



Thematic Opinion

Contextual learning: rethinking education for Nepal in the wake of COVID-19 crisis

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Abstract: COVID-19 lockdown revealed – among other aspects, shortcomings in educational thinking and processes in countries like Nepal. Apart from the surge in exploring online teaching and learning opportunities, this crisis also paved way for rethinking the prevalent education system. As with a 2016 report from Massachusetts Institute of Technology, this inclination towards new avenues of educational tools provides a context to rethink education because technology alone cannot enable education. Fundamentally educational processes need to respond to specific contexts by anchoring itself to the context. Drawing upon alternative models of education, this paper suggests a contextual approach to learning with collaborative process and learner-centric pedagogy. The suggestion is based on the authors' observations and experience in early education in general, but reflecting on the family experience of relevance of 'contextual education' approach in the times of COVID-19 crisis in particular. The contextual learning situates a learner – with a sense of freedom and responsibility, as the core driver of education, while other stakeholders (parents or teachers) facilitate the learning process by adapting to the interests and initiatives of the learner. This calls for a shift in our thinking about education – what it is, and what it should achieve, as well as democratizing and decentralizing the educational processes.

Keywords: contextual learning; COVID-19; education in Nepal; rethinking education

सारांश: कोविड-१९ को लकडाउनले नेपाल जस्ता मुलुकमा अन्य विभिन्न क्षेत्रमा भैँ शैक्षिक सोचाइ र प्रक्रियामा रहेका कमीकमजोरीहरु उदांग पारिदिएको छ। यो विषम परिस्थितिले अनलाइन पठनपाठनका अवसरहरुका खोजीमा आएको आकर्षक वृद्धिको अलावा समग्र शिक्षा प्रणालीनै पुनर्विचार गर्न बाटो खोलिएको छ। मासाचुसेट्स इन्स्टिच्युट अफ टेक्नोलोजीले सन् २०१६ मा प्रकाशित गरेको एउटा प्रतिवेदनमा उल्लेख भएभैँ नयाँ शैक्षिक प्रविधि र साधनहरु प्रतिको बढ्दो भुकावले हामीलाई समग्र शिक्षाको अवधारणामाथिनै पुनर्विचार गर्ने प्रसंग जुराइदन्छ। किनकि प्रविधि मात्रैले शैक्षिक क्रियाकलाप सम्पन्न हुँदैन। खास त शिक्षा जुन परिस्थितिमा लिइन्छ, त्यहि सन्दर्भमा जोडिएर त्यसैप्रति जिम्मेवार हुन सक्नु पर्छ, तर हाम्रा शैक्षिक उपलब्धि विरलै हाम्रा समाजका लागि उपयोगी हुन्छन। वैकल्पिक शिक्षाका खाकाहरुमा आधारित भएर यो लेखमा एउटा सान्दर्भिक सिकाइको प्रक्रियाको बारेमा चर्चा गरिएको छ, जुन सहकार्य र सिकारु(केन्द्रित पाठचविधिमा आधारित हुन्छ। यो चर्चा र सुझाव साधारणत लेखकद्वयको पारिवारिक बाल सिकाइको अनुभव र खास गरि कोविड-१९को परिस्थितिमा सान्दर्भिक शिक्षाको औचित्यमाथिको चिन्तनमा आधारित छ। सान्दर्भिक सिकाइमा सिकारुलाई स्वतन्त्रता र जिम्मेवारी दुवै दिदै उनीहरुलाई नै आफ्नो शिक्षाको मुख्य जिम्मेवार मानिन्छ भने अरु अभिभावक र शिक्षकगणले सिकारुको आफ्नोरुचिअनुसारको सिकाइको सुनिश्चितता गर्न सहजीकरण गर्ने भन्ने हुन्छ। यसो गर्नको निम्ति शिक्षा के हो, यसबाट के उपलब्धि हासिल गर्नु पर्ने हो अनि शिक्षा पढतिलाइ कसरि विकेन्द्रित र प्रजातान्त्रिक बनाउने लगायतका कुरा सहित हाम्रो शिक्षाप्रतिको धारणामा आमूल परिवर्तन आउनु जरुरि छ।

