the point of view of social development aspects. Finally, attitude of the decision makers like men or women need to be analyzed in terms of whether they just provide relief for the symptoms of oppression, whether they are gender reinforcing or equity / equality or making inclusive society and promoting social infrastructure for the equilibrium growth of the country.

References

An Assessment of Pedagogical Competencies of Lower Secondary School Teachers

Kul Narsingh Shrestha

Introduction

A competent teacher needs both content mastery and pedagogical competency. Content mastery provides knowledge about what to present in the class whereas pedagogical competency provides knowledge as well as skills in how to present the content. Pedagogy is the art of teaching that brings effectiveness in teaching-learning activity. Effective pedagogical practice promotes the achievement of students and builds up confidence of the teachers in teaching. It contributes to bringing quality of learning and teaching in the classrooms.

The education commissions and committees formed at different time periods stressed the need for developing pedagogical competencies of teachers to ensure the quality of education. For instance, Nepal National Education Planning Commission (NNEPC), the first comprehensive educational development initiative formed in 1954, emphasized both expansion of the education in terms of access and qualitative improvement of delivery. Quality of education has been a major educational focus since the enactment of report the of this commission. However, quality obviously remained an anticipated vision so far.

The National Education System Plan (NESP) has made teacher training compulsory for all levels of education for developing necessary competencies in teachers (MOE, 1971). But such goals could not be materialized yet even at the turn of the century.

It seems that the classroom pedagogical approaches as intended by the education commission reports of 1956 and 1971 have not yet been transformed into classroom practices. The development of

* Associate Professor, Sanothimi Campus
pedagogical competencies in teachers seemed to be not as effective as pointed out by the National Education Commission (NEC) in 1992. This commission's report stated, "The teaching-learning situation in primary schools is rather depressing .... Students are encouraged to learn by rote, and assessments are made on the same basis." Hence, emphasis on the development of pedagogical competencies laid by these education commission reports indicates lack of a unified and coherent development of pedagogical competencies in the school teachers.

Intention and commitment for 'quality education' is being reiterated from one project to another in Nepal. There is progressive refinement in defining and linking quality education to children's learning. For example 'Basic and Primary Education Project' emphasized, "Teachers will be able to use appropriate method of teaching to achieve the objectives of the lesson" (MOE, 1997). 'Concept paper for further support on Basic and Primary Education in Nepal 2004-2009' (MOES, 2003a) pointed out a need to de-emphasize rote learning.

The Core document of EFA (MOES, 2003b) envisioned a classroom by 2015 as: "... the curriculum and educational materials are designed so as to ensure active, child-centered learning delivered through a wide range of teaching-learning methodologies. Teachers evaluate students through a range of formal and informal techniques, using these assessments to identify each student's strengths and weaknesses so that they may adapt their teaching methodology to cater for the needs of students as individuals, and so improve the quality of each student's learning." Thus, EFA documents have pointed out that the emphasis on rote learning and teacher-centered approach has remained as dominant pedagogical practices at the primary level. The similar situation is observed in lower secondary schools also. Child-centered approach, individualized instruction, formative assessments are pointed out to be practices for reforming classroom pedagogical practices. School Sector Reform Core Document proposes "... promote independent learning by students being education under diverse situation... a child's mother tongue will be employed as the medium of instruction up to grade three... flexible
instructional arrangements will be developed and employed..." (MOES 2007).

From the above discussion, it is clear that a number of gaps were reported by several studies on the pedagogical practices between the Nepalese classrooms and intentions as stated in the various commission reports. The various studies of Formative Research Project (FRP) have also revealed that classroom teaching-learning was mostly teacher dominated, there was more emphasis on rote learning, and repetition of the textual materials was common practice in the classroom teaching learning. It was also reported that there was lack of instructional material, classroom space and seating arrangement did not allow easy movement of the teacher and students, and classroom display was negligible.

The major cause for the gap in pedagogical practices is due to lack of pedagogical competencies in school teachers. Hence, it is a common felt need to assess the necessary pedagogical competencies of lower secondary school (LSS) teachers for implementing child centered teaching and learning.

**Objectives**

1. To identify the pedagogical problems of Lower Secondary School (LSS) teachers.
2. To assess the necessary pedagogical competencies of LSS teachers for effective teaching.
3. To suggest pedagogical competencies for solving the pedagogical problems of LSS teachers.

**Methodology**

The present study was an exploratory study for identifying both pedagogical problems of LSS teachers and necessary pedagogical competencies for solving such problems. This study has adopted qualitative approach based on in-depth interaction with the LSS teachers and researcher's own observation. The required information were collected through open-ended questionnaire as well as Focus
Group Discussion (FGD). Two Educational Training Centres (ETC) of Kathmandu and Kavre were chosen purposively for this study where LSS teachers were involved in teacher training. A total of 15 participants from each ETC were randomly selected for the study.

Delimitation of the Study:

This study is of qualitative nature with limited sample. Besides, in this study the samples involved were from public/community schools only. Hence, the findings of the study may have limited scope for generalization. However, information collected and analysis made would provide some important insights into pedagogical problems of LSS teachers and in identifying necessary pedagogical competencies for becoming effective LSS teachers.

Major Findings of the study

The major findings of this study are grouped into the following two major headings: (i) problems related to pedagogy of LSS teachers and (ii) necessary pedagogical competencies for becoming effective LSS teachers.

(1) Problems related to pedagogy of LSS teachers

The problems are outlined into the three categories as following:

Problems related with the students:

- Students of public schools lacked interest, motivation and positive feeling towards study, which made them difficult to learn smoothly in the classroom.
- Large number of students in each class created much noise and disturbed the whole class.
- Unhealthy competition among the students and unethical examination pattern have emphasized on rote learning than on practical learning.
- Most of the contents of the curriculum are theoretical, not useful for future and not practical oriented.
Most of the students are irregular in public schools. There is no fixed time for admission. Late admission and irregularity of the students in the schools seem to be the major problems of public schools.

Language difficulty is found in the students of most of the public schools.

Students with low achievement level usually join the public schools creating problems in quality teaching and learning.

Problems related with school teachers

Most of the lower secondary school teachers have to take classes whole day. They had no sufficient time for correcting copies of the students and preparation for effective teaching.

Classes are overcrowded hampering quality of teaching learning.

They lacked the knowledge of new curriculum and new topics included in the various subjects.

Teachers have to teach various subjects in a day making it difficult for them in preparing for teaching. Teaching subjects are also changed every year.

Teachers also lacked the skill of using various instructional techniques appropriate to the topic and objectives and to prepare no or low cost instructional materials.

Students differed significantly in their educational level. Hence, it is quite difficult for teachers in dealing with the heterogeneous group.

Teachers lacked commitment towards their profession due to various reasons.

Problems related with school administration

Public schools have no sufficient fund for providing instructional materials, lab materials, furniture and other physical facilities.
There is a lack of sufficient and proper furniture in the classroom.

Lack of required instructional materials has affected to fulfill the objectives of the curriculum.

There is a lack of subject teachers in the schools.

There is also a lack of appropriate classrooms in the schools. The size of classrooms is small in comparison to the number of students enrolled.

Textbooks, teacher guides and other educational materials are not available in needed numbers and in the beginning of the session.

Most of the respondents expressed that teacher training is essential for the teachers for developing necessary pedagogical competencies in order to become effective teachers.

(2) Necessary pedagogical competencies for becoming effective LSS teachers

The necessary pedagogical competencies identified for becoming effective LSS teachers are categorized into the following groups:

Competencies related to preparation for teaching

1. Ability to use curriculum, textbooks and teacher's guide for effective teaching.

2. Ability to base teaching and instructional techniques to achieve curriculum objectives.

3. Ability to decide what to teach, how much to teach and why to teach (formulate behavioural objectives for teaching the lesson).

4. Ability to prepare daily lesson plans considering the children's needs, interests, and characteristics by developmental stage.

5. Ability to prepare unit plans and annual plans.

6. Ability to plan for independent study, group work/team work to bring variety in teaching.
7. Ability to plan for grade, multigrade and subject teaching.
8. Ability to prepare and select appropriate instructional materials from locally available materials as appropriate to the lesson.

**Competencies related to classroom management**
1. Ability to arrange seating arrangements of students so that the teacher can reach each student.
2. Ability to use wall space in the classroom for displaying learning materials prepared by the students.
3. Ability to maintain a reasonable level of discipline in the classroom so that the atmosphere for learning in the classroom does not get disturbed.
4. Ability to develop friendly relation with the students.
5. Ability to create stimulating and enjoyable learning environment.

**Competencies related to presentation of lesson**
1. Ability to communicate and issue instructions in a polite, clear, simple, pleasant manner and understandable language.
2. Ability to demonstrate a sound knowledge of students' interest, needs and characteristics by development stages.
3. Ability to project himself/herself in a pleasing and friendly manner upon entering the classroom.
4. Ability to link previous lesson with new teaching.
5. Ability to demonstrate a sound knowledge in the teaching subject(s).
6. Ability to use blackboard properly and effectively.
7. Ability to ask questions properly and encourage students to answer.
8. Ability to encourage shy students of the class to participate in classroom activities.
9. Ability to use local language as a means of explaining and exploring concepts where necessary.

10. Ability to use instructional materials as appropriate to the lesson.

11. Ability to demonstrate a sound knowledge of various student friendly and student-centered teaching techniques that address the student's needs, interests, and characteristics.

12. Ability to use a variety of instructional strategies, encourage students' development of critical thinking, and problem solving.

13. Ability to use basic principles of teaching (concrete to abstract, simple to complex, known to unknown, parts to whole, whole to parts, etc).

14. Ability to be friendly and cooperative to the student.

15. Ability to treat all the students equally and impartially.

16. Ability to provide opportunities for each student to learn individually and in groups.

17. Ability to create appropriate learning environment for providing meaningful learning experiences related to subject matter to all students.

18. Ability of using rewards for good works of the students and various motivation techniques for motivating students towards learning.

19. Ability to receive and provide feedback during teaching learning activities.

20. Ability of summarizing the lesson.

**Competencies related to assessment of students**

1. Ability of using formative and summative evaluation.

2. Ability of using subjective, objective tests as well as oral and other devices of evaluation for assessing students' learning.
3. Ability of keeping individual records of students' performance and achievements and monitoring their progress.

4. Ability of using mean, percent and other statistics in interpreting the test scores obtained by the students.

5. Ability of ranking students on the basis of their performance and achievements.

6. Ability to manage students' promotion to higher classes properly.

7. Ability to assess and find out whether the planned objectives were achieved/fulfilled.

8. Ability to plan remedial teaching for weak students.

9. Ability to use various methods to evaluate the success of teaching (e.g. students' opinions, parents' opinions, and students' results).

10. Using feedback from assessment to improve the teaching learning process.

11. Ability to assist students to express themselves effectively in writing and in speech.

12. Ability to ensure that the expressions made by the students are logical and systematic.

13. Ability to use effective communication skills including questioning and responding skills.

14. Ability to demonstrate skills in using continuous assessment system (CAS).

Recommendations

Based on the findings, the following recommendations are suggested:

- The minimum qualification for LSS teachers should be B.A. or equivalent in order to mastery the teaching contents and to increase the maturity level of the teachers.
All the teachers should have basic teacher training. The teachers need to develop competencies on classroom teaching methods/techniques and use of proper strategies according to the needs and interests of the students. They should be able to decide what to teach, how to teach and why to teach. They should be able to apply child friendly and learner-oriented approaches for effective teaching learning. Hence, teacher training is essential for developing pedagogical competencies of teachers for making them effective teachers. The subject-wise short term refresher training should also be provided to the teachers for effective teaching.

Teachers should have the ability to prepare annual plans, daily lesson plans and plan for group works. They should be able to select and prepare appropriate instructional materials.

Teachers should understand growth, development, characteristics and interests of learners. Considering these factors they should be able to create best learning environment to maximize their learning.

Considering the teaching load of the teachers, there should be some free time to the teachers for planning and preparation of teaching, home-work checking and conducting continuous assessment of the students.

The maximum number of students for each class and teacher-students ratio should be determined. Classroom should not be overcrowded. The area of the classroom should be spacious enough to accommodate fixed number of students.

Students in a classroom vary in various ways – language they speak, their interest, learning styles, ability, achievement level, home background, etc. A teacher’s role is to organize learning for all children to help them learn to maximum according to their capacity

Curriculum should be relevant to the students' need and it should provide life skills helpful for generating income.
Instructional planning and implementation should be based on curriculum. Teachers should understand what curriculum is and how to use curriculum for classroom instruction and assessment. Hence, proper orientation of curriculum should be provided to the LSS teachers.

- Classroom management skill is one of the important skills for the effective teachers. For effective teaching learning, arranging classroom seating (making it flexible and easy movement to make teacher and students reach each other), classroom display, getting attention of the students, proper classroom control, etc. are important.

- Parental education should be provided to the parents so that they understand the importance of educating their children and send them regularly to the school.

- Prior to the construction of classroom, their design should be prepared on the basis of required space, light, and ventilation as per the norms and standards.

- School Management Committee should be active in generating funds for the development of the schools.

- Teachers’ content knowledge is also important for effective classroom delivery. Hence, subject-wise training should be ensured for bringing effectiveness in teaching. Along with pedagogical skills, content knowledge should be developed.

- Continuous assessment and formative use of assessment should be emphasized on training programmes. Assessment and evaluation are important undertaking in the teaching learning process. Both formative and summative use of evaluation should be emphasized to develop assessment tools to evaluate learning objectives of the curriculum and to support students' learning. They should use different types of assessment tools rather than depending only on paper and pencil test.

- The successful teachers should be effective communicator. Hence, communication skill should be developed. They should
be soft spoken, clear voiced, speak multi languages, and have effective communication skill.

- In designing the curriculum for teacher training, components such as child psychology, school level curriculum, classroom management, planning of teaching, instructional techniques, formative and summative evaluation, use of various tools in evaluating students, preparation and use of instructional materials, and communication should be emphasized.

Conclusion

There are a lot of problems related to pedagogical competencies in LSS teachers for effective teaching learning as expressed by the LSS teachers themselves. Hence, prior to hiring and appointing teachers, they should receive teacher training for developing pedagogical competencies. Only teacher training programmes can develop pedagogical competencies in the teachers for effective teaching. Thus, only after providing teacher training, teachers should be employed and engaged in teaching profession. The minimum qualification for LSS teachers should be Bachelor's level. It is in this context, a fixed policy regarding the appointment, qualification and training of teachers seems to be an urgent need with long term vision to improve the quality of education in the country.

The teaching-learning situation in LSS is rather depressing as expressed by the LSS teachers. Using rote learning, repetition of textual material and application of teacher centered strategies in the classroom should be replaced by the problem solving and student centered strategies for effective teaching.

In designing the curriculum for teacher training courses/packages, practical oriented courses should be included in order to develop pedagogical competencies. Courses related to child psychology, school level curriculum, classroom management, planning of teaching, instructional techniques, preparation and use of instructional materials, preparation and use of various tools for assessing students, formative and summative evaluation, and effective communication should be emphasized.
References

CERID. 2002. Effective Classroom Teaching Learning (Phase 1: Classroom delivery). Kathmandu: FRP for BPEP.


Towards Making National Context Inclusive for Inclusive Education

Dr. Bharat Bilas Pant∗

The Context

It has been a common issue throughout the world that the children with disabilities or learning difficulties are often marginalized within or even sometimes excluded from the school system. In many developing countries, the children remain hidden. In traditional thinking and way, the education of children with disabilities takes place in special schools or institutions distinct from, and outside of, the institutions of the regular school and university system.

Inclusive education believes on the inclusive settings where students with and without disabilities have equal opportunities to participate and learn in a common classroom. Inclusive education means that all students in a school, regardless of their strengths or weaknesses in any area, become part of the school community. They are included in the feeling of belonging among other students, teachers, and support staff.

Moreover, the concept of ‘children with special educational needs’ extends beyond those who may be included in handicapped categories to cover those who are failing in school for a wide variety of other reasons that are known to be likely to impede a child’s optimal progress. Whether or not this more broadly defined group of children are in need of additional support depends on the extent to which schools need to adapt their curriculum, teaching and organization to provide additional human or material resources so as to stimulate efficient and effective learning for these pupils "(International Standard Classification of Education - ISCED, 1997).

Especially in a resource scare settings and country, inclusive education is found to be effective equally to provide regular education to a child with special needs. Generally, people think that

∗ CERID, TU
disabled children are different and need special treatment in education, as attention is not paid to them in normal classroom situation. Today, a large proportion of disabled children are in fact educated in institutions of the regular system in many countries.

The fundamental principle of inclusive education is that every child has a right to education and that the education system needs to be flexible to accommodate the learning needs of all children. It is a philosophy that places children at the center and demands that it is not children who need to change to fit into the existing education system, but rather the education system needs to become child-centered to meet the learning needs of all children. Hence, the emphasis is on making schools child-friendly, mainstreaming children with disability into general schools, and creating a non-discriminatory education system where all children have equal opportunity in learning.

In the present world, an inclusive education model suggests that students with disabilities, no matter how severe, should be taught in the regular education classroom with support services provided within that classroom. Segregated setting is against the principle of inclusion. Every student should be recognized potentially able and creative and the school environments (organization, methods, values and attitudes) should be considered an inevitable part of it. The notion of inclusiveness indicates the principle of non-segregation which relates to the needs of all learners. An inclusive activity is one where each student is actively involved in ways that are educationally/socially beneficial.

**International Efforts towards Inclusive Education**

In June 1994 representatives of 92 governments and 25 international organizations formed the World Conference on Special Needs Education, held in Salamanca, Spain. This inclusive tendency was also a strong feature of the Salamanca Statement on Principles, Policy and Practice in Special Needs Education, agreed by the representatives of 92 governments and 25 international organizations in June 1994. This Conference was instrumental in reaffirming the right to education of
Towards Making National Context Inclusive for Inclusive Education

every individual, as enshrined in the 1948 Universal Declaration of Human Rights, and renew the pledge made by the world community at the 1990 World Conference on Education for All to ensure that right for all regardless of individual differences. During 1990-2000 A.D., considerable activities took place in many countries to move educational policy and practice in a more inclusive direction.

The World Education Forum (Dakar, Senegal, April 2000) was the first and most important event in education at the dawn of the new century. By adopting the Dakar Framework for Action, the 1,100 participants of the Forum reaffirmed their commitment to achieving Education for All by the year 2015 and entrusted UNESCO with the overall responsibility of co-ordinating all international players and sustaining the global momentum (http://www.unesco.org/education/efa/wef_2000/index.shtml).

Inclusive Education got impetus from World Conference on Education for All (1990), held in Jomtien. The principle of inclusive education was adopted at the World Conference on Special Needs Education: Access and Quality (Salamanca, Spain, 1994) and was restated at the World Education Forum (Dakar, Senegal, 2000). Since the Dakar World Education Forum in April, 2000, Education for All (EFA) is the first priority for UNESCO's Education Sector. According to the six goals of the Dakar Framework for Action, education for the most vulnerable children should be an integral part of the overall school system throughout the world. The South African Federal Council on Disability (SAFCD), called for the development of a single inclusive education system for South Africa locally in October 1995.

Despite the initiatives of the international organizations, NGOs and donors, the efforts, in general, have been fragmented and limited to small projects in the filed of inclusive education. Inclusion, as a crosscutting issue should be the guiding principle for the development work with governments towards Education for all. The right to education applies to everybody and need for developing policy guidelines was endorsed by the conference.
Inclusive Education in USA

Inclusive education as a way to provide quality education for all children and youth is also known as mainstreaming, integration, full inclusion and regular education initiative. USA’s Federal statutes have been mandated to ensure that students with disabilities are not removed from their home schools or classrooms unless their educational needs could not be met in those places with supports.

Provision for legal requirements is one of the crucial things to be considered in inclusive education so that related organizations and educational institutions provide education for children with disabilities in regular education classroom. The legal provision however should not be a barrier to the teachers or schools who have tried to include students with disability in normal classroom teaching.

In USA, the most current language of the federal mandate concerning inclusive education comes from the 1997 amendments to the Individuals with Disabilities Education Act (IDEA) (http://www.ed.gov/offices/OSERS/IDEA/q_and_a.html).

Inclusive Education in UK

UK schools have a responsibility to provide a broad and balanced curriculum for all students and the National Curriculum is considered as the starting point. All students are provided with relevant and appropriately challenging work at each key stage through national curriculum. And it has set out three principles – setting suitable learning challenges, responding to pupils’ diverse learning needs and overcoming potential barriers to learning and assessment for individual and groups of people as essential to a more inclusive curriculum (http://www.nc.uk.net/inclusion.html).

The national curriculum provides guidelines on the flexible approach to take account of any gaps in pupils' learning resulting from missed or interrupted schooling.

Similarly, under the principle of responding to pupils' diverse learning needs, teachers are required to set high expectations and provide opportunities for all pupils irrespective of gender, special educational...
needs, disabilities, social and cultural backgrounds, ethnic groups, and diverse linguistic backgrounds. This principle further indicates that teachers need to be aware that pupils bring to school different experiences, interests and strengths which will influence the way in which they learn. Teachers should plan their approaches in a way that all pupils can participate actively in lessons.

The above principles thus emphasize the roles of teacher in inclusive education. Teachers who have taught in an inclusive classroom say the philosophy of inclusion hinges on helping students and teachers become better members of a community by creating new visions for communities and for schools. Inclusion is about membership and belonging to a community. In fact, inclusive education practices show that it involves all types of good instructional practices that a successful teacher thinks about children and develops ways to reach all children.

A summary of research on inclusive education in USA shows different perspectives of inclusive education from the view point of teachers who are involved in teaching inclusive education.

- There is no single formula for becoming an inclusive teacher or an inclusive school. Inclusion is providing more options for children as ways to learn.
- One of the basic elements in teaching and learning is that children of all ages should learn and grow in environments that resemble the environments that they will eventually work in.
- A school graduate is expected to be living and working in a community which is diverse. Therefore inclusion is a key while the pupils are in school. Therefore inclusive education means teachers working with students in a context that is suitable to a diverse population of students. Inclusion is based on the belief that people/adults work in inclusive communities, work with people of different races, religions, aspirations, disabilities.
Inclusive Education in Nepal

The challenges of putting this concept into practice are numerous as inclusive education is a relatively new concept in Nepal. While policy and decision makers are yet to internalize this concept, there is an urgent need to ensure that educational planning and management, teacher training, and curriculum and teaching learning materials all embrace the principles of inclusion. Inclusive education is a developmental approach seeking to address the learning needs of all children, youth and adults with a specific focus on those who are vulnerable to marginalisation and exclusion. The inclusive curriculum includes strong parental involvement, students making choices, and a lot of hands-on and heads-on involvement.

In Nepal various studies have been conducted to estimate the size of special needs children and also attempt has been made to develop training curricula for teachers. However, appropriate attention for introducing inclusive education is yet to be provided.

A national survey (1989) has detected 4.9% of the population to be mentally retarded and about 5000 mentally retarded persons are getting education, training and care from the government and nongovernmental sector(Kafle, in Education and Development 2003, P.10). The situation analysis of disability in Nepal conducted in 2001 by National Planning Commission/UNICEF/New Era revealed that about 62 % of all disabled have no education (UNICEF, 2003, P.13).

Under its five-year program for the primary sub-sector EFA 2004-09, Nepal has adopted inclusive education as one of its key strategies for implementation. As an effort towards reaching a common understanding of inclusive education, the Department of Education (DOE) of the Ministry of Education and Sports has developed the following definition of Inclusive Education through a National Seminar organized in March 1-2, 2003.

“Inclusive education is a process of developing educational system that ensures the opportunity for receiving education in a non-discriminatory environment in their own community by respecting
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the multicultural differences. Inclusive education believes on the principle that all children can learn if they are given appropriate environment and support to address their needs and recognizes the importance of the ownership of the community in schools. Inclusive education is a strategy to identify those children at national and local level who are in danger of being deprived of education or are in danger of dropping out from the school due to lack of essential appropriate environment and support, and it encourages to follow a child centered teaching and learning to fulfil social, cultural and educational needs of all children.”

Nepal's Education for All National Plan of Action (EFA, NPA), 2001-2015 is designed under the overall concept of inclusive education approach with purpose of promoting inclusion and non-discrimination among various social groups. In this connection, the Department of Education has been involved in various activities such as analyzing the education needs of all children, implementation and monitoring of Inclusive Education programs and extending quality education opportunities for marginalized and excluded children with support of UNESCO Kathmandu. DOE has also identified the following target groups for inclusive education: girl child and women, children with disability, Dalit children, minority ethnic groups, street children, children affected by conflict, children affected by trafficking and sexual abuse, children severely affected by poverty, children of bonded labourers, children in jail, children infected and affected by HIV/AIDS, child lepers, and child labourers.