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1. Introduction

COVID-19 lockdown in Nepal since 24 March 2020 has paused the everyday rush and allowed us to take a stock of systems in-place prior to lockdown. It has revealed a range of hobbies, creative works, rapid evolution of WFH (work from home) culture, rise in online users of various platforms, steep increase in customer base of e-learning solutions, increase in digital game players, as well as interesting dynamics among children and parents, students and teachers, country and citizens, families and neighborhoods, and so on. Educational institutions' closure and young learners staying home have triggered pressure on parenting, anxieties of future, exploration of online learning, retrospection of one's own family and home environment, reflections on the nature of future workplace and employment, and more importantly, some discussions on various aspects of education as well. UNESCO – like all other key UN agencies, began its response mechanism to COVID-19 through a dedicated web portal (<https://en.unesco.org/covid19/educationresponse>). In Nepal, some institutions resorted to online teaching, some individuals and groups began discussion on adapting the education system into 'new normal', and so on. The assessments of efficacies of all these initiatives are yet to be conducted, but we can begin to reflect on the challenges and opportunities brought forward by this pandemic. Such exercises would help not only in our preparedness for future pandemics but also to enhance our everyday practices in post COVID-19 normalcy. This paper reflects on this aspect, with the assumption that the COVID-19 crisis has awakened the parents, teachers, school managements, governments and societies that it is high time to revisit our educational practices.

2. COVID-19 Observations and Analysis

Online class surged as a lockdown fashion in a society where internet was so far confined as a medium to operate social media, watch YouTube videos, and at best browse news. This was a positive and promising incident, but soon this began to emerge as a concern in terms of cost (as fees charged by schools or the internet tariffs), availability of good network, and the potential rising of a new 'digital divide' in a society which already suffers with multiple layers of social divisions. Many teachers took the lockdown as vacation, while others accepted the challenge of going out of their comfort zones to learn new techniques and pedagogies. Some NGOs too proactively reached out to students and teachers to counsel as well as to fill the gap created by the long closures of schools. Still many found reasonable excuses to do nothing as they considered

teaching and learning were meant to take place when the schools were formally open. This 'excuse' is alarming as a policy and individual practice in the education sector. There is a need of fundamental shift in our perceptions and practices of education. This is where we see this COVID-19 situation as a disruptive moment that needs to be captured in our imagination and planning for future of education.

This paper attempts to suggest one of the many ways our education system may be overhauled. Rethinking education in Nepal, we argue for (re)conceptualizing education and its processes to respond to our own contexts. This requires a paradigm shift from teaching to learning as the focus of education. Learning can take place when the learner feels connected to the knowledge. Knowledge can be connected to the learner only if it corresponds to the learners' contexts – a concept that we elaborate in this paper. Our hypothesis is that many social and personal anxieties about school closures would have been easily managed if our education system had responded to a variety of contexts in our society – individually, collectively, and environmentally. In such a scenario, every child's education could have been easily continued at home or the immediate locale during this lockdown, if our education was 'context-based'. This idea of 'context-based education' – called contextual learning in this paper, is a possible way of (re)thinking our education. The paper draws from many informal interactions with parents and teachers in Nepal and India since past two years. During the lockdown in Nepal and India since March 2020, we carried out additional informal conversations to prepare this paper. The following conclusions are made through an analysis of informal qualitative data from our conversations and observations, which were gathered through online interactions with randomly selected respondents, drawn through personal acquaintance and observations of children in immediate neighborhood and broadly following peoples' public expressions through social media.