In Nepal the Social Services National Coordination Committee (now the Social Welfare Council) had a Disabled Coordination Committee to look after special education programme. The inclusive education started in Nepal from the time of BPEP I( 1992-99) as part of a joint programme of Nepal and Denmark later on supported by the government, World Bank, DANIDA, JICA, and UNICEF to increase access to primary schools in 40 districts. A national special program
was established in 1993 covering 23 of the 40 districts by including children with visual, hearing, speech, mental and physical impairment. The Special Education Unit of BPEP then implemented the program for the establishment of integrated structure, teacher training and human resource at the national and district level by involving community through orientation and awareness program and provision of residential facilities for children with disabilities (UNICEF, 2003). However limitations were observed in the programme. CHIRAG (1988) found that all disabled children eligible for grade 1 to 5 were, in fact, placed in single room and taught as a common class. In more than 60 percent of the cases, students with disabilities were not integrated in regular classes (UNICEF, 2003). Inclusive education practically should comprehensively cater to the differing needs of the children studying together in a regular class.

In recent years, BPEP II (1999-2004) has introduced inclusive education by involving primary school to identify and assess children with disabilities, training for special education teachers, and providing appropriate teaching-learning material. The number of districts thus covered increased from 23 to 45 districts.

In terms of education for special needs children, a status report-2005 indicates that the physical progress made in this components was recorded to be 92.58% (Status Report-2005:11).

In the review and analysis of the existing curriculum, textbooks, and teachers’ guides from the perspective of various stakeholders, it is revealed that the existing curriculum and teaching learning materials are not inclusive in their content and approach to teaching. They have pointed out that issues of ethnic minority, Dalits, people with disability and those of gender and human rights are covered only in very small proportions in the existing curricula. Consequently, textbooks do not adequately reflect the above issues and concerns and they continue to sideline issues of groups that have been historically excluded, i.e. women, Dalits, Janajatis, and people with disability.

Hence, in order to create an inclusive curriculum, it is necessary to not only orient the curriculum developers on the fundamentals of inclusive education, but also there is a need to change the curriculum
development process itself to ensure wider participation and consultation of various stakeholders. Also, it is necessary to clearly state inclusive teaching and assessment strategies in the curriculum as well as in teachers’ guides. Curriculum content must be changed to make it more balanced and non-discriminatory, and it must clearly state that textbooks are produced based on the curriculum must embrace the principles of social inclusion and equity. Guidelines for book writers must be developed stating the basic principles of inclusion including non-discrimination, equity and equality, and cultural representation. Although the policy push for inclusive education is already there as reflected in the EFA document and Secondary Education Support Program (SESP), the challenge today is to accomplish these tasks given the limited technical capacity within the system in this area.

In recent years, the teachers, students and other stakeholders (women’s groups, child right groups, ethnic groups, Dalits and disabled) raised this issue during the regional workshops and through the stakeholder analyses of the existing curriculum. The National Curriculum Framework by the Curriculum Development Centre stands as an evidence to such practice. In this connection, after reviewing the existing curriculum, different stakeholder groups have pinpointed the lack of inclusiveness in the curriculum, textbooks, teaching strategies and evaluation procedures to address the diverse needs of different castes and ethnic groups, children with disabilities, and children with other disadvantages.

The tenth development plan also has indicated for making special provision for providing facilities of education from pre-primary to bachelors’ level for the disabled. The Secondary Education Perspective Plan (SEPP, 1997), Secondary Education Development Plan (SEDP, 2001) also insisted on the creation of a high quality learning environment to be supplemented by specific measures that address the needs of disabled and disadvantaged groups and particularly women from disadvantaged groups who are marginalized in terms of secondary education. Overall, it is suggested
that following measures are essential to follow for inclusive education.

**Legal Provision is Essential**

Guiding principle for the development work with government towards Education for All was considered to be basic in inclusive education. The right to education applies to everybody and therefore there is a need for legal provision and developing policy guidelines to ensure the effective implementation of inclusive education.

Awareness raising and training for related personnel and stakeholders

Awareness raising and training on inclusive education is crucial to educate different people of the community to avoid the widespread myth that disabled pupils should be cured before they are to return to general education. Training programs should be designed for teachers, teacher educators, parents, and community and policy makers.

**Open and Flexible Curricula**

Also special attention must be given to the curriculum for children with a learning disability. The content of teaching and training should be rationally weighted between different fields of study such as personal development, communication training, life skills, leadership and moral development training useful for daily living and various forms of creative activities. To support regular curriculum, supplementary reading materials suitable to blind should be made. Teaching should facilitate rather than hinder. The content of teaching and training should be equally divided between different fields of activities such as personal development, communication training, sensory training, motor training, activities for daily living and various forms of creative activities. Introduction of inclusive education component in pre-service as well as in-service teacher training courses from primary through secondary level is a must. Specifically, following provisions should be made:
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- Orientation for educational administrators and policy makers.
- Awareness generation for parents and community collaboration.
- Induction of inclusive education component in pre-service teacher training courses both at elementary as well as secondary level
- Orientation for educational administrators and policy makers.

Increasing Access for Learning Disabled and Special Needs Groups

In South Asian Region, many children are beyond access and are marginalized within education. The place of special schools is almost non-existent and therefore inclusive education still does not have full acceptance in schools and society which, however, do not present a solution to this problem. Therefore existing community and institutional schools must take an active role in school development as models, centers for guidance and support services to regular schools. Physical facilities for physically impaired and blind should be increased. Access to curriculum materials, classroom and lab facilities should be friendly.

Development of Materials

Material development for creating awareness for general public, community parents, policy makers, educational administrators, teachers, teacher educators, and newspapers and journals addressing children with special needs, are essential efforts.

Research and Innovation and Promotion of Networking

Study of existing good practices for inclusive education at national and regional level is necessary. Further, collection of existing researches by questionnaires and also through internet and study of existing good practices for inclusive education are needed. Besides, joining existing networks and coordination and sharing at regional and international level is equally important.
Suggested Reading


http://interact.uoregon.edu/wrrc/akinclusion.html

http://www.unesco.org/education/efa/ed_for_all/background/jomtien_declaration.shtml


http://www.unesco.org/education/information/50y/brochure/tle/156.htm


MOES, 2001. Secondary education development plan (SEDP), HMG/Nepal


MOES, 2003. Meeting the goal of education for all: compilation of the thematic reports, HMG/N, MOES, Kathmandu, Nepal
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Effectiveness of School Health Programme Concerning Adolescence Sexual and Reproductive Health

Shyam Krishna Maharjan Ph.D. *

Introduction

Nepal Health Sector Strategy and Nepal Health Sector Implementation Plan (NHSP) have clearly envisaged information education and communication (IEC) and behaviour change communication (BCC) as appropriate strategies in order to enhance peoples' awareness and healthy lifestyle by achieving essential health care service. In this context, NHEICC has been launching IEC/BCC activities like production and dissemination of IEC materials in local language, conduction of school health programme and local cultural and folk activities, orientation on gender sensitisation to service providers, production and broadcasting radio programme through FM stations, still slide show in cinema halls, and health education exhibition programmes in the community with the support of UNFPA in Nepal in order to bring awareness on health of the people. Among these activities, school health programme is one of the most concerned and significant activities related to health education which is conducted by the staffs of District/ Public Health Office in the schools to develop awareness of school adolescents toward adolescence sexual and reproductive health.

School health education programme is one of the best approaches to bring favourable change in health behaviour of the school students. Previously, it was considered as a theoretical course provided mainly by the campuses of Faculty of Education in health education curriculum. However, this programme is not given priority in the schools. Recently, Ministry of Health has recognised it as an integral component of public health services and included reproductive and primary health related activities in the program since students can contribute in creating awareness in the community. Although courses

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on reproductive health have been offered in the school curriculum, the schools lack trained health education teachers. Surprisingly, teachers other than the subject teachers, have been teaching this subject. As a result of this, students' level of awareness on sexual and reproductive health could not be promoted effectively.

District/Public Health Offices organised school health education programme at the community level and assigned the staff of Primary Health Care Centre and Health Post and Sub Health Post to conduct health education activities especially related with adolescence reproductive health in the peripheral schools from the health institutions.

The objectives of the study were to identify the adolescents' knowledge on reproductive health including physical change, reproductive system, delayed marriage, safer sex, STIs, HIV and AIDS and prevention and control measures of communicable diseases, and to find out the impact of school health education programme on students' knowledge and behaviour regarding sexual and reproductive health.

**Methodology**

The study is descriptive and cross sectional in its nature. Both quantitative and qualitative methods have been implemented for achieving the objectives of the study. The study covered 10 districts from all five development regions and two ecological regions, Terai and Hill. The study attempted to cover some sample districts and areas which are supported by UNFPA in implementation of IEC/BCC activities on adolescence sexual and reproductive health. Districts/Public Health Offices are launching school health programme in those sample districts. A total of 400 students aged 10 to 20 (boys 206 and girls 196) were selected as the respondents for the study. From each selected district, 40 students from programme were selected purposively including 10 students from each selected schools in which school health programme has been launched by the District/Public Health Office. Likewise, 198 Health post and Sub health post
staffs including 110 male and 88 female of sample district were selected on the basis of convenience sampling.

A semi-structured in-depth interview schedule, questionnaire and focus group discussion were the tools of the study. These tools were piloted in three districts namely Chitawan, Bhaktapur and Kavrepalnachowk. Based on the result of the pilot and comments and suggestions obtained from the experts, tools reviewed minutely and were given final shape.

Results and Discussion

The results and discussion were made on the basis of collected data and information as following:

Student's participation in school health activities

Table 1 shows that a high proportion of students (83 %) from Dang and more than 70 % from Kapilvastu, Kanchanpur, and Bardiya districts had attended the school health education classes. The table further shows that more than two thirds (68.50%) students participated in classes conducted by the district health staff.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>District</th>
<th>Yes</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Illam</td>
<td>21 (52.50%)</td>
<td>19 (47.50%)</td>
</tr>
<tr>
<td>2</td>
<td>Saptari</td>
<td>23 (57.50%)</td>
<td>17 (42.50%)</td>
</tr>
<tr>
<td>3</td>
<td>Mahottari</td>
<td>30 (75.00%)</td>
<td>10 (25.00%)</td>
</tr>
<tr>
<td>4</td>
<td>Makawanpur</td>
<td>27 (67.50%)</td>
<td>13 (32.50%)</td>
</tr>
<tr>
<td>5</td>
<td>Gorkha</td>
<td>28 (70.00%)</td>
<td>12 (30.00%)</td>
</tr>
<tr>
<td>6</td>
<td>Kapilvastu</td>
<td>31 (77.50%)</td>
<td>9 (22.50%)</td>
</tr>
<tr>
<td>7</td>
<td>Dang</td>
<td>33 (82.50%)</td>
<td>7 (14.50%)</td>
</tr>
<tr>
<td>8</td>
<td>Bardiya</td>
<td>30 (75.00%)</td>
<td>10 (25.00%)</td>
</tr>
<tr>
<td>9</td>
<td>Dadeldhura</td>
<td>20 (50.00%)</td>
<td>20 (50.00%)</td>
</tr>
<tr>
<td>10</td>
<td>Kanchanpur</td>
<td>31 (77.50%)</td>
<td>9 (22.50%)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>274 (68.50%)</td>
<td>126 (31.50%)</td>
</tr>
</tbody>
</table>
Status of school health education activity

It was found that a high proportion of the students had participated in the interaction and discussion with health staffs. However, only 27% students were found to have participated in essay writing on health. It was revealed that 92% students who attended the health education classes conducted by the health staff got an opportunity to learn about reproductive health, which encouraged them to change their health behaviour to a great extent.

Table 2: Students' participation in sexual and RH related IEC/BCC activities

<table>
<thead>
<tr>
<th>Reasons for participation</th>
<th>No. (Percent)</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Changes in adolescents</td>
<td>199 (72.60)</td>
<td>103 (51.70)</td>
<td>96 (48.20)</td>
</tr>
<tr>
<td>2. Reproductive system</td>
<td>142 (51.80)</td>
<td>75 (52.80)</td>
<td>67 (47.20)</td>
</tr>
<tr>
<td>3. Safer sex behaviour</td>
<td>92 (33.60)</td>
<td>48 (52.20)</td>
<td>44 (47.80)</td>
</tr>
<tr>
<td>4. HIV &amp; AIDS</td>
<td>199 (72.60)</td>
<td>103 (51.80)</td>
<td>96 (48.20)</td>
</tr>
<tr>
<td>5. Gender equity</td>
<td>58 (21.20)</td>
<td>27 (46.60)</td>
<td>31 (53.50)</td>
</tr>
<tr>
<td>6. Drug Abuse</td>
<td>159 (58.00)</td>
<td>89 (55.90)</td>
<td>70 (44.10)</td>
</tr>
<tr>
<td>7. Age at marriage</td>
<td>176 (64.20)</td>
<td>94 (53.40)</td>
<td>82 (46.60)</td>
</tr>
<tr>
<td>8. FP, safe motherhood</td>
<td>107 (39.10)</td>
<td>56 (52.30)</td>
<td>51 (47.70)</td>
</tr>
<tr>
<td>9. Responsible parenthood</td>
<td>34 (12.40)</td>
<td>86 (51.20)</td>
<td>82 (48.80)</td>
</tr>
</tbody>
</table>

Health staffs of District/Public Health Service had served to teach the students different areas of health. However, they mainly focused on reproductive health and HIV & AIDS. Higher proportion of the students (72.60%) participated in the sessions on HIV & AIDS and changes in adolescent (Table 2) behaviour. According to the collected data, about one third of the total respondents got information on safer sex while only a few students got information on responsible parenthood in the class. Female students' proportion on participation in health education classes was found to be lower than that of male students.
Involvement of health staff in school health education programme

Out of 198 health staffs, more than two thirds (67%) reported to have conducted school health education activities. Proportion of staff involved in such activities was found to be highest in Dadeldhura (85%) and Saptari (81.8%) followed by Dang, Ilam and Kapilvastu. In Gorkha district, more than half of the staffs were involved in school health education activities.

Health staffs can act as important resource persons for conducting school health programme in the schools. They are expected to address reproductive health issues and major local health problems in the health education activities. From the focus group discussion with the students, it was revealed that health staffs covered contents like family planning, STIs, HIV & AIDS, changes during adolescence period and reproductive health issues. However, according to the responses of the health staffs they mainly covered HIV/AIDS/STIs (33.1%) and reproductive health issues (34.6%), TB/leprosy (19.5%), diarrhoeal diseases (9.8%) and ARI/Pneumonia (3.0%). The health staff used different kinds of teaching strategies like talk programme, interaction and speech. Like wise, posters were the main teaching materials used by the health staffs while teaching health education in the schools. About 80% students reported that health education was mainly taught by school health education teachers.

The number of female teachers involved in teaching health education was very few. Likewise, the number of female health workers conducting reproductive health education sessions in the school has lower than that of male health workers. Girl students reported that they felt uncomfortable to ask questions and interact with male teachers or health workers. It signifies that girls are still not getting good learning environment for reproductive health education and communication in the school. This suggests that recruiting female health education teachers is necessary.

School health education sessions conducted by the D/PHOs focusing on sexual and reproductive health of adolescents were well
responded by the students as they were curious to learn about reproductive organs, physiological changes and reproductive health issues in a greater detail. The students suggested that health education should be taught by health staffs and trained health education teachers so that they can gain correct and recent information on these issues. It is learnt from the focus group discussion (FGD) that school teachers hesitated to deliver topics on reproductive health issues and they skipped some topics without teaching the students. The students of Gorkha and Bardia reported that they could not interact with school teachers openly when they asked some questions regarding sexual organs and reproduction. The school teachers tended to be emotional and discouraged the students to ask such questions about sexual and reproductive health. Such situation demotivated students to learn more about sexual and reproductive health.

From the FGDs with students, it was revealed that school health education activities conducted by health staffs were effective. The students mentioned that health staff have sufficient knowledge and experiences about the subject matters and they provided clear and detailed information using instructional materials. Students felt comfortable to ask questions and interact with the health staff without any hesitation. Thus the health staffs satisfied the curiosity of the students.

**Impact of school health education programme on students’ knowledge and behaviour**

Ninety per cent students reported that they gained health knowledge from the classes of the health staff. Majority of them reported to have used such knowledge in their daily lives. Almost all students were found conveying such information to their friends and other people (Table 3) which is the very positive aspect of the programme.
Table 3: Impact of School Health Education (SHE) Activities

<table>
<thead>
<tr>
<th>Knowledge and behaviour</th>
<th>No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge gained from SHE activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>247</td>
<td>90.1</td>
</tr>
<tr>
<td>No</td>
<td>27</td>
<td>9.9</td>
</tr>
<tr>
<td>Total</td>
<td>274</td>
<td>100</td>
</tr>
<tr>
<td>Use of Knowledge in daily life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>190</td>
<td>69.3</td>
</tr>
<tr>
<td>No</td>
<td>84</td>
<td>30.7</td>
</tr>
<tr>
<td>Total</td>
<td>274</td>
<td>100</td>
</tr>
<tr>
<td>Communicating health knowledge and information to others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>258</td>
<td>94.2</td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>5.8</td>
</tr>
<tr>
<td>Total</td>
<td>274</td>
<td>100</td>
</tr>
</tbody>
</table>

One of the main objectives of school health education activities conducted by the D/PHO is to make students aware on areas of reproductive health and primary health care. Nearly, all (95.0%) students in this study were found aware of HIV/AIDS and a large number of them (67.3%) was familiar with the sexually transmitted infections. They also gained knowledge about mode of transmission and preventive measures of HIV/AIDS. Very few students reported abstaining from sexual intercourse as a strategy for the prevention of STDs. About one-third students opined that people living with AIDS (PLWA) should be isolated from home and community because the majority disagreed with the view that it is a simple manageable illness. However, most students had consensus that PLWAs should be treated as other people without any discrimination.

Adolescence is the period of transition from childhood to adulthood. It is the most challenging period of human life. Most of the students are found to be aware of physical changes and secondary sex characteristics that appear during the adolescence stage of human development. Likewise, most of the students could mention the physical changes and development of secondary sexual characteristics such as growth of breast and pubic hair (88.8%), enlargement of external genital (81.8%) and menarche (92.0%) among the girls. It is revealed that 86% students knew about the growth of genital organs
taking place during this period. Similarly, 92% mentioned the appearance of moustache and arm pit hair among the boys during the adolescence period. Obviously, they learned about the opposite sex's physical change by reading text books and through their teachers.

The FGD findings are consistent with the findings from the interviews. Students who participated in the discussion expressed that health education activities conducted by health staff were very effective because they used various teaching materials and provided knowledge and skills related to their lives without any hesitation even in sexual health. They also mentioned that school teachers often skipped the lessons related to reproductive organs while health staffs shared additional information on sexual and reproductive health which further motivated them to learn more about sexual health.

It was because of exposure to learning opportunities provided by health staff in the school, the students are able to mention physiological and mental changes in early adolescence period and describe the benefits of delayed marriage. During the FGD session, most students expressed that delayed marriage leads to small and happy family, better care of mother and infants, and reduction of risk during the pregnancy and delivery as compared to early marriage. They have decided to marry at the age of 20-25 years. They also reported that they were transferring knowledge and skills gained from the health education classes in their daily lives. Furthermore, after getting knowledge and information from health education classes, they paid more attention on health, nutrition, sanitation and preventive measures of diseases including HIV/AIDS and STIs, and visited the health facility when they faced some kinds of health problems. They also reported that they were able to talk confidently about family planning devices and reproductive health issues with their peers, parents and neighbours. One of the girl participants from Makawanpur reported that her mother adopted sterilization measure when she convinced her mother.

Some of our friends who had got opportunities to participate in reproductive health classes felt shameful to buy sanitary pad and discuss on menstrual problems. We shared our knowledge and experiences about reproductive
health with our friends. We do not carry heavy load during menstrual period now. We think these are some examples of our behavioural changes occurred after attending the health education classes (Girl student participants in FGD from Ilam).

They also reported that they were familiar with health post staff and aware of services provided by them for the community people. It shows that IEC/BCC programme conducted by District/Public Health Office was both impressive and effective.

**Conclusion**

School health education has been recognised as an important component of reproductive health services among the service providers and school teachers. It is found to be the most effective health education and communication strategy. It is encouraging to note that the number of classes and students participating in school health sessions has increased in most of the districts. Health education classes conducted by the health staff on reproductive health are found more effective in cases which school teachers skip or hesitate to interact with the students. Those students who participated in the classes run by the health staffs have learned about adolescence reproductive and sexual health including HIV/AIDS and STIs & prevention & control of preventive diseases in greater details.

Indeed, the campuses under the Faculty of Education throughout the country have been producing health education teachers, however, most of them have less opportunity to teach this subject since any subject teachers other than of health education like science, language, social studies etc. are assigned to teach this subject. Similarly, no post for health education teachers has been created by the Ministry of Education. This kind of practice indicates that school health programme by the health staffs be continued until the schools can recruit trained health education subject teachers. As a matter of fact, school health education programme cannot be sustained by the efforts of District/Public Health alone. It is suggested that the school health programme should be launched through the efforts of health education teachers with support from District/ Public Health Offices.
Acknowledgement

NHEICC, UNFPA and DRC deserve special thanks for providing the writer the opportunity to carry out this study.

References


Teacher Training for Improving the Quality of Teaching Learning Situation

– Bhupendra Hada, Ph.D.’

The Context

Teaching is a very challenging job, but we often take it lightly and easy, because it seems easy in looking, but it is one of the most complex and challenging works when done. The act of teaching is not only dynamic, but also it is an adventurous experience. In order to improve the quality of teaching, teacher must be trained. A trained teacher can influence the feeling of students and he/she can teach the students in a way and style that he/she learned in the training period. From this, the students can be made capable and they can adjust in any complex society with their knowledge and learned activities.

Teachers are often termed as the change agents of the society. Teacher education system is also said to reflect the developmental paradigms the country. The initiator of change and the bearer of its impact are the teachers who are equipped with a sound pedagogy based on the solid foundation of updated knowledge and information (Malla, 1998, cited in Kafle and Aryal, 2000: 114).

As good school education is said to be the quality education and an effective and functional teacher education system is an inevitable component of a good education system. Hence, training of teachers is essential and indispensable as the trained teachers can play the vital role for the future career of students through their effective classroom activities.

Meaning of Quality Education

Quality can be defined from various angles. In this reference, Pfeiffer and Coote (cited in Nariwal, 2001: 2) have remarked that quality is a slippery concept. It is slippery because it has such a variety of meanings and the word implies different things to different people.
Much of the confusion over the meaning of quality arises, because it can be used both as an absolute and relative concept. Quality in this prospect is used to convey status and positional advantage. In another way, quality in the technical sense is employed as a relative concept – the relative definition views quality as an attribute of a product as service but add something which is ascribed to it. Quality in this sense is about measuring against a specification.

Likewise, Ranjit (2007: 100) has argued that quality education is obviously viewed in terms of input and outputs of education. This means that quality is assessed by looking at conditions (inputs) believed to be essential and desirable to produce quality and by looking at evidences (outputs) that the school does achieve quality.

Ranjit (2007: 100) further stated that measures of quality education differ from institution to institution. Studies and reports show that there are no universally accepted mechanism to measure the real quality. Researches have pointed out indicators of quality education categorized under teacher, student, curriculum, physical and financial infrastructures and other measures. Some measures of quality are used more widely in improving education in several countries, such as:

(a) Measurement of literacy / illiteracy;
(b) Enrolment ratios; and
(c) Measurement of educational attainment by level of quality of formal schooling.

In the same way, UNESCO (1996: 92) has reported the quality of education in the following way:

"Pupils having completed a level of education should have acquired certain level of knowledge. The three main inputs to the education process are the teachers, the curriculum (content and methods), and the educational materials; it is often difficult to determine the respective roles of each of these components, because they interact in a global manner with the pupils. However, the training process is an expensive one, and it is certainly possible to obtain a product of better
quality by combining the various inputs more judiciously, and very serious studies of the quality of the products. The inputs and process are indispensable for a well-founded choice of the best investment to be made.

Similarly, Nariwal (2001: 2) further argued that quality in education is a pervasive but elusive concept – it is multifaceted and embraces three broad aspects, such as (a) goals, (b) the process deployed for achieving the goals, and (c) how far goals are achieved. Quality therefore plays a pivotal role not only in higher institutions of learning, but also in primary school which lays the foundation of every child.

Likewise, Grisay and Mahlck (1982, cited in Ranjit, 2007: 102) believe that the notion of quality can not be limited to student results alone, it should also take into account their determinants, i.e. the various means such as the provision of teachers, building, equipments, curriculum, textbooks, and the teaching learning process, etc. Hence, the general concept of quality of education is composed of three interrelated dimensions; the quality of teaching practices (process) and the quality of results (output and outcomes).

From many studies and literatures on quality education, it seems that the concept of quality is said to be complex and multi-dimensional. Grisay and Mahlck (1982, cited in Ranjit, 2007: 102) further suggested the following in evaluating quality of the educational systems:

1. The extent to which the products or results of the education provided (i.e. the knowledge, skills, and values acquired by the students) meet the standards stipulated in the system's educational objectives, and

2. The extent to which the knowledge, skills, and values acquired are relevant to human environmental conditions and needs.

But Koirala's (2001: 12) argument was different from others. He stated that ability to pass, ability to be creative, ability to earn, ability to provide service is said to be an educational quality.
Hence, in our Nepalese perspective, high pass percentage of examination in school or school's internal efficiency is said to be the form of quality schooling.

**Evolution of Teacher Training System in Nepal**

The general definition of training is that it is the process of behavior shaping, because training makes the teacher perfect in his/her classroom teaching. Without training, a single teacher cannot teach his/her students effectively. Hence training for teacher is inevitable and competency in teaching results from it.

In this context, Kafle and Aryal (2000: 114) stated about training that Nepal has moved through a myriad of teacher education systems over the years since the dawn of democracy in 1951. The first teacher training institution was established in Nepal in 1949 to train teachers for Basic Schools. However, the training program was discontinued in 1953.

Similarly, in Nepal, the beginning of training for the teacher was started from the establishment of normal school. It was established for the teaching profession in the form of College of Education in 1956. Now a days, it is known as the Faculty of Education with its separate identity in higher education. Training institutions such as National Center for Educational Development (NCED) directly work under the Ministry of Education.

In connection to the initiation of training of primary teachers in Nepal, the establishment of Basic Teacher Training Center in 1947 is said to be the earliest endeavour. Since then, the country has experienced various types of primary teacher training programs. These training programs were different in terms of duration, management, mode of operation evaluation, of trainees and the like. Now, at present, 10-month primary teacher training as per the recommendation made by National Education Commission (NEC) is in practice. The 10 month PTT program is divided into three phases of which the first and the third phases is operated by National Center for Educational Development (NCED) whereas the second phase is implemented by Distance Education Center. NCED has established
several Primary Teacher Training Centers (PTTCs), known as ETCs, to conduct the PTT program. Prior to conducting the first phase of the training, the trainers of PTTCs receive 7 to 10 days’ training with training manual as support material as well (Shrestha, 2000: 105). In this connection, Bista (2002: 64) added that pre-service and in-service training programs are operated in essence for the development of teacher's capability.

The table below shows the government teachers by level, sex, and training status.

**Table 1: Number of government teachers by level, sex and training status in 2062.**

<table>
<thead>
<tr>
<th>Training status</th>
<th>Primary</th>
<th>Lower Secondary</th>
<th>Secondary</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Total</td>
<td>Female</td>
</tr>
<tr>
<td>Trained</td>
<td>7718</td>
<td>23376</td>
<td>31,094</td>
<td>792</td>
</tr>
<tr>
<td>Partially trained</td>
<td>6301</td>
<td>17,035</td>
<td>23,336</td>
<td>247</td>
</tr>
<tr>
<td>un-trained</td>
<td>3,276</td>
<td>11,610</td>
<td>14,886</td>
<td>645</td>
</tr>
<tr>
<td>Approved positions</td>
<td>-</td>
<td>-</td>
<td>80,775</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>17,295</td>
<td>52,021</td>
<td>69,316</td>
<td>1,684</td>
</tr>
</tbody>
</table>

(Source: DOE, 2005)

Table 1 shows a very uneven allocation of female teachers for lower secondary and secondary community schools in comparison to primary community schools. This reveals female teachers are much more encouraged in primary community schools and government's policy is also clear that female teachers should be compulsorily appointed for primary level. The percentage of female teachers out of the total reported was 21 percent, with 25 percent in primary, 12 percent in lower secondary and only 7 percent in secondary education. The table further demonstrates the very wide difference between male and female teachers in Nepal. Immediate need is there for achieving gender equity in school education in Nepal.

According to data available in 2003, there are about 32 percent, 31 percent, and 48 percent trained teachers in the primary, lower
secondary, and secondary level respectively (DOE, 2003, cited in Sharma, 2006: 131). Different types of school level training are launched by National Center for Educational Development (NCED) through its 34 training centers and affiliated various private sector training centers located at different strategic locations of the country. These institutions could manage training through distance mode and direct interactive modality about only 10,000 teachers per year. The trend of recruiting untrained teacher is still in practice. In this way, the teacher training program seems to be trapped in a vicious circle (Sharma, 2006: 131).

**Teachers' Role in Quality Improvement**

The success of an educational institution depends largely upon its teachers' sensitive role. He/she should mould the students' aesthetic and intellectual personality. Teaching is an art and teacher is an artist. A trained teacher can influence the students by his/her gesture just as an artist shows his/her art on the dais. Thus, teachers' role is sensitive and indispensable for effective and quality teaching.

In this context, educationist Burton (cited in Chauhan, 1983: 40) specified teaching in that it is the guidance, stimulation, direction and encouragement of learning. The definition has four key words, which need explanation: stimulation, which means to cause motivation in the learner to learn new ways. It is to crate an urge to learn. In the same way, direction means teaching is not a haphazard activity, but it is a goal directed activity, which leads to pre–determined behavior. Similarly, guidance means to guide the learner to develop his / her capabilities, skills, attitude and knowledge to the maximum for an adequate adjustment in the external environment. Likewise, the last key word is the encouragement of learning to encourage the learner to acquire maximum learning.

In reference to the definition of teaching, Morrison (1934: Agrawal, 1995: 34) stated that teaching is an intimate contact between a mature personality and less mature one which is designed to further the education of the latter.
In this connection, Brubacher (1939, cited in Agrawal, 1995: 34) added that teaching is an arrangement and manipulation of a situation in which there are gaps and obstructions which an individual will seek to overcome and from which he/she will learn in the course of doing so.

Similarly, psychologists and educationists have interpreted teaching in various ways, such as

(i.) Teaching is communication between two or more persons who influence each other by their ideas and learn something in the process of interaction.

(ii.) Teaching is a process in which learner, teacher, curriculum, and other variables are organized in a systematic way to attain some pre-determined goal.

(iii.) Teaching is to cause motivation to learn, and

(iv.) Teaching is to fill in the mind of the learner by information and knowledge of facts for future use.

(v.) (Source: Chauhan, 1983: 4)

In a nutshell, teaching is to cause the child to learn and acquire the desired knowledge, skills and also desirable ways of living in society. The major purpose of teaching is to help the student to respond to his/her environment in an effective way. Therefore, a trained teacher can play the dynamic role to provide quality education through his/her impressive and meaningful teaching.

From the above mentioned scholars' views it is clear that teaching will become more effective and meaningful if their definitions are followed strictly by every teachers of the institutions (schools and colleges).

**Solutions to Improve the Quality of Learning**

In order to provide quality teaching learning situation, following suggestions are recommended:
Teacher Training for Improving the Quality of Teaching Learning Situation

- Teacher should demonstrate the various instructional materials in the classroom for students to clearly understand related lesson.
- For student centered learning, the school should be developed as an institute in a democratic atmosphere.
- Teacher education or teacher training should earn professional respect and trust from the stakeholders.
- A coordinating mechanism should be established to integrate all teacher education programs.
- Minimum in-service training should be provide to more teachers as far as possible.
- As physical infrastructure of the school affects the teaching learning situation, the infrastructural facilities should be made available in abundance to ease the process of teaching-learning situation.
- Supervision is essential and indispensable to enhance effective teaching learning situation. Class supervision makes the teacher efficient in his/her teaching. Therefore, regular supervision is needed at all levels for effective and meaningful teaching.
- Regular parent teacher interaction is needed to strengthen relationships which in turn contributes to explore effective ways for meaningful teaching.
- Prepare a detailed implementation plan of academic program for the operating of classes in an academic year in order to systematically guide the delivery of teaching.
- Invite and recognize outstanding public contributions for both effective performance of teachers (Shrestha, 2001: 59) and regular monitoring of school activities to raise the quality of school education.
- As malnutrition affects young bodies to grow and in practice their brain development and subsequently, cognitive capacity, is impaired by it (Kenny, 2003: 3), supply of nutritious food has a role in encouraging the teaching learning situation to take place effectively.
As clean drinking water is essential for all human beings to combat intestinal infestations of many kinds of worms, and conditions, such as diarrhea (Kenny, 2003: 3), every educational institutions must keep the clean drinking water for the students that helps in the delivery of teaching smoothly.

Concluding Remarks

Quality education is essential for the country, because today's age is a competitive age and our educational standard has to be in perfect harmony with the developmental process of the world. The products (outputs) of the education system, otherwise, will not be able to face the complex situations (Upreti, 1997: 3).

It is a universal truth that learning from present and past experiences, quality and competency of teachers and management of schools / colleges determine the overall quality of education. Studies have reported that much of the problem related to the quality of education will be solved, if high quality training is provided to teachers. Similarly, unstimulating and unproductive teachers will eventually be discarded by students and will be increasingly discharged of their duties by the school management (Shrestha, 2004: 8). It is in this context that teacher training institutions have to play vital professional role and produce teachers in an interactive mode so that they will feel fully equipped and supported in adjusting and making their place in the profession of teaching. Lack of effective teaching in institutions (i.e. schools/colleges) will have a set back to quality education. The country's wishes, the can be fulfilled through quality education which can be assured only creating a meaningful teaching learning situation.

References


Education Financing in Nepal

Dr. Dhruba Raj Shiwakoti

Context of the Study

Governments all around the world are heavily involved in all levels of educational activities. This activity takes up a significant portion of public expenditure. There is a strong reason for public intervention in the financing of education on the ground of equity and efficiency. To provide educational opportunity to each qualified potential student at possible minimum cost is always a priority.

Many developing countries experienced rapid growth in education in the past two or three decades. During this time of rapid expansion, education expenses were often the most important item in their budgets as it was financed and provided mainly by the government. This was also true in countries where private education was well developed.

Although the average public expenditure on education increased steadily as percentage of Gross National Product (GNP) and the national budget between 1960 and 1974 in these countries, this fiscal effort could not continue beyond 1970s. Many governments suffered from acute budget shortage during the 1980s and 1990s. In the early 1990s, it became clear that the actual expenditure (the allocation rate was lower than national income growth) allocated in education had decreased much more in a number of developing countries.

Confronted with the financial constraint, developing nations have faced many critical educational issues such as erosion of educational quality and its relevancy, increasing educational unemployment, gross educational inequality, declining status of teaching profession and the most worrisome of all, decreasing public confidence in education.

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Thus, it is reasonable to judge whether the allocated expenditure on education is adequate and whether the sufficient financing by families and students through cost-sharing measures seems justified. Besides, public spending on education is often inefficient when it is misallocated across levels and within levels.

**Current Issues of Education Financing in Nepal**

Nepal has made national and international commitment for ensuring ‘Education for All”. In order to achieve this goal, the Tenth Plan (2002-2007) has put stress on balanced development of schools, colleges and universities. Adopting this sort of mechanism, the Tenth Plan anticipates producing workforce capable of reducing poverty prevailing in the country.

Over the past five decades, there have been considerable quantitative achievements in education. There were only 321 primary schools, 11 secondary schools and 250 university graduates in 1951. Currently, there are 4,502,697 children enrolled in 27,525 primary schools (Grades 1-5), 1,961,973 children in 13,510 secondary schools (6-10 Grades), 257,267 students in 991 higher secondary board affiliated higher secondary schools (11-12 Grades) and 219,054 students in 495 campuses in 2005 (World Bank, 2006). The total of these students plus Early Childhood Development students constitute one-third (33.96 percent) of the total census population of Nepal in 2001 (7,863,548 students as against the population 23,151,423). Likewise, this sector employs a total of 117,486 government teachers in schools (1-10 grades) and 14,269 teachers and staffs in 495 campuses, which are owned by five universities (Table 1). Thus, in terms of size of the engagement and employment, education sector can be considered a large ENTERPRIZE owned by the government in Nepal.
Even though enrolments and access to all levels of the system have improved dramatically over the past five decades, education system in Nepal is one of the youngest in the world because, primary education is still far from being universal and that post-primary education requires structural reforms. Higher secondary education is in early stage of development and about 2 percent of the total population of Nepal are having access to higher education. Moreover, there is a general concern over the unacceptably low quality of education received by the majority of students at all levels of education. Public education system that serves to 90 percent of the population and essentially to the poor, is not functioning effectively.

However, ensuring that all children gain a quality education requires adequate funding to education sector and a balanced distributive system of resources within education sub-sectors. Thus, financing is a key consideration in the policy debate to justify the appropriate level of financing in the country. This study has been developed to analyze

### Table 1: Number of Schools/ Campuses by Level of Education, 2005

<table>
<thead>
<tr>
<th>Level</th>
<th>School/ Campus</th>
<th>Students</th>
<th>Teachers</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECD/PPC</td>
<td>-</td>
<td>922,557</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Primary (1-5)</td>
<td>27,525</td>
<td>4,502,697</td>
<td>88,555#</td>
<td>-</td>
</tr>
<tr>
<td>Lower Secondary(6-8)</td>
<td>8,471</td>
<td>1,374,796</td>
<td>16,213#</td>
<td>-</td>
</tr>
<tr>
<td>Secondary(9-10)</td>
<td>5039</td>
<td>587,177</td>
<td>12,718#</td>
<td>-</td>
</tr>
<tr>
<td>Higher Secondary(11-12)</td>
<td>911*</td>
<td>257,267</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tertiary</td>
<td>495</td>
<td>219,054</td>
<td>6,455@</td>
<td>7814@</td>
</tr>
<tr>
<td>Total</td>
<td>42441</td>
<td>7,863,548</td>
<td>123,941</td>
<td>7,814</td>
</tr>
</tbody>
</table>

Source: School level educational statistics of Nepal, Department of Education (DOE), 2006, Bhaktapur. DOE & Annual report by University Grants Commission (UGC), 2004/05, Kathmandu: UGC.
* Schools affiliated to Higher Secondary Education Board.
# Government teachers only.
Data not available.

@ Data of tertiary education refers to the year of 2004/05. This data includes only the teachers and staff of 77 campuses and 6 schools who are working in five Universities (Tribhuvan, Mahendra, Purvanchal, Kathmandu and Pokhara). Thus, it excludes the data of 412 campuses that have affiliation to these universities.
government’s policies and priorities of funding mechanism of education sector and sub-sectors. A study of these aspects is essential to record achievements and also to develop optimum options for future reforms.

**Objectives of the Study**

The primary objective of the study is to present an analysis of the financing system of education in Nepal. More specifically, the study intends to accomplish the following objectives:

- To measure educational expenditure as a percentage of gross national product and total government expenditure and see how their share allows to make international comparison;
- To examine annual expenditure on primary, secondary, higher secondary and tertiary education;
- To find out the unit cost of primary, secondary, higher secondary and tertiary education in order to see how they are linked to each other.

**Methodology of the Study**

This study is based on secondary sources of information. Time series data covering a period of 15 years were collected from Tribhuvan University Grants Commission Ministry of Finance Department of Education and other related institutions. Relevant documents were also collected to explain the nature and trend of these data from the above sources.

**Educational Development in Nepal**

Nepal’s planned development started from the year 1956. Even though the Ministry of Education was established as early as 1951, planning for educational development began only with the Fourth Five Year Plan (1970-75). Since then, the country has adopted several important educational strategies to facilitate this sector. The important ones carried out during different national development plans are summarized below.
Nepal National Education Planning Commission (NNEPC) 1956 and All Round National Education Committee 1961 were formed in order to modernize and expand the education sector. The recommendations of NNEPC after its implementation created a positive environment in education sector. The other relevant activities carried include the launching of Free and Compulsory Primary Education Project in Chitwan and Jhapa districts and in some VDCs of other districts. This project was launched in 107 VDCs in the kingdom of Nepal until the end of the seventies.

The Fourth Plan (1970-75) implemented National Education System Plan (NESP) 1971/75 (NESP was initiated in 1971 but the act of implementation completed in the first year of the Fifth Plan) for all-round development of education in Nepal.

Primary education was declared free of tuition charges in the first year (academic year 1976) of the Fifth Plan (1975-80). The provision of Free Textbooks up to Grade III was also made in the plan. The plan was also guided by the principle of appointing trained female teachers with an aim to increase the enrolment of the pupils especially girls.

Two important projects were undertaken during the Sixth Plan period (1985-90) for improving the standard of education. An education project was launched in Seti Zone with a view to bring about qualitative improvement in education. Similarly, Primary Education Project was undertaken to improve the quality of education at this level.

The country made some quantitative progress in education sector with the rise in the number of students, teachers and schools/colleges during the Seventh Plan (1985-90) as the plan has also laid emphasis more on quantitative targets. For the purpose of expanding the scope of tertiary education, Mahendra Sanskrit University was established in this plan period (NPC, 1985).

A National Education Commission was formed in the plan gap year 1991. Secondary education at Grade VI was also announced free in the same year. Gradually, the subsequent grades of secondary
Education were made free during the Eighth Plan (1992-97), for example, Grade X was declared free in FY 1995/96 (NPC, 1992). Also Secondary Education Development Project was implemented in 1993 for making education management strong and efficient, which was reorganized as Secondary Education Development Center in 2000/01. With regard to the improvement of the quality of primary education, Basic and Primary Education Project was operated. Besides, a High Level Education Commission (HLEC) was constituted in 1997 that submitted its report in 1998.

The Seventh and Eighth Plan promoted higher/tertiary education by setting up four Universities, and Higher Secondary Education Board (HSEB). The HSEB was established in 1989 (2046) to impart Grade XI, and XII education in Secondary Schools to the high school graduates. The similar details about the universities are furnished in the following box.

**The story of the development of universities in Nepal**

The establishment of the eldest university of Nepal, Tribhuvan University, dates back to 1961 (2016 BS). Thereafter, came into existence Mahendra Sanskrit University in 1986 (2043 BS) with a view to complement the former one as it did not award advance academic degrees in Sanskrit Education.

In 1991 (2048 BS), Kathmandu University in private sector was established to offer similar courses to that of Tribhuvan University. Then, Eastern (Purbanchal) University and Pokhara University were established in 1994 (2051 BS), and 1997 (2054 BS), respectively, in the form of regional universities. Besides, B. P. Koirala Health Science Academy and National Physical Health Science Academy are being operated with an equal status of university. These academies produce MBBS/BN/MD/MS and MSC graduates. Lately, Lumbini Boudha University was established in the country.

In the Ninth Plan (2002-2007), the progress of primary and secondary education in terms of net enrolment was satisfactory but it could not meet the targets of setting up Open University and additional
universities due to the lack of required infrastructures. The Tenth Plan (2002-2007) aimed to set up these universities and establish at least one community school in each constituency to add up to 205. It also intended to raise net enrolment rate of primary level to 90 percent, the gross enrolment to 65 percent at the lower secondary level and 45 percent at the secondary level.

**Educational Enrolment in Nepal**

It is only after 1951 that the gradual development of school education appeared in Nepal. From 1951 to 1970, the number of primary schools increased from 321 to 7,256 and enrolment at this level increased from 8,505 to 449,141. By 1990, there were 17,842 schools, 71,213 teachers and 2,788,644 students at primary level.

The expansion of secondary education system also appeared only after 1951. In 1951, there were 11 schools that surprisingly rose to 6,124 in 1991. Likewise, the number of students increased from 1,680 (6-10 Grades) to 773,808 between 1951 and 1991(SEDP, 1997).

The occurrence of such a boom in education system has these reasons: the country entered into the democratic era in 1951; there was a growing social demand for education as a result of the growing consciousness about the value of education; and government made series of planning efforts in education.

However, a phenomenal growth in tertiary level education appeared only in late sixties. In 1970, there were 17,200 students at tertiary level (enrolled at Tribhuvan University) which rose to 51,356 in 1981. It indicates three times increase in a period of ten years. By, 1991 the total enrolment at Tribhuvan University (both public and private campuses) was over 150,000.

The evolution of the enrolment in education is shown in terms of GER and absolute number in Table 2. Likewise, Table 3 presents a state of affairs of growth rates of students. Thus, these two tables together provide a basis to look over the student enrolment and their growth rates during a period of fifteen years. As seen in Table 2, the total number of students enrolled in 1991 was approximately 3.8 million
that reached approximately to 7.9 million in 2005. These tables therefore indicate that the number of students increased more than double within a period of fifteen years. The increase in participation is also explained by the gross enrolment ratios (GER) of these levels. The GER at primary level in 1991 was 106 percent whereas in 2005 it reached 145.4 percent. Similarly, the GER at lower secondary level increased from 40 percent to 76 percent between 1991 and 2005. However, the GER at secondary level slightly increased from 32 percent to 49.3 percent over the same period.

It is suggested that the intersectoral increase should be examined carefully as some of these data have alternative explanations that are presented at the end of each Table.

Table 2: Evolution of Educational Enrolment in Nepal

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-primary</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>13</td>
</tr>
<tr>
<td>Primary</td>
<td>106</td>
<td>2,884,275</td>
<td>114</td>
<td>3,263,050</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>40</td>
<td>378,478</td>
<td>48</td>
<td>726,300</td>
</tr>
<tr>
<td>Secondary</td>
<td>32</td>
<td>395,330</td>
<td>32</td>
<td>290,143 &amp;</td>
</tr>
<tr>
<td>Higher Secondary</td>
<td>*</td>
<td>*</td>
<td>NA</td>
<td>2657</td>
</tr>
<tr>
<td>Tertiary</td>
<td>NA</td>
<td>150,618*</td>
<td>NA</td>
<td>134,445*</td>
</tr>
<tr>
<td>Total</td>
<td>3,808,701</td>
<td>4,416,595</td>
<td>5,483,158</td>
<td>7,863,548</td>
</tr>
</tbody>
</table>


* The act of giving affiliation to Secondary school by Higher Secondary Education Board began in 1992. The classes of Grade 11 were started in 38 schools in the academic year of 1992.

* Data of Tribhuvan University only (Own and affiliated Campuses). Once UGC was established in 1994 the act of collecting information for the rest universities on or before 1995 was not carried out.
The students of tertiary education have decreased because of the decrease in the enrolment of Tribhuvan University. In 2000, there were 146,749 students enrolled in Tribhuvan University (own campuses) but this number decreased to 132,777 in 2005. This decrease is the result of increasing enrolment in higher secondary education. The data of tertiary education refers to the year 2004/05.

NA means data not available.

Similarly, the decreasing number of students is seen in secondary education because until 1992 lower secondary level included grades 6-7 and secondary level included grades 8-10, but from 1993 onward, lower secondary level included grades 6-8 and the secondary level, grades 9-10. Thus, the size of students in secondary level was decreased and the size of lower secondary students increased.

### Table 3: Growth Rate of Students by Level

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>-</td>
<td>3.13</td>
<td>2.65</td>
<td>5.58</td>
</tr>
<tr>
<td>Lower secondary</td>
<td>-</td>
<td>17.70</td>
<td>7.15</td>
<td>9.47</td>
</tr>
<tr>
<td>Secondary</td>
<td>-</td>
<td>-7.44</td>
<td>6.48</td>
<td>12.02</td>
</tr>
<tr>
<td>Tertiary</td>
<td>-</td>
<td>-2.80</td>
<td>13.96</td>
<td>-0.86</td>
</tr>
</tbody>
</table>

Source: Table 1.

The sign – refers to base year. In 1995, the growth rate of tertiary level has decreased as Table 2.1 includes the students of Tribhuvan University only. Negative sign is also seen in secondary education because until 1992 lower secondary level included grades 6-7 and secondary level grades 8-10, but from 1993 onward lower secondary level included grades 6-8 and the secondary level, grades 9-10.

### Educational Financing in Nepal

The data on financing of education in Nepal provide a base to measure educational expenditure as a percentage of gross national product and total government expenditure. Also, they permit an analysis of how these shares compare with international figures. Similarly, the data examine annual expenditure on primary,
secondary, higher secondary and tertiary education. Also, the unit cost of primary, secondary, higher secondary and tertiary education is measured, in order to see how they are linked to each other.

*Educational Expenditure as a Percentage of Gross National Product and Total Government Expenditure*

Variation in achievements in education stems primarily from differences in policy choice that affect both costs and financing of education. Thus, it seems reasonable to present an analysis of educational expenditure as a percentage of gross national product (GNP) and educational expenditure as a percentage of total government expenditure (TGE).

(a) Public Expenditure on Education as a Percentage of Gross National Product

Total public expenditure on education (current and capital expenditure combined) expressed as percentage of gross national product measures the proportion of national income allocated to education sector. This is called “national effort cost” indicator and has been frequently used to make international comparison among countries.

Table 4 shows how education expenditure as percentage of GDP varies over the past fifteen years (1991-2005). The percentage of GDP ranges from 2.22 in 1991 percent to 3.81 percent in 2005. In general, the overall trend of national effort cost indicator is on the rise as it is between 2.0 – 2.5 percent for one year, between 2.5-3.0 percent for nine years, between 3.0-3.5 percent for three years, and above 3.5 percent for two years. Consequently, model value for fifteen years has appeared between 2.5-3.0 percent, for it has been repeated for nine years in Table 4. From 2002 onward, the value of national effort cost indicator is above 3 percent that has appeared close to 4 percent in 2005. Thus, the picture is not discouraging as the trend of national effort cost indicator is rising over the period.

However, the picture seen in Figure 1 presents slightly different conclusions. A cursory observation of the trend line of GDP and
education expenditure (EE) indicates that GDP is moving faster than EE which concludes that the level of national effort cost indicator is inadequate in terms of GNP. Accordingly, additional increase of EE is preferable.

The value of national effort cost indicator of Nepal appears to be inadequate, if it is compared with the study of Lewin, UNESCO, and SAARC countries.

Lewin (2001) found that the average proportion of gross national product allocated to education had risen marginally in 44 developing countries from 3.7 percent in 1985 to 4.1 percent in 1995.