The objective of this analysis is to understand parents and young students' perception and behavior about education while they are at home during the past two months and still going on. Based on these observations, we find that most of the families that we are able to observe follow an educational model that educational philosophers refer as 'transmission model' or 'banking' model (Miller, n. d. (<https://www.educationrevolution.org/store/resources/alternatives/mapoflandscape/>)). Transmission model refers to the conventional schooling system where 'knowledge' is objective and given, which a child most gradually collect (hence banking). We have to admit our bias here that we have been

exploring alternatives to ‘transmission model’ since past few years, and hence our interest was to examine the consequences of ‘transmission model’ of education to the societies in Nepal:

Our analysis is based on categorizing our observations across the following major groups of family with school-age children:

- a. Family with limited resources and education level, for whom only way of ensuring better education is to send their children to school. Hence, closing of schools would imply disruption of their children’s education. This brought anxiety and stress in an extended lockdown (initial lockdown was like any other vacation).
- b. Economically sound family with sufficient educational background could resume some of the regular curriculum though they had anxieties about when the formal education would resume. This brings an important question of the perception of education, which we discuss later. This group could allow their children to engage with smartphones (and computers if available) as well as television but they were not so sure about their contribution towards the continuation of their children’s education.
- c. Third group is economically sound family with a fair bit of familiarity with online tools, hence are able to support their children carrying on with regular curriculum (with potentially a brief interruption) with the help of institutional support available online.
- d. Fourth group is also similar to previous groups but with a confidence on supporting their children’s education by self-introducing supplementary online or digital platforms, and letting their children continue learning on their own pace (regardless of the outreach from the respective schools).
- e. A mix of all above groups but in a limited number, were able to venture into new forms of learning with family at home or wherever they were located. This group was very small and did not bother about the formality of education but was keen to ensure that the children are somehow constructively occupied at home.
- f. A group of students not interrupted at all in terms of their education as they did not go to school prior to the COVID-19 outbreak anyway. This would include both disadvantaged (which we were not able to include in our study) and privileged (our own case).

During the closing of schools in lockdown in Nepal, educationist Dr Bidya Nath Koirala had suggested eight ways in which the teaching learning could be continued. These eight ways include (i) local involvement of teachers for those who cannot afford any technological aid, (ii), radio-based

education to those who have radio at home, (iii) televised educational materials to those who have television sets at home, (iv) teaching communicated through landline telephones if available, (v) cellular or mobile phone based education where data connectivity is possible, (vi) offline computer based teaching where educational materials may be transmitted through digital storage devices if internet connectivity is an issue, (vii) online education mode for those with appropriate devices and connectivity, and (viii) home-schooling if the family is well educated (Koirala 2020). While we largely agree with Professor Koirala’s suggestions, we are afraid they seem to only cater to the need of conveying the lessons or learning materials. If we could also enable a connection to the local resources and contexts, we believe the eight ways are practically feasible ways of achieving slightly higher level of learning during such crisis situation. But what we are arguing can happen only when the educational system has a room for local contexts to play a role in children’s education. In addition, such teaching and learning can happen effectively if the parents or neighborhoods are actively involved. This requires us to analyze the social perception of educational processes.

Thinking through the contexts, perceptions and activities with regards to education in the above representative groups from our societies, we can infer some insights into how education is perceived and pursued by different social groups. Regardless of economic or educational status, majority of families believed that a structured education leading to measurable good grades and a good certification is the key of education. There seems very negligible concern or aspiration to make education relevant to one’s own family or society. To many in our society, education generally implies a one way process where the school and the teachers are at the ‘transmitting’ end and the students are at the receiving end. There are some concerns about the content – what is being transmitted, but hardly anyone questions about the modulations of this transmission. Rarely there is any imagination that the transmission can be from multiple directions. Even rare is the question that whether a streamlined transmission could actually be replaced by a ‘radiation’ of knowledge from vast resources available around the child at any given time. We do not delve so much into the ultimate destination of this mandatory journey of education for a child, but we can easily sense a widespread concept of an obvious destination at the end of these educational processes. We find that the common perception of ‘destination’ is that the trajectory of educational career should lead to a ‘decent’ job (read as salaried job, employed by someone else at the cost of one’s freedom of self-interest or passion). For

majority of families, the structured and good certificate earning education shall enable their children to secure a job - either in government offices or an established corporate sector. It is, therefore, obvious for us to face a lot of curiosity from colleagues and relatives when they hear that our child does not go to school.