UNESCO (2003) in its study of South and East Asian countries, has indicated that the percentages of gross domestic product (GDP) devoted to education show a range from 1.4 percent to 6.2 percent in 2000/01. Their spending particulars are as follows: Cambodia, Pakistan, Myanmar and Indonesia less than 2 percent; Bangladesh, the Lao People’s Democratic Republic, Macao, Nepal, the Philippines, and Sri Lanka between 2 to 4 percent; India, the Islamic Republic of Iran, Brunei Darussalam, Bhutan and Thailand between 4.1 and 5.4 percent, and Malaysia 6.2 percent.

In 2000/2001, the expenditure on education as a percent of gross domestic product (GDP) in SAARC countries was as follows: Bangladesh- 2.5; Bhutan 5.2; Nepal-3.7; India-4.1; Maldives- NA; Pakistan-1.8; and Sri Lanka- 3.1. Thus, this proportion of Nepal appears to be below the proportion of Bhutan and India but above those of Bangladesh, Pakistan and Sri Lanka (UNESCO 2003).

In conclusion, the level of national effort cost indicator of Nepal (3.81 in 2005) appears to be far below while compared with developing countries (Lewin, 2001) as these countries reached 4.1 in 1995 and in third rank while compared with South and East Asian Countries (first rank- Malaysia, second rank - India, the Islamic Republic of Iran, Brunei Darussalam, Bhutan and Thailand); and below Bhutan and India but above Bangladesh, Pakistan and Sri Lanka while compared with the SAARC countries.
(b) Educational Expenditure as a Percentage of Total Government Expenditure

Public expenditure on education as percentage of total government expenditure measures the share of public expenditure devoted to education in a given year relative to perceived value of other public spending. This indicator is called “fiscal effort cost indicator” as it assesses the priority that government places on education compared to other sectors. However, the figures for total government expenditure are less comparable internationally than those for gross national product as the relative size of public sectors differs by country.

Nepal appears to allocate an increasing proportion of educational expenditure in education. Ministry of Education and Culture (MOEC) estimated that government expenditure on education remained around 10 percent of the total government budget during the 1975-90 period.

Table 4 implies that the level of fiscal effort cost indicator of Nepal is increasing between 1991 and 2005. The fiscal effort cost indicator has varied between 12.06 and 16.75 and it is above 12-13 percent for 6 years, 13-14 percent for 4 years, and 14-15 percent for 2 years, and above 15 percent for 3 years. In absolute figure, the value of fiscal cost effort has increased approximately by 7 times (from Rs 3213 million in 1991 to Rs 21250 million in 2005). It is also worth mentioning that the total public expenditure over the same period increased only approximately by 5 times (from Rs 26641 million in 1991 to Rs 126885 million in 2005). Thus, the faster increase of educational budget than that of total public expenditure clearly indicates that education sector has received due priority in public spending.
Table 4: Educational Expenditure as Percentage of Gross National Product and Total Government Expenditure (1991-2005)

(Rs in Million)

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Domestic Product (GDP)</th>
<th>Total Public Expenditure (TPE)</th>
<th>Education Expenditure (EE)</th>
<th>Education Expenditure as Percentage of GDP</th>
<th>Education Expenditure as Percentage of TPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>144933</td>
<td>26641</td>
<td>3213</td>
<td>2.22</td>
<td>12.06</td>
</tr>
<tr>
<td>1992</td>
<td>165350</td>
<td>33595</td>
<td>4249</td>
<td>2.57</td>
<td>12.65</td>
</tr>
<tr>
<td>1993</td>
<td>191596</td>
<td>35514</td>
<td>4533</td>
<td>2.37</td>
<td>12.76</td>
</tr>
<tr>
<td>1994</td>
<td>209976</td>
<td>42691</td>
<td>5531</td>
<td>2.63</td>
<td>12.96</td>
</tr>
<tr>
<td>1995</td>
<td>239388</td>
<td>51648</td>
<td>7152</td>
<td>2.99</td>
<td>13.65</td>
</tr>
<tr>
<td>1996</td>
<td>269570</td>
<td>57566</td>
<td>7759</td>
<td>2.88</td>
<td>13.48</td>
</tr>
<tr>
<td>1997</td>
<td>289798</td>
<td>62022</td>
<td>8115</td>
<td>2.80</td>
<td>13.08</td>
</tr>
<tr>
<td>1998</td>
<td>330018</td>
<td>69693</td>
<td>8704</td>
<td>2.64</td>
<td>12.49</td>
</tr>
<tr>
<td>1999</td>
<td>366251</td>
<td>77238</td>
<td>10176</td>
<td>2.78</td>
<td>13.17</td>
</tr>
<tr>
<td>2000</td>
<td>394052</td>
<td>91621</td>
<td>11750</td>
<td>2.98</td>
<td>12.82</td>
</tr>
<tr>
<td>2001</td>
<td>406138</td>
<td>99792</td>
<td>14073</td>
<td>3.47</td>
<td>14.10</td>
</tr>
<tr>
<td>2002</td>
<td>437546</td>
<td>96125</td>
<td>14402</td>
<td>3.29</td>
<td>14.98</td>
</tr>
<tr>
<td>2003</td>
<td>474919</td>
<td>102400</td>
<td>15613</td>
<td>3.29</td>
<td>15.25</td>
</tr>
<tr>
<td>2004</td>
<td>508651</td>
<td>111690</td>
<td>18059</td>
<td>3.55</td>
<td>16.17</td>
</tr>
<tr>
<td>2005</td>
<td>557869</td>
<td>126885</td>
<td>21250</td>
<td>3.81</td>
<td>16.75</td>
</tr>
</tbody>
</table>

Figure 1 indicates that both TPE and EE are increasing over the study period. The trend values of TPE as well as EE are also increasing after 2000.

Figure 1

Like national effort cost indicator, the value of fiscal effort cost indicator also appears to be inadequate, if we compare it with the study of Lewin (2001). In 44 developing countries, he found that government budget allocated to education had risen from 14.3 percent to 17.9 percent between the data for 1985 and 1995. Nepal has approached this level only after 2003.

UNESCOIS (2003) in its study of South and East Asian countries found that expenditure on education in the government budget ranged from 7.8 percent to 31 percent in 2000/2001. This percentage was less than 10 in Brunei, Darussalm, Indonesia, the Lao People’s Democratic Republic and Pakistan and it was between 10 to 16 percent in Bangladesh, Bhutan, Cambodia, India, Nepal and Macao.
Education Financing in Nepal

Education receives close to or more than 20 percent of budget in the Islamic Republic of Iran and Myanmar and 31 percent in Thailand.

In their study of Asian countries, Tan and Mingat (1992) found that public spending on education was on average less than 20 percent of total government expenditure in 1985.

However, in SAARC countries, the percentage value of fiscal effort cost indicator of Nepal (14.1) was higher than India (12.7), Bhutan (12.9) and Pakistan (7.8) but lower than that of Bangladesh (15.7) in 2000/01. Thus, in SAARC countries, the level of fiscal effort made by Nepal seems commendable.

Thus, the fiscal effort indicator of Nepal falls far short if we compare her current level of achievements with the study of Lewin (2001), UNESCOIS (2003) and Tan and Mingat (1992) as the countries involved in these studies have achieved Nepal’s status in earlier time periods. However, among SAARC countries, the level of fiscal effort of Nepal seems commendable.

Annual Public Expenditure on Primary, Secondary, Higher Secondary and Tertiary Education

Public expenditure by level of education measures how the educational budgets are distributed among various levels of education such as primary, secondary, tertiary, vocational and non-formal education. This estimation assesses the priority of government funding accorded to different levels of education. While estimating the annual expenditure of primary and secondary level, the study has incorporated the pertinent budget such as the expenditure on basic and primary education project, education for all, text books etc. in primary education and the expenses on science education project, Budhanilkantha school, secondary education project were included in secondary education. In case of higher secondary and tertiary level, the total allocated expenses to these levels were inserted.

Table 5 and Figure 2 show how allocation of educational expenditure is distributed on primary (1-5 grades), secondary (6-10 Grades),
higher secondary (11-12 Grades) and tertiary level (Tribhuvan University).

**Table 5: Annual Public expenditure on primary, secondary, higher secondary and tertiary education (1991-2005)**

(Rs in Million)

<table>
<thead>
<tr>
<th>Year</th>
<th>Primary</th>
<th>Secondary</th>
<th>Higher Secondary</th>
<th>*Tertiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>1560</td>
<td>433</td>
<td>budget not allocated</td>
<td>902</td>
</tr>
<tr>
<td>1992</td>
<td>1969</td>
<td>633</td>
<td>1</td>
<td>1245</td>
</tr>
<tr>
<td>1993</td>
<td>2346</td>
<td>726</td>
<td>3</td>
<td>969</td>
</tr>
<tr>
<td>1994</td>
<td>2817</td>
<td>882</td>
<td>5</td>
<td>1235</td>
</tr>
<tr>
<td>1995</td>
<td>3886</td>
<td>1206</td>
<td>9</td>
<td>1231</td>
</tr>
<tr>
<td>1996</td>
<td>4163</td>
<td>1619</td>
<td>12</td>
<td>1379</td>
</tr>
<tr>
<td>1997</td>
<td>4180</td>
<td>1702</td>
<td>14</td>
<td>1701</td>
</tr>
<tr>
<td>1998</td>
<td>4538</td>
<td>2018</td>
<td>26</td>
<td>1606</td>
</tr>
<tr>
<td>1999</td>
<td>5489</td>
<td>2102</td>
<td>27</td>
<td>1915</td>
</tr>
<tr>
<td>2000</td>
<td>6658</td>
<td>2307</td>
<td>43</td>
<td>1829</td>
</tr>
<tr>
<td>2001</td>
<td>8015</td>
<td>2940</td>
<td>12</td>
<td>1680</td>
</tr>
<tr>
<td>2002</td>
<td>8414</td>
<td>2955</td>
<td>11</td>
<td>1243</td>
</tr>
<tr>
<td>2003</td>
<td>8568</td>
<td>3090</td>
<td>11</td>
<td>1436</td>
</tr>
<tr>
<td>2004</td>
<td>15112@</td>
<td>3215</td>
<td>102</td>
<td>1537</td>
</tr>
<tr>
<td>2005</td>
<td>17104</td>
<td>3694</td>
<td>120</td>
<td>1974</td>
</tr>
</tbody>
</table>

Sources: *Red books of fiscal years 1991/92-2005/06, Ministry of Finance (MOF), 1991-06, Kathmandu; MOF; Annual reports 2002/03-2004/05, University Grants Commission, (UGC), Kathmandu:UGC.*

*The tertiary level includes only the expenditure of Tribhuvan University. Data from 2002 onward for tertiary level were collected from the annual report of UGC and the other from Red Books of MOF. Government budget allocations to UGC were: 1363 million in 2002, 1410 million in 2003, 1691 million in 2004, 1974 million in 2005.
Thus, the annual allocation to TU was part of the budget from its total. Education for All (EFA) contributed to increase the budget of Primary level.

The overall budget allocation pattern from the year 1991 to 2005 shows that government has accorded high priority to primary education among four levels of education. For example, the absolute amount of government expenses at primary increased approximately by eleven times (from Rs 1560 million in 1991 to Rs 17104 million in 2005) whereas at secondary it was approximately by nine times (from Rs 433 million in 1991 to Rs 3694 million in 2005) and at tertiary level, approximately by two times (from Rs 902 million in 1991 to Rs 1537 million in 2005). At the higher secondary level, the government has begun allocating budget since 1992.

In terms of financing, the primary education has the highest status among the four levels of education from 1991 to 2005. But in case of secondary and tertiary education, the priority of the government differs over the periods. Till 1995, tertiary education is given second priority in education budget but after that period, secondary education receives second priority. Thus, government changed its priority from tertiary to secondary after 1995 declaring free secondary education in the kingdom.

In 2005, expenditure on primary education appeared to be Rs 17104 million, on secondary Rs 3694 million, on higher secondary Rs 120 million, and on tertiary Rs 1974 million which was approximately 74 percent, 16 percent, 1 percent, and 9 percent, respectively. Education for All (EFA) program has contributed to increase the budget of Primary level since 2004.

In general, the overall pattern of budget allocation suggests that government has allocated more expenditure to primary level than to secondary and tertiary levels. It indicates that government has accorded obvious priority to primary education within formal education sub-sectors. Likewise, secondary education receives second priority after 1995. Finally, tertiary level is given third priority after
1995. In case of higher secondary, the budget shows an almost increasing trend every year with substantial increase since 2004.

**Figure 2**

Unit costs of Primary, Secondary and Tertiary Education

Unit costs of primary, secondary and tertiary level explain how per year public expenditure is distributed among these levels. This indicator gives an approximate value of a country’s ability to pay for education. However, it does not allow to make international comparison because of the difficulty to convert different currencies into a single accepted currency.

The unit costs for primary (1-5 Grades), secondary (6-10 Grades), and tertiary level (Tribhuvan university) has been estimated dividing the total public expenditure of particular level by the number of community/Tribhuvan university students of the corresponding level. However, the unit cost of higher secondary (11-12 Grades) level has not been estimated because budget allocation to this level was not available.

Table 6 provides estimations of unit cost or per student expenditure for different levels of the education system during 1991-04. Figure 3 exhibits the estimated result.
According to Table 6, unit cost of tertiary education is the highest among the three levels of education throughout the study period. The unit cost of primary was at Rs 568 in 1991, Rs 1967 in 2000 and reached to Rs 4192 in 2004. Thus, it indicates seven times increase during a period of fourteen years. Similarly, the unit cost of secondary was Rs 715 in 1991, Rs 1934 in 2000 and reached Rs 2160 in 2004. It indicates three times increase. It is worthwhile to make a note that while comparing the unit costs, a primary school place was approximately double expensive than a secondary school place in the year 2004. Thus, it is concluded that the cost of one primary student is equal to the cost of two secondary students for the government.

Given the high profile of the enrolment of secondary education (GER 76 percent at lower secondary and 49.3 percent at secondary in 2005) and a low coverage of educational expenditure (unit cost of secondary is Rs 2160 against Rs 4192 for primary level in 2004) it is obviously clear that the expenditure of primary level is increasing at the cost of secondary level.

Overall, the unit cost of tertiary level shows a decreasing tendency since it has not even doubled over the period of fourteen years. It starts with Rs 8182 in 1991 and reaches Rs 11,576 in 2004. Still, the unit cost of tertiary level appears to be the highest.

The unit cost of secondary level is higher than that of primary level till 1999; however, after 1999, secondary education appears to be cheaper than primary education to the government. In reality, after 1999, the unit cost of secondary is increasing at slower rate whereas the unit cost of primary is increasing at a faster rate.

Thus, in terms of budget allocation especially after 1999, among three levels of education, secondary education is the least expensive and tertiary education the most expensive to the government. It is therefore, reasonable to expect that the unit cost of tertiary level decreases further for the government in future.
Table 6: per Student Expenditure (1991-2004)

<table>
<thead>
<tr>
<th>Year</th>
<th>Government Students</th>
<th>Govt.Exp.(Rs in Million)</th>
<th>Per Student Exp.(in Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary</td>
<td>Second</td>
<td>Hi(TU)</td>
</tr>
<tr>
<td>1991</td>
<td>2748636</td>
<td>605516</td>
<td>110239</td>
</tr>
<tr>
<td>1992</td>
<td>2854393</td>
<td>648900</td>
<td>103829</td>
</tr>
<tr>
<td>1993</td>
<td>2913581</td>
<td>800855</td>
<td>102018</td>
</tr>
<tr>
<td>1994</td>
<td>2999797</td>
<td>681166</td>
<td>97849</td>
</tr>
<tr>
<td>1995</td>
<td>3012369</td>
<td>768924</td>
<td>99438</td>
</tr>
<tr>
<td>1996</td>
<td>3168267</td>
<td>919423</td>
<td>104626</td>
</tr>
<tr>
<td>1997</td>
<td>3148943</td>
<td>932407</td>
<td>99259</td>
</tr>
<tr>
<td>1998</td>
<td>3275184</td>
<td>939423</td>
<td>122957</td>
</tr>
<tr>
<td>1999</td>
<td>3316537</td>
<td>969325</td>
<td>127355</td>
</tr>
<tr>
<td>2000</td>
<td>3385029</td>
<td>1192794</td>
<td>146749</td>
</tr>
<tr>
<td>2001</td>
<td>3583888</td>
<td>1347105</td>
<td>142308</td>
</tr>
<tr>
<td>2002</td>
<td>3579471</td>
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<td>2003</td>
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<tr>
<td>2004</td>
<td>3604645</td>
<td>1488451</td>
<td>132777</td>
</tr>
<tr>
<td>2005</td>
<td>4233873</td>
<td>1800204</td>
<td>NA</td>
</tr>
</tbody>
</table>


NA means data not available. Hi (TU) means students of Tribhuvan University studying at tertiary level.

A cursory look at Figure 3 explains the expenditure gap and height of per student expenditure for primary, secondary and higher (tertiary) level. Still, the unit cost of tertiary level is the highest which however has followed a decreasing tendency after 1999.
Conclusions

Based on the findings drawn from the analysis of data, the following conclusions are made for the present study.

Inadequate Public Expenditure on Education as a Percentage of Gross National Product

Even though the trend of national effort cost indicator is on the rise over the study period (1991-2005) and it has appeared close to 4 percent in 2005, it still appears inadequate because of two reasons. First, the comparison of the trend line of GNP with education expenditure (EE) indicates that GNP is moving faster than EE, which concludes that the level of national effort cost indicator is inadequate in terms of GNP. Accordingly, additional increase of EE is preferable. Second, the value of national effort cost indicator of Nepal appears to be insufficient while compared with the level of developing countries, South East Asian Countries and SAARC countries.

Inadequate Educational Expenditure as a Percentage of Total Government Expenditure
Nepal appears to allocate an increasing proportion of educational expenditure in education and it has been found that education sector has received due priority in public spending. In terms of enrolment coverage, there are enough gaps (GER at lower secondary 76 percent and secondary 49 percent and 2 percent enrolment in higher education) that are supposed to be filled in future. Thus, it requires additional investment. By international standard (South and East Asian countries, developing countries and Asian countries) also, the fiscal effort of Nepal appears to be inadequate.

Inadequate Public investment in secondary education

While comparing the unit cost of primary level with secondary level, the cost of one primary student appears to be equal to the cost of two secondary students for the government making secondary education the least expensive among three levels of education. After 1999, the unit cost of secondary is increasing at slower rate whereas the unit cost of primary is increasing at a faster rate. Given the high enrolment of secondary education and a low coverage of educational expenditure obviously clears that the expenditure of primary level is increasing at the cost of secondary level.

Recommendations

The following are the recommendations of the study.

Make efforts to increase public expenditure on education as a percentage of gross national product

Government of Nepal should make a gradual effort to increase public expenditure on education as a percentage of gross national product. In this regard, a range of 5 to 6 percent is desirable.

Make effort to increase educational expenditure as a percentage of total government expenditure

Government of Nepal should make effort to increase educational expenditure as a percentage of total government expenditure.
expenditure. The educational expenditure should be close to 20 percent of total government expenditure.

Increase public investment in secondary education

In annual expenditure of the Ministry of Education, it should keep and effort to increase the proportion of the budget allocated to secondary level. This is desirable to maintain the quality and future enrolment of secondary level.

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Cost Sharing Pattern of Higher Education in Tribhuvan University

Dr. Shanta Singh *

Tribhuvan University is the pioneer and largest university of Nepal, where more than 90% of students are enrolled. But due to the limited sources of income, higher education basically depends on government grants. So government is the main financer for Tribhuvan University. Tribhuvan University acquires its revenue primarily from the two sources, i.e. internal and external. The internal sources include various types of fees, income from physical assets, sales of publication, donation and others. Among them the main sources of income is the tuition fees of the students. But the level of tuition fees being charged by the Tribhuvan University is essentially very nominal compared to that of the private (affiliated) campuses. So on one hand there is a limited source of income and on the other, cost sharing from the stake holders is very low. This is the main issue of financing higher education of the Tribhuvan University. Realizing this fact an attempt has been made to study the cost sharing pattern of higher education of Tribhuvan University. The main objective of this study is to find out comparative situation of the tuition fees and the cost sharing pattern of sample public (constituent) and private (affiliated) campuses of T.U.

This is an empirical study conducted in 2005 based on the primary information or data. Among 51 Public (constituent) and 110 Private (affiliated) campuses offering bachelor level of education, this study has covered 19 general higher education campuses of Tribhuvan University. All together the study has encompassed 12% of total campuses of Tribhuvan University. It included 18% (9 out of 51) public campuses and 9% (10 out of 110) private campus. However, due to the absence of law discipline in the affiliated private campuses in Kathmandu valley this discipline is excluded in this study. So, altogether only 18 campuses and concentrated in this study. Among the 18 campuses, ten to fifteen students each from five different

* Reader, Mahendra Ratna Campus
disciplines (Law, Management, Humanities, Science and Education) of private and public campuses of three development regions (Eastern, Western, and Central) were taken as a sample. In this study 314 diploma students of different faculties were concentrated.

The opinions on cost sharing patterns of higher education, were examined in terms of selected background characteristics of the respondents i.e. students. For analysis purpose, this study is divided into following on.

1  Socio-economic characteristics (ethnicity's, religion, education and occupation)
2  Comparison of tuition fees of sample private and public campuses
3  Cost sharing pattern of higher education of sample private and public campuses

Socio-Economic Characteristics of the Students (ethnicity, sex, religion, education and occupation)

Table 1: Socio- Economic Characteristics of Respondents

<table>
<thead>
<tr>
<th>A. Ethnicity</th>
<th>Number of students (Frequency)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Brahmins</td>
<td>183</td>
<td>58</td>
</tr>
<tr>
<td>2. Newars</td>
<td>53</td>
<td>16.9</td>
</tr>
<tr>
<td>3. Magars</td>
<td>10</td>
<td>3.2</td>
</tr>
<tr>
<td>4. Chettris</td>
<td>45</td>
<td>14.3</td>
</tr>
<tr>
<td>5. Gurungs</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td>6. Rais</td>
<td>12</td>
<td>3.8</td>
</tr>
<tr>
<td>7. Others</td>
<td>8</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>314</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Cost Sharing Pattern of Higher Education in Tribhuvan University

<table>
<thead>
<tr>
<th>B. Sex</th>
<th>Number of students (Frequency)</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Male</td>
<td>234</td>
<td>74.5</td>
</tr>
<tr>
<td>2. Female</td>
<td>80</td>
<td>25.5</td>
</tr>
<tr>
<td>Total</td>
<td>314</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Religion</th>
<th>Number of students (Frequency)</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hindus</td>
<td>302</td>
<td>96.2</td>
</tr>
<tr>
<td>2. Muslims</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td>3. Buddhists</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td>4. Christians</td>
<td>2</td>
<td>.6</td>
</tr>
<tr>
<td>5. Others</td>
<td>4</td>
<td>1.3</td>
</tr>
<tr>
<td>Total</td>
<td>314</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Education of the parents</th>
<th>Father</th>
<th>Per cent</th>
<th>Mother</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Uneducated</td>
<td>58</td>
<td>18.5</td>
<td>149</td>
<td>47.5</td>
</tr>
<tr>
<td>2. Under SLC</td>
<td>90</td>
<td>28.7</td>
<td>114</td>
<td>36.3</td>
</tr>
<tr>
<td>3. SLC or equivalent</td>
<td>58</td>
<td>18.5</td>
<td>28</td>
<td>8.9</td>
</tr>
<tr>
<td>4. I.A or equivalent</td>
<td>38</td>
<td>12.1</td>
<td>11</td>
<td>3.5</td>
</tr>
<tr>
<td>5. B.A or equivalent</td>
<td>44</td>
<td>14.0</td>
<td>10</td>
<td>3.2</td>
</tr>
<tr>
<td>6. M.A or equivalent</td>
<td>22</td>
<td>7.0</td>
<td>2</td>
<td>.6</td>
</tr>
<tr>
<td>7. Above M.A</td>
<td>4</td>
<td>1.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>314</td>
<td>100.0</td>
<td>314</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E. Occupation of the parents</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agriculture</td>
<td>158</td>
<td>50.3</td>
</tr>
<tr>
<td>2. Business</td>
<td>47</td>
<td>15.0</td>
</tr>
<tr>
<td>3. Service</td>
<td>103</td>
<td>32.8</td>
</tr>
<tr>
<td>4. Industry</td>
<td>2</td>
<td>.6</td>
</tr>
<tr>
<td>5. Others</td>
<td>4</td>
<td>1.3</td>
</tr>
<tr>
<td>Total</td>
<td>314</td>
<td>100</td>
</tr>
</tbody>
</table>


**Ethnic Composition**

As shown in Table 1 the ethnic composition of the respondents was dominated by the Brahmins because more than 58 per cent students were from this ethnicity, followed by the Newars (16.9 %), Magars (3.2 %), Chhetris (14.3 %), Gurungs (1.0 %), Rais (3.8 %) and others (2.5 %), in pursuing higher education. It means other ethnicities of the society are not serious in pursuing higher education for various reasons.
Sex

The sex compositions of the students were also dominated by male members. However, it was randomly sampled. Among the 314 students, 74 per cent were male. This finding tends to show that in Nepal, male students are more interested to pursue higher education than the female students. The main reasons are gender discrimination and lack of consciousness towards female education.

Religion

In terms of religion, Table 1 shows that more Hindu students have pursued higher education. Other religious students are negligible in number in pursuing higher education. However, according to 2001 census, we have an 80 per cent Hindu population in the country.

Parents Education

Table 1 further reveals that about 48 per cent of the mothers and about 19 per cent of the fathers are uneducated. Majority of the fathers have not even completed school education. It was further observed that a negligible per cent of mothers has high level of education. The per cent indicated that the participation of female in higher education is lower than the male at all level.

Parents Occupation

Regarding the parents' occupation almost 50.3 per cent are agriculturist and 32.8 per cent are service holders. It was found that higher education was not favored by the agriculturist parents. They felt that basic education was enough for their occupation and trained their children accordingly.

In this study questions were asked to the diploma level students about the reasons for pursuing higher education. The reasons given by the respondents for pursuing higher education varied in nature which is depicted in Table 2. The common responses were to have better social status (45.2 %), better job opportunity (26.1 %), economic self-reliance (22.9 %), be a politician (1.3 %) and others.
Table 2: Reasons for Pursuing Higher Education

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Sample students of public and private campuses by regions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central</td>
</tr>
<tr>
<td>1. Better job opportunity</td>
<td>37</td>
</tr>
<tr>
<td>2. Better social status</td>
<td>55</td>
</tr>
<tr>
<td>3. Economic self reliance</td>
<td>19</td>
</tr>
<tr>
<td>4. Be a politician</td>
<td>1</td>
</tr>
<tr>
<td>5. Other members of the family are educated</td>
<td>-</td>
</tr>
<tr>
<td>6. Others</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
</tr>
</tbody>
</table>

Source: Field Survey

As indicated in Table 2, though the parents have low level of education as suited to their occupation, both the parents and the students were more aware of the value of higher education. Because they wanted to pursue higher education for better social status and economic advancement. It means higher education would play a major role in their socio economic life.

Table 3: Distribution of Annual Income and Occupation of the Parents

<table>
<thead>
<tr>
<th>Annual income of the parents</th>
<th>Main occupation</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agriculture</td>
<td>Business</td>
<td>Service</td>
<td>Industry</td>
<td>Others</td>
<td>Total</td>
<td>%</td>
</tr>
<tr>
<td>Below 25,000</td>
<td>61</td>
<td>4</td>
<td>6</td>
<td>-</td>
<td>2</td>
<td>73</td>
<td>32.2</td>
</tr>
<tr>
<td>25,000-75,000</td>
<td>57</td>
<td>14</td>
<td>23</td>
<td>-</td>
<td>-</td>
<td>94</td>
<td>29.9</td>
</tr>
<tr>
<td>75,000-100,000</td>
<td>25</td>
<td>14</td>
<td>33</td>
<td>1</td>
<td>2</td>
<td>74</td>
<td>23.6</td>
</tr>
<tr>
<td>100,000 and above</td>
<td>8</td>
<td>2</td>
<td>14</td>
<td>-</td>
<td>-</td>
<td>43</td>
<td>13.7</td>
</tr>
<tr>
<td>Total</td>
<td>158(50.3%)</td>
<td>47(15.0%)</td>
<td>103(32.8%)</td>
<td>2(0.6%)</td>
<td>4(1.3%)</td>
<td>314</td>
<td>100.0</td>
</tr>
</tbody>
</table>


Table 3 shows the distribution of parents by their level of annual income and occupation. As the table shows, among different occupations, 50.3% parents of the sample students' main occupation was agriculture followed by service (32.8%), business (15.0%),
industry (0.6%) and others (1.3%). The highest percentage of the parents (29.9%) are within the annual income bracket of between Rs. 25,000/- and Rs 50,000/- and the lowest (9.2%) within the range of Rs.1, 00,000/- and above. It is observed that the parents from agriculture and service oriented background recognize more the importance of higher education. They encouraged their children to pursue higher education.

The table also shows that students with industrialist guardians comprise the lowest 0.6% in private and public campuses of T.U. It can be inferred that students from industrialist families can afford more expensive private colleges/or foreign colleges for higher education.

The students were also asked about the sources of financial support for their higher education. It was found from the results as shown in Table 4 that about 75 per cent and 84 per cent guardians of sample private and public campuses have financially supported their children. And only 21.8 per cent and 14.9 per cent students of private and public campuses were studying on their own. It further shows that they are somehow involved in income generating work like teaching, computer operation, home tuition, service etc. But in case of scholarships, very few percentages (0.96 per cent) of the students have got different kinds of scholarships. It means the students are more dependent on guardians for financial support.

Table 4: Sources of Financial Support to Higher Education

<table>
<thead>
<tr>
<th>Sources of financial support</th>
<th>Students of private campus</th>
<th>%</th>
<th>Students of public campus</th>
<th>%</th>
<th>Total students</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Guardians</td>
<td>100</td>
<td>75.2</td>
<td>152</td>
<td>84.0</td>
<td>252</td>
<td>80.3</td>
</tr>
<tr>
<td>2. Self-finance</td>
<td>29</td>
<td>21.8</td>
<td>27</td>
<td>14.9</td>
<td>56</td>
<td>17.8</td>
</tr>
<tr>
<td>3. Scholarship</td>
<td>3</td>
<td>2.3</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td>4. Grant from an organization</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>0.6</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>5. Others</td>
<td>133</td>
<td>100.0</td>
<td>181</td>
<td>100.0</td>
<td>314</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey
2. Comparison of Tuition Fees of Sample Private and Public Campuses

The tuition fee for the fiscal year 2004/05 of sample private and public campuses of different level and discipline shows that the rate of tuition fee is different. This is depicted in Table 5 below.
Table 5: Tuition Fee per Month in Private and Public Campuses

<table>
<thead>
<tr>
<th>Discipline and level of education</th>
<th>Private Campus</th>
<th>Public Campus</th>
<th>Total Campuses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Sum</td>
<td>Min</td>
</tr>
<tr>
<td>Certificate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>5</td>
<td>1340</td>
<td>160</td>
</tr>
<tr>
<td>Management</td>
<td>4</td>
<td>110</td>
<td>180</td>
</tr>
<tr>
<td>Science</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Law</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Education</td>
<td>2</td>
<td>390</td>
<td>190</td>
</tr>
<tr>
<td>Diploma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>5</td>
<td>1900</td>
<td>250</td>
</tr>
<tr>
<td>Management</td>
<td>4</td>
<td>1459</td>
<td>259</td>
</tr>
<tr>
<td>Science</td>
<td>1</td>
<td>1500</td>
<td>1500</td>
</tr>
<tr>
<td>Law</td>
<td>1</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Education</td>
<td>4</td>
<td>1480</td>
<td>280</td>
</tr>
<tr>
<td>Degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>1</td>
<td>1250</td>
<td>1250</td>
</tr>
<tr>
<td>Management</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Science</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Law</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Education</td>
<td>2</td>
<td>980</td>
<td>380</td>
</tr>
</tbody>
</table>

As shown in Table 5 the average tuition fees of private and public campuses of Humanities, Management, Science, Law and Education at Certificate Level, are Rs. 268/- and Rs. 45/-, for Humanities Rs. 295/- and Rs. 46/- for Management, Rs.195/- and Rs. 42/- for Education, per month respectively. The average tuition fees of public and private campuses Humanities, Management, Science, Law and Education at Diploma level are Rs. 380/- and Rs. 56/- for Humanities Rs. 365/- and Rs. 55/-, for Management for Science Rs. 1500/- and Rs. 50/-, Rs. 400/- and Rs. 50/-, for Law and Rs. 370/- and Rs. 50/- for Education respectively. In the same way, the tuition fees of Humanities and Education at Degree Level of private campuses are Rs. 1250/- and Rs. 490/- respectively. In the case of public campuses, this is very nominal amount for higher education. Because the average tuition fee for Humanities is Rs. 65.25/- and for other disciplines like Management, Science, Law and Education it is only Rs. 62/- per month which is lower than the fee for secondary school education. Therefore, it is observed that this is probably the cheapest tuition fee not only in our country but also in the whole world. It is therefore, suggested that tuition fees for higher education be revised immediately.

Besides the monthly tuition fees of the sample private and public campuses, the annual expenditure of the sample students for higher education is also presented in Table 6.

Table 6: Annual Spending of Sample Students of Private and Public Campuses

<table>
<thead>
<tr>
<th>Annual expenditure</th>
<th>Private campus students</th>
<th>Public campus students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Sum</td>
</tr>
<tr>
<td>1. Campus fee</td>
<td>133</td>
<td>1001100.00</td>
</tr>
<tr>
<td>2. Home tuition fee</td>
<td>131</td>
<td>170400.00</td>
</tr>
<tr>
<td>3. Lodging charge</td>
<td>131</td>
<td>1013900.00</td>
</tr>
<tr>
<td>4. Fooding charge</td>
<td>133</td>
<td>2139600.00</td>
</tr>
<tr>
<td>5. Transportation</td>
<td>133</td>
<td>479586.00</td>
</tr>
<tr>
<td>6. Others</td>
<td>133</td>
<td>186512.00</td>
</tr>
</tbody>
</table>


Besides the campus fee, other charges are also included in Table 6. To pursue higher education only the campus fee is not enough but other
charges should also be included. As shown in Table 6, the annual expenditure on higher education varies widely between the sample private and public campuses of Tribhuvan University. Because the mean annual expenditure of the campus fees and other charges of the students of sample public and private campuses are Rs.7527.1/-, and Rs.28873.9/- and Rs.1777.0/-, and Rs. 277513.3/- respectively. It means average fee of the private campuses is four times higher than that of the public campuses.

When the students were asked about the present financial pattern of higher education of Tribhuvan University. They were ranked first, second, third and fourth to "over dependence on government for the fund", "poor community support", "lack of awareness about cost sharing concept by the guardians" and "poor income generation of the campus" respectively for their responses as mentioned in Table 7. It means the over dependence on the government fund is the main financial feature of Tribhuvan University.

### Table 7: Present Financing Pattern of Higher Education

<table>
<thead>
<tr>
<th>Opinions of students</th>
<th>Total scores of sample students</th>
<th>Total respondents</th>
<th>Total scores</th>
<th>%</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor community support</td>
<td></td>
<td>314</td>
<td>1100</td>
<td>24.5</td>
<td>II</td>
</tr>
<tr>
<td>Lack of awareness about cost sharing concept by the guardians</td>
<td></td>
<td>314</td>
<td>1004</td>
<td>22.4</td>
<td>III</td>
</tr>
<tr>
<td>Poor income generation of the campus</td>
<td></td>
<td>314</td>
<td>990</td>
<td>22.0</td>
<td>IV</td>
</tr>
<tr>
<td>Over dependence on government for the fund</td>
<td></td>
<td>314</td>
<td>1102</td>
<td>24.6</td>
<td>I</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>314</td>
<td>291</td>
<td>6.5</td>
<td>V</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>314</td>
<td>4487</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>


### Cost Sharing Pattern of Sample Private and Public Campuses

It is observed that out of 18 sample campuses, only one public campus has been provided enough budgets by the Tribhuvan University. But the campuses have other sources of income besides the government grant, which is mentioned in Table 8.
Table 8: Other Sources of Income of the Private and Public Campuses

<table>
<thead>
<tr>
<th>Sources of income</th>
<th>Private campus</th>
<th>Public campus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>Fees from students</td>
<td>9</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>Government grants</td>
<td>-</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>UGC grants</td>
<td>7</td>
<td>77.7</td>
<td>3</td>
</tr>
<tr>
<td>Donation</td>
<td>2</td>
<td>22.2</td>
<td>7</td>
</tr>
<tr>
<td>Local contributions</td>
<td>4</td>
<td>44.4</td>
<td>5</td>
</tr>
</tbody>
</table>


Besides the students' fees, some private and public campuses have received income from some other sources like grants, donation and local contributions etc. Figures given in Table 8 have shown that out of nine private campuses, 78 per cent had received the UGC grant, 22 per cent donation and 44 per cent local contribution without government grant. In the same manner, out of nine public campuses, only 33 per cent had received government grant and local contributions. So it is observed that the UGC grants have been provided only to the affiliated private campuses for civil construction works. Public campuses therefore need to be encouraged to generate revenues from internal resources, especially through greater cost recovery from students. As it is seen that tuition fees of campuses are very low and nominal compared to the higher secondary education, low tuition fee is thus the main issue of financing of higher education in Nepal from the perspective of Tribhuvan University.

Table 9: Percent of Cost Sharing in Public and Private Campuses

<table>
<thead>
<tr>
<th>Cost sharing agencies</th>
<th>Private campus</th>
<th>Public campus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-20%</td>
<td>21-40%</td>
</tr>
<tr>
<td>Student</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Donors</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Local committees</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>UGC grants</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Government grants</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>


As shown in Table 9, out of the nine private campuses, the students had shared 50 %, 75 %, and 95 % cost for higher education in three, one, and five campuses respectively whereas only 10 % of the cost...
had been shared by the students of four other public campuses. It means that the students of sample private campuses have shared about 73 per cent cost, which is 7 times more than that of the public campuses. Therefore, it is observed that private campuses are being operated only by students’ fees. If we examine the cost sharing practice by the other agencies like donors, UGC, local committees etc they are sharing only 1-10 per cent of the cost in three, four and eight private campuses respectively. At the public campuses, besides government grants, contributions from other agencies are non-existent.

This study further tried to find out the cost sharing measures in different campuses. When asked about the percentage of educational expenditure by different agencies, the public and private campuses had different views as shown in Table 10.

**Table 10: Percentage of Educational Expenditure by Different Agencies**

<table>
<thead>
<tr>
<th>Agencies</th>
<th>Private campus</th>
<th>Public campus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20-25 %</td>
<td>30-50 %</td>
</tr>
<tr>
<td>The govt.</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Committees</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Campus</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Local govt.</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>


As given in Table 10, out of 18 sample private and public campuses, 4 private and public campuses each viewed that 20-25 per cent cost or expenditure should be shared by the government, communities, campus and local govt. for higher education whereas only one private campus viewed that this should be 30-50 and 80-100 per cent. In the same way, six private and one public campus viewed that parents should share 30-50 per cent expenditure for higher education.

**Conclusion and Recommendation**

From all the above discussion it is observed that low level of tuition fees and low cost sharing practice marks the feature of higher education of Tribhuvan University. The following recommendations
are therefore made to increase the cost sharing pattern in higher education.

Firstly, due to the low tuition fees, students are encouraged to take admission at T.U. as a back up measure. They do not bother to attend the classes. So tuition fees should not be so low as to make the student careless towards their education. It is observed that tuition fees structure of constituent campuses are very low as compared to the affiliated campuses. So provision should be made to increase the tuition fees structure of higher education immediately so that they would be more concerned towards learning as in private campuses. Therefore, a policy should be made for the equal range of tuition fee structure both in public and private campuses. In Tribhuvan University, nominal fees are charged, not by the programme or course or the location of the campus, but by the level of education. Efforts should therefore be made to increase the tuition fees according to the program, courses and location of the campuses.

Secondly, it is observed that cost sharing from the stakeholders is very low in Tribhuvan University. As we all know, only the government or the private sector or the community alone can not run the university. Therefore, cost sharing should be among the central government, local government, local communities and stakeholders not only for good quality education but also for ensuring regular and sustainable flow of financial resources.

Thirdly, government investment in higher education of T.U. is very low. There is no national policy for higher education in terms of percentage of GDP to be allocated for higher education. It is therefore recommended that 20-25 per cent of cost sharing in higher education vis-a-vis increased educational budget should be allocated for good quality education. The high level National Education Commission 1998 had recommended only 16 percent share of higher education to the education budget. There should be a of national policy to increase the government investment according to the increasing programmes, increasing number of campuses and increasing enrolment of the students.
Cost Sharing Pattern of Higher Education in Tribhuvan University

References


Sector wide Approaches (SWAp): Knowledge for Audit
Janak Raj Gautam*

Introduction

Sector wide approaches (SWAp) is a new concept that spurred from 2000 with a note that development partners collaborate to support sectoral programs with pool funding components based on a country's long-term vision. SWAp approach ensures that a sector will always have project ready for implementation considering its development priorities in favour of the sectoral expansion. Initially it is marked by the preparation and finalization of strategy moving on a phase wise basis to human resource development, pilot testing, budgetary support and eventually, a destination of sector wide approach through integration process. In a sectoral context, an organization can be understood as an open system with interrelated and influenceing components. It motivates managers, agents, directors and apex authorities to look into both inside and outside organizational boundaries, capacity constraints with all the potential for improvements. In Nepal, the Ministry of Education has already made a move to go through the transitional context to adopt SWAp in its educational programs. The following table stands as an example to this.

Table 1: Movement towards SWAp

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project focused development approach</td>
<td>programme development approach covering a sector or an area</td>
<td>EFA-Programme area like governance</td>
</tr>
<tr>
<td>basket funding modality</td>
<td>pool funding modality</td>
<td>Pool Funding</td>
</tr>
<tr>
<td>donor specific agreement</td>
<td>joint agreement</td>
<td>Donor contact person</td>
</tr>
<tr>
<td>stand alone donor support</td>
<td>joint financing arrangement</td>
<td>Joint assessment methodology</td>
</tr>
<tr>
<td>donor dependency</td>
<td>government led process</td>
<td>Donor contribution&lt;30%</td>
</tr>
</tbody>
</table>

* Assistant Auditor General
Office of the Auditor General
Recently, the World Bank has warned that the project implementation in Nepal is in a critical stage among the South Asian Countries as it can neither mobilize its fund nor is able to make expenses already stated in the programmes. The World Bank has also taken a policy for fund release as per the new system is called ‘Base Case’ allocating up to 350 million dollars. Nepal government has requested the World Bank for budgetary support. After all, understanding SWAp in its transformational nature is necessary since the government is heading towards new destination with many challenges. Nepal at present is in a state of difficulty to use borrowed and grant funds in comparison with the other South Asian Countries. The position is depicted as follows:-

Table 2: Nepal’s status in using the borrowed/grant funds

<table>
<thead>
<tr>
<th>Year</th>
<th>Status</th>
<th>% of project in number</th>
<th>% of amount involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>Very serious danger in implementation</td>
<td>31%</td>
<td>30%</td>
</tr>
<tr>
<td>2008</td>
<td>Very much challenging for implementation</td>
<td>25%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Concept

A SWAp is a programme based approach of aid delivery for its effectiveness at the entire sector. SWAP approach has been gradually introduced in education, water and energy sector in Nepal since August 2004. In the years to come, SWAp in education may not be a successful story in Nepal because of various types of internal disturbances. The aim of SWAp is to strengthen government to own and coordinate projects, facilitate budgeting process; make sufficient funds to cover operating costs, integrate capital investment, develop budgetary support policies and make efforts to build up domestic capacity. The following table briefly presents its characteristics:
### Table 3: SWAp Characteristics

<table>
<thead>
<tr>
<th>What a SWAp can not be</th>
<th>What a SWAp can be</th>
</tr>
</thead>
<tbody>
<tr>
<td>• a financing modality</td>
<td>• strengthening the sector involving all stakeholders</td>
</tr>
<tr>
<td>• government decides, donors accept.</td>
<td>• building trust through mutual transparency</td>
</tr>
<tr>
<td>• donors group up to twist arm on government</td>
<td>• dealing with real and thorny issues</td>
</tr>
<tr>
<td>• government and donors crowding out civil society and private sector</td>
<td>• assuming up domestic ownership and accountability</td>
</tr>
</tbody>
</table>

SWAp is a borrower-management approach in which development partners only support country-led programs according to the Paris Declaration on Aid Effectiveness, 2005. This Paris declaration like ownership, aid alignment, harmonization, managing the results, and mutual accountability in entire portions of one sector, typically encompass greater areas of responsibility than that of traditional projects. Partners are committed to openness, consultation and sharing of information, observe the challenges and become mutually accountable while running the projects in consideration of quantity, quality, time and cost. Generally, SWAp is also characterized by the following principles some of which are already laid down in the Paris Declaration.

**Ownership:** Development partners come together to support the country’s own program for the development of a particular sector because of responsibility of the country in planning and implementation. It means that the country exercises effective leadership through its capacity to own national development policies and strategies linked to medium term expenditure framework. International development cooperation can support the efforts of developing countries, but eventually, the responsibility rests with the countries, not with the donors.

**Partnership:** The government makes sure that the program should be coordinated well with the participation of development partners,
involving other in-country stakeholders at various levels. The scope of programme might be broad or limited, but it always requires the participation of stakeholders by discouraging any stand alone donor project initiative.

**Expenditure framework:** The sectoral policy framework depends upon government's overall medium-term expenditure, resource, and priority activities. Partners' resources are channeled through government systems and terms of the agreement with developing partners for accelerated sector progress. In Nepal medium term expenditure framework (MTEF) is viewed as a strategy for mid course correction during program implementation.

**Uniform Implementation:** As circumstance permit, partners aim to synchronize their own processes jointly through measures like appraisal, programming, review, monitoring and evaluation. Additionally emphasis is laid on using and strengthening government institutions, procedures, and staff with the aim of having single banking, procurement, payment, disbursement, authorization, reporting and auditing system for all activities of the sector under a unified approach strategy.

**Challenges:** Donors' coordination including other sectors is one of the essential factors for SWAP. Organizations in the context of SWAP can be understood as open system. Poverty reduction strategy paper (PRSP) approaches for instance focus substantial attention on the need to make interaction among organizations involving areas as funding, technology, staff, information, implementation, supervision and efficient arrangements of such functions. The need to ensure coordination among donors to work in an effective manner in highly necessary for obtaining all visible achievements in the years to come. Donor agencies have pointed out that foreign assistance pledged to Nepal has been ineffective because of lack of uniformity and coordination. There are underlying challenges as depicted in the following table:
Table: Typical challenges in SWAP for actors

<table>
<thead>
<tr>
<th>Donors or developing Partners</th>
<th>Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take the back seat</td>
<td>Embrace dialogue on sensitive issues</td>
</tr>
<tr>
<td>Recognize own limited capacity</td>
<td>Build some order in house</td>
</tr>
<tr>
<td>Understand and deal with complexity</td>
<td>Get the results on agenda through successful implementation</td>
</tr>
<tr>
<td>Curb disbursement visibility pressure</td>
<td>Disbursement depends on capacity of government</td>
</tr>
</tbody>
</table>

**Reporting**: Occasional, ad-hoc, regular and periodical financial reports should be produced as per the requirements and needs of the developing partners. The report should cover progress in institutional, financial, disbursement, procurement, environmental and social safeguards arrangements within a specific period of time. The elements of financial statements should include, but not limited to, the following:

- a consolidated statement showing sources and uses of funds, disbursement, procurement in an integrated activity wise result.
- statements reconciling the balances on various bank accounts on such consolidated statement.
- Accounting policies note to accounts and explanatory notes in the financial statements

**Agenda for success**: Ministry of Education has prepared certain agenda on SWAp for its successful implementation:

1. Mobilizing and expanding external resources like bi-lateral and multi-lateral cooperation.
2. Adherence to coordination to follow the Paris Declaration on Aid Effectiveness, 2005
3. Share process on progress review like monthly, trimester, annual and midterm report
4. Common goals and strategies for all donor contributions.
5. Develop common instruments for planning, implementation and financial records monitoring.

**Audit requirement:** The country would be required to have consolidated financial statements audited by the auditor acceptable to all developing partners with specified terms of reference (TOR).

According to the Interim Constitution of Nepal, 2007, Auditor General is the government auditor for audit of all sources and expenditures of public funds of Nepal. Fundamentally, auditors have a responsibility to point out the statutory issues in a good sense along with their recognition. As SWAp has been identified as a preferable approach with growing tendency to use it successfully in education sector, it is significant that the donor group obtains the evidence of how funds to the partner country have been used for the expected performance and sensible results of the sector as guided by the auditing authority. It means that series of tasks and records of an entity are to be maintained by which transactions are processed as a means of maintaining compliance with the design and system. Accounts and the financial records to identify, assemble, analyze, calculate, classify, record, summarize reporting transactions and financial events are to be systematically arranged. Risk based audit should also be started in the sectoral type of funding arrangements. It is the need of the hour for timeliness, comprehensiveness, accuracy and analysis of the financial progress, procurement and for obtaining periodical reports. The report should help the auditors to delete wrong figures, to take action on misleading figures, to raise awareness to delay and rectify errors in the statutory statements by enhancing capacity of the auditors in the SWAp context.

All partners should agree on a set of applicable auditing arrangements including scope, type, depth, and the criteria for selection of auditors as well as timeframe for submitting audit reports, arrangements for reviewing, following up on audit findings and recommendations made by auditors in the management letter. Adoption of SWAp by donors is logical to focus on capacity development in all units of that very sector which is needed to produce the requisite outputs. While audit reports should normally
be provided annually, they might be required at anytime with corrective measures where particular risks and misuses have been identified.