These observations lead us to explore the meaning, ways and purpose of education at large. We would like to raise some questions on the purpose and means of education.

- Why does a child need to be educated? What are the core objectives or goals of educating a child?
- Should the child and the context she is in have any say in these educational processes?

These questions have been recurring in our minds since the past few years. We took the COVID-19 lockdown as an opportunity to reach out to a range of parents to understand their take on these questions. However, these were unstructured conversations around the questions. We would like to summarize our reflections connecting to some published literature in limited ways, in order to explain the agenda of 'contextual learning' as a proposal in this paper.

3. What is Education?

The English word Education can be translated in Nepali as तालिम, शिक्षा. Knowledge is ज्ञान, विद्या, सिप. Learning is ज्ञान, अनुभव. Often we do not compare and contrast these three set of concepts: education, knowledge and learning. We observe that often the education is thought of a process (rapid in preferred these days) of imparting knowledge but we are less bothered about whether any learning happens at the end of the educational processes.

Education is a process of acquiring knowledge (a product like facts or skills of acquiring those facts or doing things). There could be multiple ways of acquiring knowledge, but acquiring knowledge may not be equivalent to learning. A learning is when the learner (child in this discussion) acquires the knowledge in her conscious mind. In other words, we would like to consider that learning takes place when a child (the learner) realizes that she has gathered a required knowledge by following certain processes. This learning needs to be measurable or identifiable, and the goal of education is to make sure that the learning has relevance in life or for some specific purpose. This is where the Bloom's taxonomy (in its 2001 revised version: Anderson et.al 2001) is worth referring to, as it is a widely referred framework used by educationists and educational institutions globally.

The hierarchy of cognitive learning

recommended as Bloom's taxonomy (Anderson et.al 2001) is helpful to conceptualize educational objectives and processes at all levels. Further work has also been done to devise a matrix consisting of knowledge dimension and cognitive dimension (Blanchard 2019). Looking at such frameworks, it is important to distinguish between 'knowledge' and 'learning'. We think a working relation between the two dimensions could be a pragmatic emphasis in education. This implies learning as a process in education, and the knowledge as a product or content – something to know or learn. In the COVID-19 situation, we (the co-authors) usually wonder whether people in general are worried about the disruption in the process (education) or the interruption of the daily dose of some 'knowledge' (content). We believe that the society is mostly confused about this fundamentally different aspect in education: the learning process *versus* the consumable knowledge. In an attempt of finding a balanced process to navigate between these two aspects, we find many variants of school or learning processes that have emerged in the past century. Before discussing the potential resolutions, we shall briefly review Nepal's journey in the educational process that has led to today's heavy reliance on the transmission model.

4. Education in Nepal

Generally, we see Nepal's education scenario in pre and post 1950 scenarios. It can be assumed that a classic parents to children or at best a small Gurukul system may have been the primary mode of education in the early days, whereby any occupational or life lessons would be transmitted from one generation to another. The archaeological records like that of Takshashila and Nalanda suggest that significant institutional developments had also taken place in the subcontinent in the distant past. It is widely argued that the arrival of the British East India Company changed many of the local and regional cultural practices. Particularly with regards to education, Macaulay's report of 1835 seems to have had dramatic impacts on the formal education processes in the subcontinent. It was Macaulay who wrote what is now famously known as Macaulay's minutes in which he suggested to adopt English as language that at least selected Indians should learn, as opposed to then British Government's support to the Sanskrit and Arabic language schools or colleges. His assessment was not only based on an assumption that the Indian's cultural knowledge and education system was unable to meet the needs of time, but also that the promotion of English would enable the government to prepare natives with know-how from the west, who could then transform the larger population in following what the British

thought as a greater good. Thus, it is accredited to have changed the educational landscape in the Indian subcontinent.