**Conclusion**

The basic principle is that all funding for the sector or area are pooled together whether it may be of external source or internal. For instance, in education sector, education for all (EFA) program was initially supported by Denmark, DFID, Finland, Norway and the World Bank making it effective from 2004. Asian Development Bank, Australia, European Union and UNICEF later joined the EFA movement. SWAp is also going to be initiated in other sectors like local development, tourism, agriculture, industry, health and drinking water in the years to come. Eventually, SWAp is used only for programme but not directly to a project. But political disturbances and nonfunctioning system of governance have stood as major constraints in the operation of SWAp fully. Sectarian plan may also adopt a human resource development approach tying with the millennium development goals (MDGs). Achieving universal primary education is one of the MDGs to the target date of 2015 under the EFA plan in Nepal. To sum up, a sector will benefit largely from a systematic approach to program by ensuring a continuing flow of well prepared, analyzed and implemented resources over its lifetime. The audited projects accounts, management letter and agency financial statements should be combined and submitted to the concerned ministry, Asian Development Bank and the World Bank require audit certificates within nine months before the end of the fiscal year. Follow up letters are also sent to the departments delivering its copy to the office of the Auditor General by the donors. If we analyze the status of the key projects accounts, we may find various results like compliance within the date, non compliance, late compliance etc. Therefore, joint audit arrangement can be held by donor countries and Supreme audit institution to express audit opinion on the same version. The development partners may be convinced that cooperation on the education sector continues to serve as a model for other sectors. In the days to come the Auditor General
should also manage to enhance the capacity of its auditors in the SWAp context.

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Knowledge of Left and Right Direction in Young Children

Dr. Shanta Niraula∗

Abstract

One hundred and forty four Nepalese children of 4, 5, and 6 years were studied for their ability to identify right and left parts of their own body and those of others. The children were asked twenty questions in two phases. The results showed that Nepalese children on an average lagged behind children of some other countries in the development of their spatial understanding. Improvement in the quality of the school education and spatial training at home is recommended for ensuring optimal development.

Introduction

Left and right are commonly used means for specifying direction and location of objects. Young children often have difficulty in identifying right and left (R/L) orientation, and fail to differentiate their right hand from the left. Further, children, who can identify their right and left sides tend to have difficulty on identifying the left and right sides of others. Observations suggest that children require many years to master right-left orientation. While children acquire the concept of right and left in the course of their development, there is little research that examines how they come to understand these concepts (Roberts & Aman, 1993).

Research also indicates that right and left distinctions are generally more difficult because of bilateral symmetry of the right and left parts of the body (Shepard & Hurwitz, 1984). Piaget attributed children’s difficulty in identifying others’ right and left direction to children’s ego-centricism that is children assume that others perceive, think, and feel just the way they do. However, the knowledge of others’ perspective appears to be less egocentric than Piaget’s initial work has

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Knowledge of Left and Right Direction in Young Children

indicated (Fehr, 1978; Newcombe, 1989; Shatz, 1975). There are different factors that influence the development of these spatial orientations.

Developmental studies indicate that a child acquires right and left orientations in two important steps (Piaget, 1928; Elkind, 1961). In the early childhood, the child is ego-centric. He/she understands left-right directions in reference to his/her own body. The first step in the development of spatial direction is based on sagittal body symmetry (each of the sides receiving a name: my right hand, my left eye” (Benton, 1968; Corballis & Beale, 1976). “Right” is associated with the dominant hand, which is used to perform most manual activities; “left” is defined as the opposite one and toward heart side. In the second step, the child transfers or reverses this orientation onto the external space and people. There is 180° rotation (mental rotation) where the subject distinguishes what was right before is on the left now. The child can now distinguish between “to the right of” or “to the left” of the subjects. He/she now passes from egocentric to allocentric spatial orientation. The age at which this change takes place is not definite. It may differ from country to country and culture to culture.

No study has been reported in Nepal about the processes that underlie the use of these spatial concepts, and little is known about the processes used by children for solving spatial problems.

The present research focuses on the processes involved in the development of spatial direction. It intends to determine the age at which Nepalese children are able to identify left and right direction from their own bodies as well as from those of others. It was hypothesized that children who would identify their left and right sides would have difficulty in identifying the left and right sides of others, and that spatial concept of R/L would develop from egocentric to allo-centric direction. It was also hypothesized that there would be no ethnic and gender differences in the understanding of R/L concepts at this age.
Methodology

Study Procedure: The subjects were tested individually, with oral questions; facing each other (the researcher and the child). The questions were prepared by the researcher and were pilot tested. There were two sets of questions; each containing 10 items. The children were tested in two phases. In the first phase, they were asked to show their own left-right and crossed parts of the body. For example, “show me your left hand; show me your left eye with your right hand” etc.

In the second phase, the subjects had to identify the other people’s right and left parts of the body. For example, “show my left eye,” or crossed “show my right eye with your left hand” etc. Scoring was done on the basis of right and wrong responses. Each correct response was scored “one”. Questions are given in the Appendix.

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Mongolian (n=72)</th>
<th>Indo-Aryan (n=72)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Age</td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>4 years age group</td>
<td>12 12</td>
<td>12 12</td>
</tr>
<tr>
<td>5 years</td>
<td>12 12</td>
<td>12 12</td>
</tr>
<tr>
<td>6 years</td>
<td>12 12</td>
<td>12 12</td>
</tr>
</tbody>
</table>

The participants were 144 children. The study employed $3 \times 2 \times 2$ factorial design. The subjects were equally divided into three age (4, 5 and 6 years), two ethnic (Indo Aryan and Mongolian) and two gender groups (boys and girls). Children were selected randomly from two public (government) schools: Bijaya memorial and Paropakar High schools.
**Results**

1 *phase*

**Table 1: Mean score of groups on R/L identification of one’s own body part**

<table>
<thead>
<tr>
<th>Age</th>
<th>Mongolian Boys</th>
<th>Mongolian Girls</th>
<th>Indo-Aryan Boys</th>
<th>Indo-Aryan Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>4 years</td>
<td>1.17</td>
<td>0.72</td>
<td>0.97</td>
<td>1.25</td>
</tr>
<tr>
<td>5 years</td>
<td>3.5</td>
<td>1.38</td>
<td>3.33</td>
<td>1.07</td>
</tr>
<tr>
<td>6 years</td>
<td>4.33</td>
<td>2.27</td>
<td>4</td>
<td>1.35</td>
</tr>
</tbody>
</table>

The mean score shows a clear difference according to the age level of subjects in each group. Children of six years have more understanding of the R/L than the other level. At each level Indo-Aryan children have generally scored higher than the Mongolian group. Gender difference is also evident as the score of boys is generally higher than that of girls.

**Table 2: Number of children identifying R/L in different age, and gender groups (on one’s own body part).**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Respondents</th>
<th>Non-respondents</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years</td>
<td>36</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>5 years</td>
<td>48</td>
<td>0</td>
<td>26.67*</td>
</tr>
<tr>
<td>6 years</td>
<td>48</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Indo-Aryan</td>
<td>67</td>
<td>5</td>
<td>0.04</td>
</tr>
<tr>
<td>Mongolian</td>
<td>65</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>64</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>68</td>
<td>4</td>
<td>0.12</td>
</tr>
</tbody>
</table>

$P<.01$*

The results indicated that the number of 4 year children identifying R/L was lesser than those of other two groups which suggested that identification goes on improving with an increase in the child’s age.
The $\chi^2$ value with respect to age was significant ($\chi^2=26.67$, df=2, $P<.01$). Identification of Indo-Aryan and Mongolian children as well as that of boys and girls did not provide any evidence of significant difference. This suggests that the ethnic and the gender differences do not influence R/L orientation at this age.

**Phase II**

**Table 3: Mean score of groups on R/L identification on other’s body part.**

<table>
<thead>
<tr>
<th>Age</th>
<th>Mongolian</th>
<th>Indo-Aryan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>4 years</td>
<td>Mean</td>
<td>0.39</td>
</tr>
<tr>
<td></td>
<td>S.D</td>
<td>0.17</td>
</tr>
<tr>
<td>5 years</td>
<td>Mean</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>S.D</td>
<td>0.65</td>
</tr>
<tr>
<td>6 years</td>
<td>Mean</td>
<td>1.08</td>
</tr>
<tr>
<td></td>
<td>S.D</td>
<td>0.99</td>
</tr>
</tbody>
</table>

If we compare the results of table 1 with those given in table 3 we find that there is considerable difference between the score of the I and the II phase tests. It reveals that identifying R\L direction of one’s own body part is easier than that of the other’s body part.

**Table 4: Number of children identifying R/L in different age, and gender groups on other’s body part.**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Respondents</th>
<th>Non-respondents</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years</td>
<td>80</td>
<td>40</td>
<td>27.5*</td>
</tr>
<tr>
<td>5 years</td>
<td>12</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>6 years</td>
<td>31</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Indo-Aryan</td>
<td>25</td>
<td>47</td>
<td>0</td>
</tr>
<tr>
<td>Mongolian</td>
<td>25</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>24</td>
<td>48</td>
<td>0.18</td>
</tr>
<tr>
<td>Boys</td>
<td>27</td>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

* $P<.01$

The results suggested considerable difference in the number of respondents in identifying R\L in this phase than in the first phase (see table 2) which indicates that understanding other’s body part is
more difficult than one’s own body. Chi-square value for age was significant ($\chi^2=27.5$, df=2, $P<.01$). The other ethnic and gender groups did not show significant differences in understanding R\L.

**Discussion**

The results clearly exhibited that even the 6 years age group children were not capable of developing spatial direction. They have very low R/L identification ability.

The results of the present finding also suggested that children who made more errors did not use mental rotations, while the correct responding children appeared to use mental rotation to solve these direction problems.

The way children of different age behave during the study is worth mentioning. The older children attempted self - rotations by turning their heads. They seemed to be internally rotated, easily responded and discriminated the researcher’s right side by seeing the hand holding a pen and remaining part as the “left”. At six years of age a subject starts to turn around to get an idea of the image of the person facing him / her. When they have correct image they turn back to their seats and give the answer. Small children were quite confused to indicate the directions.

The left- right labels, involves more understanding of a conceptual reference system than simply discriminating. The bilateral symmetry characteristics of the body parts make the children initially difficult to learn the left and right labels. In consonance with the studies focusing on right -left labels of spatial cognition, the present findings indicate that right -left is related not only to the language but also to the intelligence of children and the way of transferring their own view point onto the external world and people living in it. Children no doubt start to recognize the terms R/L at a very low age (less than 4) and go on developing as they advance in age. But the average age of Nepalese children to be able to identify is above 6 years of age. Some researches indicate that young children have difficulty using the labels “left” and “right” appropriately until 7-11 years of age (Benton, 1959; Corballis & Beale, 1976; Howard & Templeton, 1966; Rigal, 1994;
Knowledge of Left and Right Direction in Young Children

Vogel, 1980). But, in some contexts children as young as 3 or 4 years can reliably make left – right discrimination (e. g., Braine & Fisher, 1988). In view of these findings the results of this study seem to indicate that the Nepalese children lie far behind the children of some other countries in their ability to identify right and left spatial direction. The 5-6 year age children were able to use R/L terms to describe objects, but the use was less frequent (Niraula, 1998; Niraula, 2002; Niraula & Mishra, 2001).

The hypotheses, that the development of right and left to be related to the age level of children are supported by the findings of this study. Children of higher age levels (6 years) scored higher than their counter-parts of lower age levels (4-5). The developmental trend showed that as they advance in age they become more capable of identifying and interpreting the labels. Their judgments also came to accuracy. The hypothesis that identification of one’s own body part develops earlier than that of other’s body is also supported by the results of this study. It is true in Nepalese contexts. The results however, confirmed that ethnic and gender variables are not responsible for the understanding of R/L concepts at this age.

Right hand is the dominant hand in the Nepalese culture. Our cultural practices often emphasize children to use right hand rather than the left. Nepalese community links right hand activities with a view of respect e.g., eating, holding, passing things to others and so on. These cultural practices and socialization factors have a dominant role in making children aware of the right hand which obviously makes the other hand known as the left hand. This enhances the knowledge of their own body rather than the opportunity to think and utilize this concept to the right and left of others body parts which in turn makes young children’s knowledge of others' perspectives rather poor. Besides, as Piaget points out, the egocentrism and irreversibility nature of the younger children keeps them unaware of the viewpoints other than that of their own. Children have confusions with the concept of right and left because they have inability to de-centrate their own vision of the world and to enter some one else point of view. This signifies that these children
tend to center on one aspect of a situation and neglect the other important features. As they proceed toward allo-centricism, they use locative directions appropriately.

The development of the language may be another source for the concept of R/L direction. As children develop linguistically, interactions with the environment progressively make them aware of the location-oriented words and the clear use of the terms. Accordingly, the child who is better developed linguistically should be more capable to identify R/L direction. But, the present study does not address this problem.

**Conclusion and Recommendation**

The results of this study in general show that the development of the understanding of spatial direction of Nepalese children is below that of children of some other countries. Although, this conclusion should be considered most tentative till it is substantiated by some more researches, considering the emphasis on rote-learning that is prevalent in most of the Nepalese schools, this conclusion is not far from the truth. So, it is recommended that strategies be evolved for the development of spatial orientation of Nepalese children in schools and at home. Spatial cognition plays a very important role in developing creative thinking and problem solving.

A study may be undertaken with other specific ethnic and cultural groups in order to test similarities and differences in the development of spatial cognition (R/L) functioning across cultures.

**APPENDIX**

1 PHASE

A. Right and left identification on the subjects’ own body:

Show me your right hand
Show me your left hand.
Show me your right eye.
Show me your left ear.
Knowledge of Left and Right Direction in Young Children

Show me your right leg.

Cross-commands
Show me your left hand with your right hand
Show me your right ear with your left hand.
Show me your left eye with your right hand.
Show me your right leg with your left hand.
Show me your left ear with your right hand.

II PHASE
Show me my right hand.
Show me my left eye.
Show me my right ear.
Show me my left leg.
Show me my right eye.

Cross-commands
Show me my right hand with your left hand.
Show me my left leg with your right hand.
Show me my right eye with your left hand.
Show me my left ear with your right hand.
Show me my right leg with your left hand.

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Knowledge of Left and Right Direction in Young Children

School-Based Management in the context of Nepal

- Hari Prasad Lamsal

The history of world education is characterized by 'periodic swinging between centralization and decentralization of power and authority (www.ecs.org, 20 March 2008). In times of greater centralized authority, large administrative structures maintain control over decisions regarding educational policy, budget and operations. On the other, much of this control shifts to smaller administrative unit in decentralization. A large body of research studies therefore has focused its attention to explore merits and demerits of such movements.

School-Based Management (SBM)

During the past several years, the trend in education system has been evolving from largely centralized structures to more decentralized one. The main expression of this trend goes by different names. One of the major trends of the education reform has been "the push to decentralize decision making, allowing those closest to the teaching learning process to be both more independent and more responsible for results" (www.ecs.org, 21 March 2008). In this way, school based management has evolved from stand-alone reform to one that typically is embedded within a comprehensive approach to improving student achievement and school performance. And, it became "a strategy for empowering teachers, increasing efficiency and accountability, creating greater energy at the school level for change and improvement" (www.ecs.org, 22 March 2008).

School-Based Management (SBM) is, simply, a school improvement strategy. It creates greater responsibility and flexibility at the school level for change and improvement in school culture, classroom practices and student learning. Sometimes, it is viewed as a management framework which is school-based, student- centered and quality-focused. In this way, it is viewed that the main purpose of

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SBM implementation is to devolve the decisions on student learning and resource deployment to the school to enable it to make school-based policies which better meet the needs of students and enhance their learning outcomes (emb. sbm, 2008). It seems to be a 'governance tool to devolve more authority from central level to the school level' (Abu-Duhou, 2000). Caldwell (2005) highlighted the definition of school based management in Education Policy Series: the school-based management is the systematic decentralization to the school level of authority and responsibility to make decisions on significant matters related to school operations within a centrally determined framework of goals, policies, curriculum, standards, and accountability.

Similarly, Malen et. al, (1990) also argued that SBM is a form of decentralization that identifies the individual school as the primary unit of improvement and relies on the redistribution of decision-making authority [to the school level] as the primary means throughout which improvements might be stimulated and sustained.

Some scholars argue that SBM is simply a strategy of school improvement while others strongly define SBM as the most radical form of educational decentralization. It involves the transfer of decision-making power to the school level. However, variations of SBM have been observed depending upon the stakeholder group holding decision-making authority. Leithwood and Menzies (1998) outline four distinct forms of SBM as i) Principal Control, ii) Professional Control (teacher majority), iii) Community Control (community majority) and; iv) Balanced Control (teacher and community equally represented).

Why School-Based Management

The contemporary rationale for implementing SBM are many. Broadly, rationale can be categorized as economic, professional, political, administrative efficiency, financial, student achievement, accountability and school effectiveness. Some scholars also argue that the repeated failure of the centralized structure is the main rational of SBM implementation. It has been claimed that the centralized systems
tend to be impersonal and do not produce the responsibility and commitment necessary to sustain improvement.

Nowadays, it has been realized that school is the primary unit of change. Cheng (1996) elaborates that in SBM, school management tasks are set according to the characteristics and needs of the school itself. School members have a much greater autonomy and responsibility for the use of resources to solve problems and carry out effective education activities. All these tasks are directed for the long-term development of the school.

Similarly, teachers and parents, who work directly with students, have the most informed and credible opinions as to what educational arrangements will be most beneficial to those students. The school's primary stakeholders are key actors who have the best information about what actually goes on in schools, how it can be improved by using scarce resources (King and Ozler, 1998). It also helps to make the most appropriate educational decisions for the school and students. In this way, local schools could be more responsive to the needs of their communities.

In this way, the rationale of SBM have been developed partly in recognition of the problems appeared from centralized structure and partly in response to research findings about more promising arrangements for improving education.

Movements towards SBM in Nepal

Nepal does not have a long history of the development of education. The education history stands as 'a model of a testimony' (Khaniya, 2007). In ancient time, religious schools with the characteristics of religious values were managed and funded by religious institutions such as: Gurukul (Hindu) and Bihar (Buddhist) with their trusts and other savings. Before 1951, most of the schools were established and financed by individual and communities with their charitable donations. There were few educational institutes that were (fully) funded by the government. In this way, school governance before 1951 was the responsibility of both the community and the state.
The systematic development of education can be said to have started since 1951. Even though the people were not educated, people from different parts of the country started to open new schools on their own initiatives. At that time, the community people did not wait for the government to take initiative for establishing new schools and recruit teachers (Khaniya, 2007). In 1954, government had formed an education committee, popularly known as Nepal National Education Planning Commission (NNEPC) for the systematic development of education. Subsequently, several commissions were formed and reports were made available. However, education policy, planning, administration and management aspects were not made specific as compared to and in line with the expansion of the schools.

In the past, it is seen that the people in the community have the sole responsibility of school governance with little support from the government. From the initiative of the community, several new schools were established in many parts of the country in a short period of time. Hence, most schools at the initial stage were community-initiated schools which received different kinds of contributions from the community (Khaniya, 2007) eg. land, funds, volunteer teachers, labour, construction materials, etc. As the community people initiated the schools, they were responsible for their management as well.

Along with the development and expansion of education in the country, Ministry of Education (MoE) was established in 1951 with several administrative structures (The Basic and Primary Education Master Plan, 1997-2002). As a result, school inspection system remained prominent to keep control in the school system. On the other, no special measures were taken for the empowerment of the community. Government supported schools were under the direct control of the government and the community supported schools were mainly governed by themselves. In this way, two types of school came into operation.

After the introduction of NESP 1971-1976, all community schools were brought under the direct control of the government which also shifted the governance role from the community to the government.
NESP brought sweeping changes in the structure and functions of different echelons of educational administration (Khaniya, 2007). The plan is an attempt to adopt a uniform system of education by nationalizing the educational institutions of the country. The plan was built on the assumptions that education in one of the prime functions of the state and therefore, it must receive support and stimulation due to it. Also the feeling was that the educational system of the nation must be organized by the state and all educational institutions must be under its supervision. The MoE assumed the sole authority and responsibility for the management of all schools in the country carried out through its Regional Education Directorates (REDs). The National Education Committee (NEC) was created to provide general policy guidance to the central Ministry, bring about coordination between school and higher education, assist the MoE in the smooth implementation of the NESP and carry out research and development functions. All school managing committees were abolished. School supervision system was instituted with the provision of separate cadres of secondary and primary school supervisors to carry out academic supervision of schools. Although there have been numerous efforts to restructure and reorganize educational administration in recent years, the structure or pattern of educational administration that exists today owes its existence to the NESP (The Basic and Primary Education Master Plan, 1997-2002)

In the course of time, the education system in Nepal has also been influenced by the evolvement of the school based management practice in the world. As a result, later reforms, carried out by the country, in school education have tried to shift the governance power from the government to the school management. Continuous efforts have also been made to decentralize the power and authority to the local community. The legal provisions were also made in the past. In this regard, Local Development Act, 1966 remained prominent, which also spoke clearly about the governance of education in the country. The Act divided the country for administrative purposes into 14 zones and 75 districts. However, such structural and administrative changes did not bring much significant changes in education governance. (Lamichhane, 1997).
Later, realizing the problems arising from the policy of delegating less decision-making authority to communities, the government, at different points in time, made major changes in the education regulations with a focus on decentralization of schools and colleges as one of the underlying principles. The Decentralization Act, 1982 did not effect many changes in this set-up, although the Act did confer upon the local Village Panchayat (Development Committee) greater responsibility for formulating and implementing local development plans. The management of public schools was thus handed over to communities. A system of giving block grants-in-aid was introduced, in line with the government's commitment to meet the teachers' salaries for a fixed staff size so as to prevent indiscriminate hiring of teachers and also to encourage local resource mobilization by the schools.

After the restoration of democracy in 1990, the first elected government introduced several measures to expand the scope and participation of people in school management, but they remained little effective. Later on, Government of Nepal (GON) amended the Education Act in 2001 (Seventh Amendment) and introduced the new “Education Regulations” in 2002. According to the amended version of the Education Act 2001 and Regulations 2002, the government introduced major changes in the formation of school management committee. The guardians of the students became the members, with the right to select or elect SMC representatives. In the history of Nepalese education development, this was the first time that community people were made responsible to government schools through the stipulated authority in the education act and regulations.

In the remote past, Nepal almost exclusively relied on community-managed, and to a large part, community-financed schools for primary education. Before three and half decades, community-managed schools were taken over by the government with the expectation of improving the overall quality of education via increased government funding and technical support. While there has been an increase in government funding of the primary school sector since nationalization, the improvements in quality and efficiency of
the primary school system have seriously lagged behind public expectations. In fact, there has been a gradual erosion of governance, accountability and quality, since nationalization. Given the widespread realization both among policy makers and public regarding the deterioration of public school quality, the Government of Nepal embarked on a radical policy reform to devolve school management responsibilities all the way down to the community level in 2002. Decentralization has once again remained a key strategy of the Government of Nepal towards improving equality, efficiency and quality of public service delivery. The Community School Support Project (CSSP) was initiated in 2003 to help the government with the start up of this decentralization initiative. About 5000 school management committees/communities have already taken over the management responsibility of school till April 2007.

**What next?**

Before moving towards the journey of SBM, we have to first recognize the elements of SBM. SBM, simply, cannot be created from the enforcement of the rules and regulations alone. It is the joint efforts of policies implementation, empowerment of community and professionals (Cladwell, 2005). Capacity building at the local level is considered a key element in successful operation of school-based management. Studies have indicated that defining the responsibilities of the stakeholders, widening participation, developing professionalism of teachers, setting goals, evaluating effectiveness and developing characteristics of good schools are necessary for the implementation of SBM. Moreover, it demands streamlining of administrative procedures, and devolution of more authority to schools in personnel management, resource deployment and design and delivery of curriculum. All these measures are to create more room for schools to develop quality education with their own unique characteristics.

Principally, Nepal can adopt SBM, but this process is not without serious consideration. And this is not a magic that can solve all problems immediately. People, even now, can argue that the management transfer to community is basically school based
management. But the SBM demands more autonomy and flexibility than is given now. In addition, research findings showed that SBM has led to greater collaboration among teachers, a stronger school wide focus on professional development and a greater sense of accountability (ecs.org, 2008 b). However, in Nepal teachers have different views. In order to maintain the basic principles (ibid) of SMB such as flexibility, autonomy, transparency, accountability, and participatory decision making in school, the capacity of the school management committee and community people remains to be a crucial factor. All these efforts recognize that the individual schools are in better position in setting their own school goals and developing quality indicators to meet the needs of their students.

Full implementation of SBM takes time, effort and resources. In the above context, Nepal cannot move directly to the desired level of school based management because the process involved in it is not without several barriers. Implementation of reform policies that require breaking up with traditional values and practices faces severe resistance not only from vested interest groups but also from the genuine stakeholders.

At the end, forces driving the move toward school-based management demand more freedom, diversity and establishing of a strong network. Creating a network among such SBM schools will be an important factor for achieving the desired outcomes. It helps to realise the possibility of transformation and build the capacities that address systematic, significant and sustained change across all schools.

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Situation of Inclusive Education in Nepal

Narendra Phuyal

Introduction

Inclusive education (IE) contributes to a greater equality of opportunities for all children of community or society. Inclusive irrespective of disability or non-disability where young people learn together in the same educational setting with the needed support. It is a strategic approach that involves changes and modifications in curriculum, content, approaches, structures and strategies with a common vision and conviction that it is the responsibility of regular educational system to educate all children.

The major purpose of inclusive program is to educate all types of children without making any discrimination. This concept was developed in the World Conference on Special Needs Education held in Salamanca, Spain in 1994. Inclusive education is, in fact, an education system which offers children the right to receive quality education in an educational environment that is child-friendly, biase-free and multicultural, and equitably considers their diverse needs shaped from caste, gender, language, culture, geographical variation, (extreme) poverty, disability and other circumstantial difficulties.

In Nepal, as in all other places, inclusive education is much debated in terms of its meaning, form and functions. Even the policy makers are not clear about its definition. But in reality it was developed by UNESCO and its partners from many countries both in the South and the North. In their opinion, “All types of children living in school catchment area must attend school” and “education should be made free not only in policy papers but also in actual practice.”

Historical background of SN in Nepal

Nepal does not have a long history of special needs education. However, many regular schools were opened after the advent of
Situation of Inclusive Education in Nepal

democracy in 1951. The education sector had not achieved much and the disabled children were considered as family burdens and the result of sin. The concept of providing education to the disabled and making them able to survive independently in the society developed only lately. Slowly, efforts were made to make people aware of the importance of special needs education and the rights of disabled children toward appropriate education. Prior to 1951, the Rotary Club provided a one-month teacher training to a person in the USA. After his return from the training, the teacher established a school for the blind in Lalitpur. But the school soon closed down. Likewise, a blind American lady, Isabel Grant, while visiting Nepal, requested the concerned persons to conduct integrated class for the blind. Then training on teaching the blind was provided to the teachers of Laboratory School and students of College of Education in 1964.

National Special Education programme (SEP) was started in 1993 in co-ordination with Denmark and the government of Nepal under BPEP I (1992-99). This programme covered 23 districts. The implementation strategies comprised establishment of integration structure, teacher training, human resource development, involvement of community and provision of residential facility. Under this programme, 180 resource classes were conducted in the programme districts. At present, this programme is conducted in 47 districts. The number of resource classes has increased from 180 to 309 under BPEP II (1999-2004).

Development of Inclusive Education in Nepal

The concept was developed in the World Conference on Special Needs Education held in Salamanca, Spain in 1994. After the Salamanca conference, a memorandum of understanding was signed between the County of Copenhagen and Royal Danish University of Education, and the Ministry of Education and Sports/Nepal on implementing inclusive education in the academic year 2056/57 BS. The programme was started as a pilot programme in Banke, Udayapur, Siddhupulchok and Kavre districts of Nepal with the beginning of BPEP II (1999). A report (November 2001-July 2004) of a formative evaluation study conducted for BPEP II by the Danish
associates was prepared. The objective of the study was to try out how the strategy of inclusive education can be developed and implemented in the Nepalese context. In line with HMG’s commitment to achieve national goal of Education For All, the concept of inclusive education was introduced in four districts (Banke, Udaypur, Kavre and Sindhupalchok) of Nepal on pilot basis.

Inclusive education is an outgrowth of special education and special needs education. Special needs education and special education are two separate terms used in BPEP I and II. During BPEP I 'special education' was the term used and the resource classes were conducted for special children i.e. four types of disabled children (physically disabled, blind, deaf and mentally retarded). During BPEP II, 'special needs education' was the term used - but there was no change in the program. The same resource classes were conducted also for the special needs children. Special needs education was defined as a class integrating disabled children and disadvantaged children with same setting. But this did not go so well in practice. 'Instead, inclusive education' was only introduced as a new terminology during the same period. Now, after the initiation of the EFA program, inclusive education was re-started with the concept of bringing all types of children, including the disabled children, into the same educational environment.

In Nepal, the concept of inclusitivity in education emerged thoroughly with the initiation of Education for All (EFA) campaign. Under the inclusive education system, children as disabled, disadvantaged and marginalized were treated equally in the same or similar education. The disabled category included blind, deaf, physically handicapped and mentally retarded children; the disadvantaged category included dalit, ethnic minority-group and remote area dwelling children and girls, and the marginalization category included orphan, street and bonded-labour children. Prior to this, a seminar organized on Phalgun 18-19, 2060 B.S. in Kathmandu by the Department of Education had identified 13 groups, which included sexually abused, in-prison, and diseased children labeled as Special Focus Group.
IE was introduced in 60 schools of 8 districts of the country in the initial year of the program. The districts were: Dadeldhura, Bardiya, Banke, Chitwan, Kavre, Sindhupalchok, Udayapur and Jhapa. In 2005, 210 schools of 22 more districts were added in the program.

**Nepal government’s concept on IE**

Government of Nepal has introduced Inclusive Education concept to fulfill the goal of EFA from the beginning banging of 2004. In this concept, all types of children whether physically and mentally disabled or socially disadvantaged get the opportunity of learning together. This helps to increase brotherhood and sisterhood relationships among children. Inclusive education is a human rights issue as well. Many children could be brought to the mainstream with benefits to everyone. There is the involvement of community also in such type of programme. The programme is conducted in cooperation with school children, parents, teachers and head teachers, social workers, school management committee members, District Education Office and local organizations for the children. One of the important aspects of Inclusive Education is Inclusive Programme, which not only includes disabled but also other types of children who are educationally disadvantaged and handicapped.

**Outcome of research**

CERID had completed three studies in inclusive education under formative research. The first study was carried out in 2004 under the title “Situation Analysis of Special Needs Education for the Expansion of Inclusive Education.” The second study was undertaken in 2006 under the title “Situation of Inclusive Classroom in Nepal.” A Study on Problems and Prospects of Institutionalizing Inclusive Education at Primary Level was the third study which was conducted in 2008. The first study contributed to collect good experiences of inclusive- education piloting program and suggested measures to introduce the inclusive program at primary level. The second study analyzed classroom situation and indicated the need of additional training to resource teacher and also the supply of instructional and stationery materials to the students. These suggestions helped
Department of Education to initiate inclusive education under the EFA program. The third study focused mainly on problems and prospects of institutionalizing inclusive education at primary level. The concept of inclusion was analyzed from disability perspective. Specifically, the study analyzed issues of inclusive education as challenges of IE as regular features, contribution of teacher training to the operation of IE classes, functioning of Assessment center, major obstacles of Resource Class and integrated classes with an aim to develop a framework required for the institutionalization of IE.

Conclusions

The piloting school has partly contributed to implement the part of the IE concept, such as, continuous assessment, better classroom setting than before as found by the 2004 study and new scheme for defined target groups in their school introducing child friendly environment. The effect of training/orientation was however found minimum to the effective operation of resource classes and inclusive schools. Three findings seem to be relevant in relation to 45-day training in the discussion with the resource teachers of school. First, resource teacher claimed that the 45-day training worked as basic level course and thus, pleaded for refresher training in their area. As suggested by the inclusive education study of 2004, the Department of Education had conducted IE orientation program to IE schools. Despite the effort the IE concept was not found clear to the local level stakeholders.

The assessment center did not do all of its functions well as a center for collecting information, coordination and referral. The function of referral service was carried out in all centers but the act of information collection and coordination was carried out in some centers only. An assessment center management committee in all the sample districts was formed under the chairmanship of district education officer to coordinate the assessment centers. The meeting of assessment center was generally called three to five times in a year. In this meeting, discussions were made concentrating on advertising, enrolment, promotion of the students studying in resource/integrated class.
Furthermore, co-ordination of activities was advanced by the visits of coordinator to the resource and integrated class.

The problems such as, lack of orientation on inclusive education targeting teachers/students/parents with an aim to develop a complete environment of integration; lack of training to all teachers in total language in Kavre and Jhapa; large number of students in a class resulting in difficulty to the deaf to get proper care; unavailability of textbooks transcribed in sign language and also the need of new dictionary on sign language; same examining system to all including the deaf have done injustice to them. Furthermore, the deaf students are naturally prone to make grammatical mistakes in writing.

The development of a framework as suggested by the officers of the district education office had highlighted the following aspects. First, the center should formulate annual program of IE creating strong will power for implementation defining the responsibility of every unit/stakeholder. Second, the program should be framed along the fundamental concept of decentralization. Third, IE should be implemented where school family, community, parents are mentally prepared to accept IE-concept properly.

The co-coordinators of the sample districts found their role important as they said that the government should make them capable of handling inclusive education by upgrading their level and responsibilities. The head teachers and teachers of the sample schools emphasized on the development of school physical infrastructure that includes toilet and spacious class etc. They further demanded instructional materials including additional teachers trained in Braille and sign language course for a period of 6 months. As said earlier, a small class size is required for integrated class. They also suggested to include one chapter on the concept of social inclusion in each grade. Finally, the teachers said that SIP and VEP are reliable planning documents to institutionalize IE.
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Research Paradigms: Implications for Social Transformation

Shashidhar Belbase

Introducing from Context

At present, there has been frequent discussion on paradigms of research among the faculties and research students in Kathmandu University School of Education (KUSOD). Most of the researches at the beginning of its M.Phil. and Ph.D. programs have not discussed research paradigms but at present all most all researchers have mentioned about research paradigm in their methodology and design part. This shows that researchers and faculties are being more conscious towards different paradigms of research and their implications. So far as the analysis of research paradigms of forty nine M.Phil. and eight Ph.D. dissertations and theses in KUSOED is concerned, they show a significant shift of research paradigm from modernism to post-modernism with wider acceptance of subjectivism and epistemological pluralism.

At the earlier phases of KUSOED Ph.D. programs, the researchers have focused on quantitative study within positivism and post-positivism research paradigm and to some extent there was focus on quantitative and qualitative (mixed) approach with dominance of descriptive analysis and less interpretive style. Slowly, the shift of paradigm from positivism, post-positivism to post-modernism resulted with the doctoral researches like "The experience of being victims of school bullying: a phenomenological study" done by Niti Rana in 2006 and "Dilemmas of organization culture and decentralization in education" by Bhoj Raj Sharma Kafle in 2007. These two studies have revealed that KUSOED has introduced epistemological pluralism in the research practice with post-modern perspective of multiple ways of knowing and understanding the reality as contextual relative to time, space and society.

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This paradigm shift in researches applying different research methods and approaches guided by different contrasting paradigms from positivism to post-modernism should not be viewed only from the nature of study (quantitative/qualitative) but also from how the researchers have interpreted the underpinning issues with different ontological and epistemological standpoints.

This is a great achievement but it is always a great challenge to establish and make the shift sustainable. In this connection this paper has discussed on research paradigms, factors that determine a particular research paradigm, levels of research paradigms and the different paradigms with their impact on the research. The author has tried to be reflective on this understanding of research paradigms based on review of researches and related literatures.

**Search of Meaning**

In my understanding till now, a research is guided by its methodological part. The methodology of research is guided by axiological assumptions (values) of researchers, value determines how to reach the information source and what tools to apply for collection of data (epistemology) and finally what tools and techniques do researchers choose is determined by what is the personal belief of researchers as being a researcher (ontology). In this way a researcher’s belief (subjective/objective), way to view the reality (nominal/realistic) and his/her value determines the paradigm of a research. According to Kuhn (1970), it stands for the entire constellation of beliefs, values and techniques, and so on shared by the members of a community.

Chalmers (1982 as cited in Wallis, 2007) defines a paradigm as "made up of the general theoretical assumptions and laws, and techniques for their application that the members of a particular scientific community adopt" (p. 90). Chalmers (1982, p. 91) points out that a paradigm has five components:

1. Explicitly stated laws and theoretical assumptions.
2. Standard ways of applying the fundamental laws to a variety of situations.

3. Instrumentation and instrumental techniques that bring the laws of the paradigm to bear on the real world.

4. General metaphysical principles that guide work within the paradigm.

5. General methodological prescriptions about how to conduct work within the paradigm.

Denzin and Lincoln (2005) have defined a paradigm as a basic set of beliefs that guide action of an individual. They further state that paradigms deal with first principles or ultimates. They are human constructions which define the world view of the researcher-as-interpretive-bricoleur. These beliefs can never be established in terms of their ultimate truthfulness. In this way a research paradigm is the set of beliefs, norms, ethics, values and principles that guide the actions of a researcher from selection of research topic to the execution of research with writing a report and its dissemination.

In my understanding, the significance of paradigms is that they shape how we perceive the world and are reinforced by those around us, the community of practitioners. I agree with Williams (1998) when the writers "Within the research process the beliefs a researcher holds will reflect in the way their research is designed, how data is both collected and analyzed and how research results are presented". For a researcher, it is important to recognize his/her paradigm, as it allows them to identify their roles and responsibilities to inform the readers the research process, determine the course of any research project and distinguish it from other perspectives.

**Levels of Research Paradigm**

Research paradigm can be understood at three levels: philosophical, contextual or social and technical. The first one considers the basic belief about the world, the second one considers the social guidelines (ethical considerations) about how a researcher should conduct his or her research or inquiry and the third level considers the method or
techniques of conducting the research. In other way can discuss the three levels of paradigm as technical, practical and emancipatory as discussed by Habermas (1987). The philosophical level is the highest level at which generally researchers discuss about five sets of assumptions in subjective-objective dimensions: ontological, epistemological, axiological, methodological, and human nature.

Ontological assumptions refer to the nature of social reality. There are realist and nominalist perspectives to view the social reality. According to realist perspective social reality is tangible, hard and made up of relatively immutable structures that exist independent of our perception and consciousness. According to nominalist perspective the social reality is constructed in names, labels and concepts that are used to structure that reality. Realist view considers that reality is out there as external to the knower and it is unique whereas nominalist perspective considers reality as constructed by individual or society and so there can be multiple realities. Realities can be constructed and deconstructed and reconstructed as it is social.

In my understanding epistemology refers to the nature of knowing and construction of knowledge and is divided into the positivist and anti-positivist stance. So far as the former is concerned it believes that reality is objective as an external observer is possible, the latter that the knower and known are interdependent and that social science is essentially subjective. A researcher with the positivist perspective studies the parts to understand the whole, he or she looks for regularities and causal relationships to understand and predict the social world. To the anti-positivist, reality is constructed by individual in social context and so the social world can only be understood by occupying the frame of reference of the participant in action.

To me axiological assumptions are closely related to epistemological dimension. These are assumptions regarding the role of values in ways of knowing. In this regard two questions come to the mind of a researcher: whether values can be disregarded in order to understand the reality or the values can be considered as a means to understand the reality?
When a researcher considers the human nature then he or she follows either deterministic or voluntarist world view. The former one views individuals as products of their environment, the other believes that individuals create their own environment (Putman, 1983;36). Finally, there are assumptions about the process of research, the methodology. Nomothetic methodology focuses on an examination of regularities and relationships to universal laws, while ideographic approaches centre on reasons why individuals create and interpret their world in a particular way (Putman, 1983;41). The social world can only be understood by obtaining first hand knowledge of the subject under investigation. Methodology focuses on the best means of acquiring knowledge about the world (Denzin & Lincoln, 2005).

In this way, to me, a research paradigm may exist at level one where the sole purpose of doing research is to establish a method, system or law; it is not time bound. In level two, the paradigms seek meaning from relationships of variables in social, cultural, economical and political life of people from the context which is time bound. At the final level, a research paradigm seeks solutions to all social, cultural, economical and political issues liberating people from all sorts of oppressions, suppressions and injustices. So, it is not sufficient to know only a particular paradigm for a research but the level of that paradigm should be understood in order to make it more rigorous for changes to occur in society no matter whether it is positivism or constructivism or integralism.

Diversity of Research Paradigm

One day my professor asked us a question during my Masters' degree study in Philosophy class: Do you believe that there is a single reality or multiple realities about our society? I was surprised to hear the question. I could not understand it at first. Some of my friends tried to answer on their own but I could not speak for a while. Actually not for a while but it took me the whole semester to understand the question. The question of single and multiple realities was concerned with our belief, values and ethics (our worldviews or paradigms).
I came to know from different papers and research books that there is a great diversity of research paradigms at present. Broadly speaking these paradigms are divided into three categories: modernism (positivism/post-positivism), post-modernism (interpretivism/constructivism, Criticalism and Representationalism) and post-post-modernism (integralism). These paradigms have their own focus, methods, and quality standards that guide researchers to address the issues regarding designs, tools, validity criteria and interpretation of data. These paradigms, to me, did not result from educational researchers but they were imported from other areas or disciplines such as naturalistic science, social and political science, literatures and philosophy. But these paradigms have significant effect on educational researchers at present.

**Positivism and Post Positivism**

Rise of modernism in research is heavily influenced by the contemporary development of science and technology during the beginning of the twentieth century. There were great scientific inventions and all the researchers heavily focused on objective results of scientific experiments.

A research was conducted in order to prove or disprove, predict or measure the variables. Experimental designs were the dominant methods followed by rigorous quantitative data analysis and objective interpretations. So the researchers on education and other social sciences were also guided by these paradigms.

In this paradigm research objects are considered as lifeless subjects. Quantitative data analysis becomes dominant in all facets of educational and social science researches. Researcher controls and observes in an objective dispassionate manner (Mortens, 1998; Kmitta, 2000; Guifoyle, 2005). The research is considered value free and all kinds of judgements are suspended till the statistical results are achieved.

There are controlled criteria of validity and reliability. Statistical tools are applied to control the quality of the research. Content validity, construct validity, concurrent validity, criterion related validity and
predictive validity tools and technique are dominant in all sciences and all most all researches (Taylor, 2007 retrieved from www.smec.moodle.com).

During the late seventies, social and educational researchers slowly came to realize the extremities of the rigidity of the hard science in the control of tools and methods of data collection, analysis and interpretation. So, they started considering the human factors not only as experimental objects but also recognized the subjectivity of individuals. Survey tools were designed to know that facts and information about human feelings, experiences and opinions through questionnaires, non-participant observation, interviews and quasi-experiments. This brought a shift in the research for the first time in the history of research in education and social sciences. This is the era of post-positivism that came to challenge the absolute positivism.

Researchers apply different methods of validation: triangulation of methods, data and theory. Triangulation of method means adopting multiple methods of data collection, triangulation of data means cross-checking of the data by more than one tools/approaches, and triangulation of theory means adopting multiple theories to capture the pertinent issues from different perspectives.

Though positivism can be dominant paradigm in researches of natural sciences but in social sciences and education it can not be absolute. Therefore, there is a need of relative and perspectized way of understanding the reality and conducting research. It opened the door to enter into another paradigm: interpretivism/constructivism.

**Interpretivism/Constructivism**

Slowly social and educational researchers came to realize the obsolete use of quantitative data and objectivity of tools and techniques. They tried to understand the feelings of research participants and understand the meaning of their responses rather than being objectively unbiased. They considered the human feeling as a part of research that is very liquid and can not be judged by rigid scientific tools. The researchers tried to understand the nature of reality more subjectively and inter-subjectively. This brought the research into a
new paradigm: Interpretivism and constructivism. It was a big shift of paradigm in the history of research in social sciences and education. Educational researchers came to adjust these shifts together with sociology, anthropology and philosophy.

Researchers started collecting data using tools such as participant observation, ethnographic field work and fourth generation evaluation (Guba and Lincoln). Researchers immerse in the socio-cultural context observing human behaviour and action closely being the participant in the phenomena. It brought the researchers into an interactive link with the participants and understand them from their participants' perspective. It motivate researchers to construct meaning out of the participants' perspectives in the social and cultural context.

Researchers adopted hermeneutical and dialectical approach to conduct the research emphasizing on the contexts and making judgements from the consensus of participants and the researcher. Now the research is no more value free and objective but is value laden and subjective. The researcher does not remain as speechless mankind but opens ears to listen and speak to give a value connecting the known and the knower.

The validity criteria have changed from triangulation to trustworthiness applying the criteria of credibility, dependability, conformability, transferability and fairness. Researchers focus on authenticity of the information applying the above mentioned criteria in order to address the issue of standard of the quality of research. This paradigm originated in early eighties and remained as dominant till late nineties (Taylor, 2007).

**Criticalism**

The rise of constructivism led to the foundation of criticalism. Researchers could not remain idle just observing the realities of lives of people during their study. They could not bring the voices of people into their own voice but they simply constructed ideas and meaning out of those voices from the field study or ethnographic tales. The tales remained tales of the filed but did not intervene in it for further change of the society. Rather it made researchers as
passive witnesses of the social realities. So, this has caused researchers to think over their own role as researchers towards the lives of people (students, teachers, parents and others). Researchers have started being a bit critical to the social practices (their own and others) and doing critical action research to bring some changes in beliefs, norms and values as per the context of development of social, cultural and political dimensions.

The researchers have started being critical to their own and others' practices and tried to bring theories into practices (praxes). The praxis of theory, methods and philosophy has become the pivot for arguments and counter-arguments. Researchers within critical paradigm believe that knowledge is socially, historically, culturally, and politically situated with multiple realities. The purpose of research is not only to understand the reality but to promote social change, liberate people from the darkness of ignorance, exploitation, injustices and discriminations. Even the quantitative data can be analyzed and interpreted in order to understand the ground reality and take political decision for necessary intervention. Neutrality of researcher is not expected but a researcher becomes an active political player for the sake of positive changes in society. In such a condition researchers have started focusing on the process rather than tools and end results of researchers. If anybody as a researcher tries to remain neutral to social, political, cultural suppressions and oppressions then that is considered as intellectual dishonesty (as this paradigm considers).

So, they have employed praxis of readers and researchers as means to judge the quality standard of the research (Taylor, 2007). Researchers have maintained the quality of the research through the message of research for change with pedagogical thoughtfulness, critical reflexivity and re-envisioning the future actions.

The critical paradigm made the researcher and readers aware of social discriminations, exploitations, injustices but could not resolve them. Just being critical reflector could not do much for the changes except realizing it. This created a room for next paradigm to come into practice. When there were louder vices but less echoes, more critiques
but less ways out, more tension but less consolation, the new system of belief, value, and ethics emerged as representationalism in the world of research as a new paradigm.

**Representationalism**

The critical perspective in research as a paradigm was successful to create a wave to shake the world. The wave brought the voices of voiceless to the forefront of social, cultural, historical and political arena. The voices became extremely biased and sought radical changes in the modern world. But such radical changes were not possible due to interdependency of the global economy. No society can be isolated from others and the trans-cultural, trans-historical, trans-social and political network throughout the globe has made everyone to rethink on their perspectives, values and ethics. So, researchers now have started focusing on how to represent the diverse ideas of self and others, how to create room for all and reduce the social injustices.

Researchers have now tried to focus on the fictionalization and narrative turns guided by literary genre of writing as research. This provided freedom to researchers to bring their own life histories (performative praxes) as a source of information that situates a personal to social and cultural context. This paradigm tried to view the social phenomena from the perspective of self and others: from the perspectives of dominated and dominator, suppressed and suppressor, oppressed and oppressor. This is time to rethink on each-others' roles and responsibilities. This is time to seek an opportunity to serve each-other for the ecological balance. Researchers have a major responsibility to determine how a social and political order can be balanced so as to maintain local, regional and global peace. So, researchers have now tried their best to represent the voices of different castes and creeds, economic classes, women, marginalized people and people from all sectors as important players of constructive changes.

Researchers have employed different tools and techniques to address the issue of quality standard (validity and reliability): crystallization,
polyvocality, verisimilitude and other literary flavours of richness and depthness. This paradigm originated during the beginning of nineties and became a dominant paradigm in late nineties. Representationalism as paradigm has been successful to represent the voices of people to the forefront of social, cultural, economical and political forums but it has not brought significant changes in the society. Slowly voices have been limited to formality and remained as political and academic jargons. So, this has opened a new paradigm to us which seeks to have room for all with dignity and value.

Integralism

I think representationalism as a research paradigm tried to maintain ecological balance in the society (culturally and politically) but it could not show ways out for how to maintain the balance among people of different classes and creeds. Just by representing their voices in the research could not empower them. So, researchers were in search of a new paradigm which could not only listen, see and act but also include all the voices in the process of social, cultural, economical and political decisions. Nepal as are public moving through a transitional phase of changes, it is more a relevant issue in our research but I think we as researchers have not yet realized or do not want to act (do research to find better ways out) in that way due to hegemony of our ideology.

This paradigm originated in early 2000s. This has brought a shift in the educational research through acceptance of diversity and viewing the world of research as a whole (holism, pluralism). This paradigm brought the idea of open curriculum and wisdom as a source of resolving all kinds of social conflicts and injustices. The wisdom of thought, philosophy and practices based on the holistic approach has tried to address the interest of all sectors of society. The political commitment is a must for this to happen. Here the political commitment means commitment of all researchers of social sciences and education in order to pave the ways out for a new social and economic order with more just, equity and inclusive world. This is the golden opportunity to do research for social changes, research for world peace, research for eradication of all kinds of suppression,
oppresion and treatment of human being as animals (still there is trafficking of women and girls, slavery and discrimination in social, cultural, economical and political dimensions).

So, I think, integrated curriculum, integrated education, integrated participation in governance through integrated approach is the present need to address. Thus, integrated approach of doing research is the main agenda of research in this paradigm. This paradigm employs practical wisdom and holism as a tool to maintain the quality standard of a research. However, the paradigm has yet to develop its research methods and process.

**Reflection and Conclusion**

The way researchers confront with different situation, contexts, issues and problems and develop new ideas, methods and value system is at the core of research paradigm taking a new form. In my understanding, when a new paradigm emerges, it does not isolate or remove the old paradigms but it creates its own room in the social and cultural context. So, there can be existence of different paradigms at a time because there are people of different beliefs, experiences and value system. In diverse society, there are diverse ideas to resolve a problems and finally it introduces different research paradigms. At present, the domination of positivism and post positivism in research in education is there. To some extent, there is flavour of new paradigms (criticalism and integralism) in some researches but still there is higher application of traditional paradigms of research that is positivism and post-positivism.

These paradigms (positivism to integralism) till now have not been able to resolve the crises in the areas of social sciences and education. New paradigms (Criticalism, representationalism and integralism) have not influenced our pedagogy in the classrooms. We are still guided by our century old teaching methods. There are changes brought about by ICT but it is not within the easy access of many people in the developing and underdeveloped countries. Researchers in these countries have been driven by immediate monetary benefits being more donor oriented researches (consultations).
Day-by-day the world is being too complex. New problems have emerged through globalization and issue of localization, unclear weapons and new economic and social orders, new political chaos and threats of international cybernetic terrorism. All the above mentioned paradigms have not been able to address the present crises. In these complexities search of a new paradigm of research is still an open ended question to all the researchers to think and act in a way to find more acceptable and just philosophy, theory and practice. Search of a new paradigm or work with established paradigm is a choice for a researcher. His/her stance empowers him/her with philosophical ground moving to practicality of his or her research with findings and implications. This is not a time to debate between quantitative and qualitative approaches but to apply them to address the issues of social changes with new thoughts, ideas and innovations.

New practices of research that are more viable for social transformation in the country are to be championed in collaboration with other universities of the world. Development of more viable, just, equitable and sustainable research paradigm from academic institutions will be a great leap in the process of social transformation. Alternative ways of knowing, acting and practicing in the classrooms based on action research and critical reflective practices should be the rule, not exception, of the country.

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Journalism Education in Nepal: An Analysis

Keshab Raj Devkota

The context

Communication is a social process. It is mobilized by the media. The human activity of communication is also considered fundamental and very essential for the existence and unity of every society. In the mass communication process, active participation of a person receiving information and messages is relatively less than in inter-personal communication. Mass communication is more advantageous than the inter-personal communication. Appropriate communication policy and programs are necessary to enable a society to function democratically and effectively for the development of a quality lifestyle.

All the sectors and aspects of the society today seem eager to initiate communication. Therefore, to convey edited messages and information to the people, media of mass communication seem to be playing a vital role. Thus, an appropriate study for the discovery, editing and disseminating of news to the society is journalism education in real sense of the term. It was not long before five hundred years ago that the concept of mass communication came into existence. It is believed that thousands of years after the development of oral language, the art of written language was developed. Then thousands of years after the development of the written language, printing press was invented. In the fifteenth century, a German named Guttenberg brought about a revolution by introducing letters made up of iron in printing. After four hundred years of the development of printing press, radio transmission started and it took another forty years for television transmission. There have been various interactions regarding the development of speaking skills in radio and television (Adhikari, 2062:10).

The history of communication in Nepal can be said to have started with the development of human civilization. Communication in

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Nepal stepped into a new era in 1958 with the inception of ‘Gorkhapatra’, the first Nepalese daily newspaper. It is however still not known when exactly journalism was started in Nepal. Communication is believed to have existed in some form even before the great unifier of Nepal, King Prithvi Narayan Shah conquered and extended the Nepalese territories. It can be said that true journalism began in Nepal following the political revolution of 2046 B.S. Currently, nearly a hundred radio stations, more than two thousand magazines and journals and about a dozen television stations exist in Nepal (Press council, 065:25). In the mean time, the development of online journalism has further helped Nepal to keep abreast with the rest of the world.

Also there has been a recent trend to run radios and television stations and to publish various books, magazines and journals in Nepalese language from various parts of the world. In this sense media has transformed the world into a kind of global village.

Journalism Education in Nepal

It was only after seventy five years of the formal beginning of journalism, a few classes on journalism were conducted by Patan Multiple Campus and Ratna Rajya Campus at the certificate level in 2033 B.S. Bachelor's level study in journalism started since 2038 B.S. Journalism was taught as an optional subject at Prithvi Narayan Campus in Pokhara since 2041 B.S. Whereas a subject it was taught at the People's Campus since 2043 B.S. The history of development as reflected by various inscriptions in stones and copper plates in Nepal is still vague. In the mythical age, the carrier of information and messages, ‘Narada’ is said to be the emissary of Gods and Goddesses. It is speculated that journalism in Nepal developed through various religious propagators. If we dig into the pages of history during the reign of king Jayasthiti Malla, we can find that the Christians had come to Nepal with an intention to promote their religion (Koirela, 2058:20).

In 1950 B.S, ‘Gorkha Bharat Jeevan’ was, for the first time, formally published from India, followed by the publication of the first
Nepalese monthly magazine 'Sudha Sagar' in Nepal in 1955 B.S. Before 2007 B.S, a few magazines and journals were published from India. However, it was only after 2007 B.S various magazines and journals were published consistently and the man power was hired from India including some foreign countries. Similarly, journalism was taught at the Master's level from 2058 B.S at R.R Campus, a constituent campus of Tribhuwan University and Kantipur City College and College of Journalism and Mass Communication affiliated with the Purwanchal University. In the fiscal year of 2059/2060, the students of Makwanpur district, for the first time, took exam on journalism in S.L.C level exams. At present, journalism is taught even at the secondary levels in various schools.

Nepal Press Institute commenced a ten month training program in journalism in 2041 B.S. Similarly, a Bachelor's level training program of 12 months duration has been commenced since 2058 B.S. Likewise, Media Point has also started a ten month training on journalism since 2053 B.S. Apart from these institutes, many other organizations like Nepal Patrakar Mahasungh, Press Chautari, Nepal Press Union, Sancharika Samuha etc are also conducting various short training programs on journalism. Since there was no Ph. D. program in journalism so far, some scholars have done their Ph.D. in journalism from abroad while some others have linked journalism with their major subject in Ph.D.

Supply a suitable sub title to the writing after here like some critical considerations etc. It is however astonishing that even in today's age of information and technology, there has been no research level education in the area of journalism. If we look at the syllabus of journalism studies in Nepal, it seems that it is more confined to all sectors of communication. Journalism is taught as an optional subject in class 10. As per the government provision, anybody who passed the tenth grade with Journalism as an optional subject can become a reporter. Also any one with an experience of ten years in the field of journalism can become an editor. However, there has been no mandatory rules for a person to choose the subject in S.L.C. to become
a reporter on one hand and even if one chooses this optional subject, it has not provided necessary knowledge as required by the reporter.

Even those studying journalism as an optional subject at the certificate level are devoid of the most basic knowledge in journalism. However, it has been made mandatory for the students of higher secondary education and certificate level with journalism to practice their knowledge and skill towards the end of their course in various journals and newspapers. This has however been just a formality. Emphasis on practical exercise of journalism should be necessary for those who study journalism at the certificate level, in order for them to become a semi-skilled reporter when they pass this level. Similarly, some modifications are needed in the syllabus of all levels as well.

Specialized knowledge in print and electronic media should be imparted right from the certificate level apart from the introduction of journalism, types of news and knowledge on radios and television journalism. Similarly, little difference is observed in the syllabuses of Bachelor's level and the Master's level studies of journalism. It is also suggested, that study of photo journalism, development journalism, electronic journalism and public contact be made specific. Many students of Master's level studying journalism lack even the basic computer skills. Likewise, photo journalism has been confined to formalities only. The students lack sufficient exercise in FM and Videography, which hinders them to practically use journalism even when they complete the Master's level study in journalism. Those studying developmental journalism should at least be capable of visiting different villages and obtain required knowledge for the development and betterment of the village. While the photo journalism students should be capable enough to select and take pictures that are worth to be printed. Recently, Nepalese people have welcomed the concept of Multi University. However, the syllabuses differ even in the same level taught in different universities.

No mandatory elementary level journalism is required as a prerequisite for those who want to pursue journalism in the higher level at colleges affiliated to P.U (Purwanchal University). However, it is not so in colleges affiliated to the T.U. The T.U affiliated colleges
require students to have completed the certificate level journalism if they intend to pursue journalism in Master's level. It is quite unprofessional that journalism is taken so lightly in Nepal even in this age of media and communication.

There has been a debate over the counseling on journalism. Journalism in this sense has not been getting the deserved respect. Even the spokes-persons of various ministries in Nepal seem to be lacking the most basic knowledge in journalism. Such a lack impedes the proper external and internal communication of the ministries and offices under them. The spokes-persons of many ministries tend to hold back information. Many government and non-government organizations publish their bulletins, however, there as well some one with no or little knowledge of journalism seem to be reigning over. There are certain norms and values in communication and media, which should be strictly followed for transparent dissemination of news and information in the society. Also, lots of mismanagement has been noticed in the internal and external communication of various INGOs and NGOs. It therefore is necessary to develop a new concept in the study and utility of journalism in Nepal with necessary review and modification of the syllabus.

Formal education in journalism started in Nepal 31 years ago, on attempts to copy the foreign syllabus as well. Nepal does not lack the required experience for effective journalism education. Some colleges offering journalism courses have been found copying the syllabus of Canada and America, which should have rather been modified in the context of Nepal. As journalism is an international subject, emphasis upon the use of an international language is desirable in the teaching and learning of journalism.

**Conclusion**

Journalism is considered the third eye, the fourth organ of the state, the magistrate and the medium of contact. As Journalism is vital in today's age, the state should make necessary endeavors to modernize and bring about effectiveness in journalism. New developments have been made in modern and advanced technology and principles of
media and communication. Initially no need of any formal education was considered for journalism and it was thought that to become a journalist was to possess an inborn aptitude like writing poetry and literature. However, with the expansion of the field, different mediums of communication developed and the world became a small place from the view point of communication. Today, knowledge and training of journalism is essential not only for those practising journalism but for the entire conscious society. At present, it seems that even a layman should acquire knowledge regarding the utilization of various mediums of communication.

Different mediums of mass communication like Radio, Television and internet have their own importance in journalism. Various new methods in the activity of collecting, editing and disseminating news have been introduced for which proper training is essential.

In India, the first press commission formed by the Indian Government in 1954 had emphasized over proper training in journalism. Similarly, the 2nd press commission as well had devised a plan for the establishment of national journalism training center and newsletter development commission for the development of journalism. Various schools and Universities are now run in India that provide training on journalism. The first press commission formed in 2015 B.S in Nepal also had emphasized on journalism education. That time efforts were made to conduct classes on journalism with the help of those who had obtained journalism training from abroad. The press commission formed after wards as well had emphasized over a healthy, neutral and unbiased journalism.

Media has thrived in Nepal ever since the political revolution of 2046 B.S with growing focus on the need of journalism education. Lately, there have been discussions over developing the press council as an archive office of the journalists, and to provide counseling to the journalists working in various print and electronic media. Meanwhile, to develop journalism as a responsible field, a need for good modification of the present syllabus in Nepal is strongly felt.
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My Understanding about Learner-Centered Classroom

Bishwo Udhir Poudel Gharti

Introduction

Before entering the depth of my topic, I tried to make out the meaning of 'education'. I found varieties of explanations regarding education. According to Rao and Kumar (2004), education is considered as the backbone of national development. They say that it is the major factor of change, modernization and production. Education helps to make the thinking, understanding and attitude of the citizens wide and scientific and it produces healthy and cultured citizens. Human beings keep on learning and training themselves throughout their lives through the influence of the surrounding environments and the experiences which mould their behaviour, concept of life and the concept of their knowledge.

I further came to know Pestalozzi, who live from by 1746 to 1827 A.D. and contributed a lot in the development of educational philosophies, basing his philosophies on the ideal of liberty (Alexander & Murphy, 1995). He said that when a child is left in toe nature, s/he will listen better, and the sense of freedom gives her/him more strength to overcome difficulties. Perstalozzi greatly emphasized that a child should be given freedom as far as possible and let him/her seek diligently for every means of ensuring his liberty, peace of mind, and good humor (Alexander & Murphy, 1995). I therefore, perceived that the focus of teaching-learning should be transferred to the learner from the teacher.

Concepts of Learner-Centered Teaching

From Weimer (2002), I came to understand that in learner-centered teaching, the curriculum is based on problem solving rather than compartmentalization of subjects. The child is presented with a challenging and stimulating environment and encouraged to find out for himself without being told the answer. Brainstorming is done in...
the class to generate a large number of ideas quickly, to encourage creativity and to involve the whole group. In this system the students are made more active than the teacher. First of all each child is observed carefully to find the individual differences. Then teaching is conducted according to his/her personal needs and abilities.

When I read an article entitled, Creating Child-Centered Classrooms: 6-7 Year Olds. Step By Step: A Program for Children and Families by Walsh (1997), I learnt how learning takes place in children. From this article, I understood that in child-centered teaching programs, children construct their own knowledge from their experiences and interactions with the world around them, and teachers foster children's growth and development by building on children's interests, needs, and strengths within a safe and caring environment. Reading Walsh (1997), I have understood that in learner-centered teaching, it is important to consider the learning style and particular interests of the child.

I found from Humphrey, Post and Ellis (1981) that learner-centered teaching is based on the philosophy that intellectual curiosity is natural and when encouraged and nurtured, it becomes a lifelong pursuit. It is necessary to bring focused attention to creating structures within which children can learn. I further understood that we must offer them appropriate instruction so that they can experience the freedom to initiate within this structure in the future.

I have found from Brades and Ginnis (1986) that there are many terms, which refer to the learner-centered approach to teaching and are used synonymously in various situations. Some of them are: student-centered learning, enquiry method in teaching, experiential learning, progressive approach and participatory learning. Student-centered teaching is synonymous to learner-centered teaching where students are in the center of the teaching-learning process. I have realized that experiential learning is the learning process where students learn in the course of satisfying their queries through experiences rather than only learning from the text. Similarly, to me, progressive approach is where it is believed that it is important to consider the learning style and particular interests of the child.
(Daigle, 2000). It is based on the philosophy that intellectual curiosity is natural and when encouraged and nurtured, becomes a life long pursuit. And in participatory learning children learn by participating themselves in practical work or group discussion rather than listening only from teachers (Daigle, 2000).

Although these different terms are not completely synonymous, there are certain common themes that connect them with each other. I learnt from Brades and Ginnis (1986) that in reality, there is a continuum of teaching style which extends from Traditional to Learner Centered approaches.

In fact, I have heavily relied on Brades and Ginnis (1986) and Weimer (2002) in this research as I found their books to be directly related with my research topic. I have also learnt from Brades and Ginnis (1986) that Didactic (traditional) and learner-centered approaches of teaching are considered to be the two opposite ends of a continuum.

Teachers whom I have encountered are found somewhere in between the two opposite ends of the continuum. Some are found more towards the traditional end and some towards the student-centered end (Weimer, 2002). I have also learnt about some distinct differences between student-centered and teacher-centered methods. I have summarized the differences between the two approaches as below.

Learner centered teaching focuses on integrated subject matter whereas traditional method focuses on separate subject matter. Integrated curriculum is also synonymously called interdisciplinary
teaching, thematic teaching, and synergistic teaching. I found that Humphrey, Post and Ellis (1981) have maintained the learner-centered teaching as an integrated study in which children broadly explore knowledge in various subjects related to certain aspects of their environment. S/he sees links among the humanities, communication arts, natural sciences, mathematics, social studies, music, and art. S/he highlights that skills and knowledge are developed and applied in more than one area of study.

Similarly, when I went through the work of Shoemaker (1989), I found that integrated curriculum is organized in such a way that it moves across subject-matter lines, bringing together various aspects of the curriculum into meaningful association to focus upon broad areas of study. He further says that it views learning and teaching in a holistic way and reflects the real world, which is interactive.

I learned from Weimer (2002), that teacher is considered to be a guide to educational experience in learner-centered teaching but in traditional methods s/he is pupils play an active role and also participate in curriculum planning whereas in traditional method pupils play a passive role and have no say in curriculum planning. They are treated as the passive listeners who simply have to accept what the teachers say. Learning is emphasized in discovery techniques in learner centered teaching but emphasis is given on memory, practice and rote in traditional method. External rewards and punishment are not used in learner centered teaching whereas they are frequently used in traditional method. Little testing, evaluation or examination is done in learner centered teaching but frequent and regular testing is done in traditional method. Emphasis is given on cooperative group work in learner centered teaching whereas emphasis is given on competition in traditional method. Teaching is not confined to classroom base in learner centered teaching whereas in traditional method it is so. In learner centered teaching emphasis is given on creative expression but little emphasis is given on creative expression in traditional method.

Similarly, after reading Kohn, (1996) in What to Look for in Classroom, I gained some ideas to check whether a class is learner
entered or not. I developed the idea that seats are arranged around the tables rather than in rows in learner centered teaching. I think such an arrangement facilitates interactions among the students. And furniture is comfortable for learning in learner centered class so that they can fully concentrate in class activities.

The other difference I found from Brades and Ginnis, (1986) was that in traditional class walls are usually bare whereas in learner centered class walls are covered with students' projects. This creates pleasing environment in the class and students can remember or refer subject matters easily. This also works as an evidence of students' collaboration, which makes them feel proud. Information about and memento of those who spend time together in the classroom is also found in learner-centered class. I have understood that in student centered class there should be frequent hum of activities and ideas being exchanged rather that silence or teacher's tone being the loudest or most often heard. I have come to know that in learner-centered class, teacher is typically working with students so that it takes a moment to find him or her unlike the typically front or center teacher in traditional class. I think this helps the teacher to provide individual care to students and students easily do not get diverted. I have understood that in learner-centered class teacher's tone is found to be respectful, genuine, warm, caring rather than controlling and imperious as in traditional method. Students are welcoming, eager to explain or demonstrate what they're doing or to use visitor as a resource in learner-centered class whereas, in a didactic class, students hardly react with the visitors.

In learner-centered class, students often address one another directly with their first name. This indicates closeness among the classmates, which helps in class discussion and interaction. Emphasis is given on thoughtful exploration of complicated issues. Students ask questions at least as often as teacher does. What I have understood is different activities take place simultaneously in learner-centered class rather than all students usually doing the same thing as in traditional method. The teacher goes on observing the activities and gives assistance if needed.
I have further come to know that an inviting atmosphere is found in learner-centered school. Students' projects fill hallway walls. Bathrooms are always in good condition. Faculty lounge warm and comfortable, office staff welcoming toward visitors and students helping in lunchroom, library, and with other school functions are some other symptoms of learner-centered school (Kohn, 1996).

According to Arizona Faculties Council (2000), examples of learner-centered educational practices include, but are not limited to: Collaborative group learning, both inside and outside the classroom; Individual student research and discovery; Research and discovery by students and faculty together; Problem-based inquiry learning; Student-faculty studio and performance activities; Hands-on experiential learning activities; On-site field experiences; Self-paced tutorials.

Learner-centered education also creates an environment that supports the individual as a whole person. It attempts to meet the individual needs of a broad range of learners who have different ways of knowing, skills and cultural backgrounds. Different learning styles may be addressed by a variety of means, such as music, art, performance, visual representations and auditory input (Arizona Faculties Council, 2000).

**Constructivism and Learner-Centered Classroom**

When I went through the work of Kilpatrick, (1991), I found that there are various approaches to student-centered learning and all of them use students' past or recalled experiences to provide primary and/or artificial experiences from which they may continue to learn. For example, in many forms of problem-based learning, the teacher selects as actual problem from real life and presents it in the artificial context of the classroom to be solved by the class. I understood that in the role-play, the teacher, in the artificial context of the classroom, provides an actual primary experience. This relates to the type of experience that the role-players may have in real life. Sometimes the teacher may ask students to recall actual experience and focus on
them, in order to share with their classmates what they have learnt from their previous experiences.

I have found a glimpse of learner-centered philosophy in Heig (1996) in his paper Constructivist learning Theory. He has described constructivism as the latest catchword in educational circles. He says that the term refers to the idea that learners construct knowledge for themselves. Each learner individually (and socially) constructs meaning as he or she learns. I found another glimpse of learner-centered philosophy when he said that we have to focus on the learner in thinking about learning not on the subject/lesson to be taught. He has further said that there is no knowledge independent of the meaning attributed to experience (constructed) by the learner, or community of learners.

Kauchak and Eggen's work (1998) Learning and Teaching: Research-Based Methods presents a gist that constructivism is a view of learning in which learners use their own experiences to construct understandings that make sense of this world, rather than having understanding delivered by their teachers. Learning activities based on constructivism put learners in the context of what they already know, and apply their understanding to authentic situations. I found the basic idea of this theory as knowledge cannot be instructed by a teacher, it can only be constructed by a learner. I think this is to say that learning is not just a direct result of listening to a teacher but the students have to organize and develop what they hear and read. They have also said that constructivism is an example of Cognitivism applied to teaching and the opposite approach to constructivism is Instructivism. After reading about constructivism I realized that it is highly related with learner-centered teaching.

**Curriculum in Learner-Centered Teaching**

I have already discussed a broad concept of how curriculum would look like in learner-centered teaching in previous sections. However, I have tried to focus on it more in this part. From Brades and Ginnis (1986) and Weimer (2002), I understood this system believes in the ownership of learning by the students rather than by the teacher or
My Understanding about Learning-Centered Classroom

curriculum designer. The teacher just acts as a facilitator and/or a resource person. Hence, the students should be at least involved in the process of planning and designing the curriculum. I understood this philosophy emphasizes that learning should be self-initiated rather than forced or imposed. The learning process should involve activities of enquiry, discovery, self-evaluating the performance, getting feedback from the facilitator (teacher) etc.

The learner centered teaching thus focuses on integrated subject matter, in which science, mathematics or language can be taught with the same sets of activities. According to this principle, the student plays the final role in learning. Learning can only be self-initiated and every individual is fully responsible for his/her own behaviour, participation and learning. Hence curriculum is designed directly considering the needs of the students (Humphrey, Post & Ellis, 1981).

**Learner-Centered Assessment Strategies**

From Weimer (2002), I understood that this method is not too concerned with conventional academic standards. In learner-centered assessment, it is basically not the teacher’s assessment of the student; rather the task of evaluation is left to the students themselves, who are the real owners of their learning.

It is interesting to find that in a learner-centered class students learn how to assess their own work, First of all, they establish criteria for what makes a good piece of work. The two possible ways for this would be by brainstorming the qualities of a good piece of work and then by showing the class some work which the teacher feels to be good. After that the students are asked to divide themselves into small groups. This helps the teacher to notice the good points about the work.

Similar observation was Brades and Ginnis (1986) when they said that once the students complete their task, the students are left to assess their own work by asking two questions: What are the good points you found about your work? And what are the sectors which have to be improved? The teacher just records the answer and attaches in the work itself. This makes the students to take the ownership of both the
positive and negative sides of the work and motivates them to improve. After the self-assessment is completed, students learn how to assess each other's work. Peer assessment helps the student to find a second opinion and make comparisons. Per assessment also helps to develop social skills like negotiation, debate, assertiveness tact etc. Furthermore, it helps to develop awareness of personal strengths and weaknesses, and gives a student the benefit of another's perspective on the content. In this type of assessment, peers are asked to point out the strengths of the work first and then the weaknesses. Teacher again notes down the feedback and attaches it with the work.

**Conclusion**

Finally, as a conclusion of the above discussion, I have developed a conceptual framework that represents the attributes of learner centered classroom.

**Conceptual Framework to understand learner-centered classroom**

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Physical Environment</th>
<th>Teaching</th>
<th>Student Participation</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is based on the philosophy that intellectual curiosity is natural</td>
<td>Seats are arranged around the tables</td>
<td>Brainstorming is done in the class to generate a large number of ideas quickly</td>
<td>The students are made more active than the teacher</td>
<td>Little testing, evaluation or examination is done</td>
</tr>
<tr>
<td>Is based on problem solving</td>
<td>Pleasing environment for learning.</td>
<td>Teaching is done according to student's personal needs and abilities</td>
<td>Students construct their own knowledge from their experiences</td>
<td>The task of evaluation is left to the students themselves</td>
</tr>
<tr>
<td>Focuses on integrated subject matter</td>
<td>Furniture is comfortable for learning</td>
<td>External rewards and punishment are rarely used</td>
<td>Students learn by participating themselves in practical work</td>
<td>After the self-assessment, students learn how to assess each other's work</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Emphasis is given on cooperative group work</th>
<th>Walls are covered with students' projects</th>
<th>Teaching is not confined to classroom</th>
<th>Frequent hum of activities and ideas being exchanged</th>
<th>Teacher notes down the feedback and attaches at with the work</th>
</tr>
</thead>
<tbody>
<tr>
<td>The subject matter is relevant and has meaning for learner</td>
<td>Inviting atmosphere</td>
<td>Teacher is typically working with students</td>
<td>Students recall experience and share with their classmates what they have learnt from their previous experiences</td>
<td>Peer assessment is done to help the student to find a second opinion and make comparisons.</td>
</tr>
</tbody>
</table>

References


APA (1997). *Center for psychology in schools and education*. APA Education Directorate Washington, DC.


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