Though Nepal was not a colony of the British, the Rana regime would have looked to the South for educational models as well. In the late 19th century, we find records of formal schools taking shape in Nepali societies, though the Rana regime in the late 19th and first half of the 20th century mostly was not supportive of this. There are evidences of organized schools like the one set up by guru Shadanand in Dingla, in Bhojpur, which later was expanded as a formal school. In Kathmandu, the Durbar Highschool, Shanti Nikunj and a few others were set up before 1950¹.

The change in 1950s led to the introduction of educational system and institutions, just like many other sectors in the country. With the official opening of the country to the rest of the world, the education system also adapted an outside model – mostly the British system imported through India. In the post 1950 Nepal, the first major initiative seems to be the setting up of a National Education Planning Commission in 1956, shortly after the consultation visit of Dr. Hugh B Wood from the USA (Pandey et.al 1956). The commission chaired by Sardar Rudra Raj Pandey and advised by Dr. Wood had a few salient points that we shall recollect now.

The report noted that Nepal had “remnants of Sanskrit education, Buddhist Viharas, the British education and the Bhasa Pathsalas, the last based on the Nepalese language. In the absence of a national education system, some of the people of Nepal have looked to the north for educational inspiration while others are looking to the south.” (Pandey et.al 1956)

It is ironic to note that the assessment done in the report by a committee in 1956 seems to be still valid today even after almost 75 years.

“The English schools have been described as a third-hand version of a system never designed for Nepal. The successful graduates are likely to find clerical employment with the government by virtue of their ability to read and write Nepali and English, but much of the curriculum has no vocational value. For those who drop out before completing high school, little of practical value has been gained except the ability to read and write.” (Pandey et.al 1956: 42)

The shameful evidence of this import was the fact that early curriculum included so much about India to the extent that Indian national anthem was also part of chores in the schools.

¹ It is beyond the scope of this paper to present here a comprehensive survey of all the indigenous schools and schooling system, but that is an area worth exploring to understand the indigenous schooling concepts existing in Nepal for past few centuries.

The 1956 report on national education plan attempts to position ‘education’ as a way to develop a sense of nationalism, spreading education as a nationwide campaign to establish a national system of education, and provides comprehensive tips about the curriculum structures at different levels and how to pursue them. For example – at the primary level, thematic areas are identified. These thematic areas are recommended to be pursued not as individual subjects but as a part of integrated learning relevant to child. It is noted that the curriculum strongly suggest to integrate crafts as part of learning process. Though some of the recommendations today may be seen as contradictory to democratic ideals, they were justified in the reality of the time to unify the citizenship towards a national cause, for example – the emphasis on Nepali as the common language.

As counter to the modern institutions, there were (and are) some vernacular institutions as well. The monastic system associated with Buddhist monks is one such system, which have been experimented and revised to suit to contemporary contexts as well. For example the chhode monastery in Lomanthang (that one of the authors were able to observe quite closely) have even incorporated ‘modern’ education with that of typical monastic education (Chapagain 2011). Similar is the case of traditional Tibetan medicinal education known as amchi school. In Lomanthang, the amchi school follows a model of education where the students are taught standard curriculum prescribed by the government while focusing on the amchi specialization (Chapagain 2011). Apart from this, Nepal has also seen the development of vocational schools aiming to educate pupils for certain years to ensure that they have some vocational skills along with the basic literacy.

With the change of political system to Panchayat after 1960, the emphasis of education shifted to build loyalty to the system and the monarchy. For example – the national education plan of B.S.2028 (1971) clearly articulates its objectives as follows:

“The educational objective will be to produce citizens who, with full faith in the country and the Crown, will conduct themselves in accordance with the Panchayat system and to meet the manpower requirements of the development through the spread of scientific and technical education.” (Ministry of Education 1971: 6)

In order to compare the thrust of primary education, we can refer to the following paragraph which clearly indicates the shift from the 1954 plan to 1971 plan:

“At this level boys and girls will be taught reading, writing and arithmetic, and some rudimentary knowledge of Nepalese and general information regarding the King and the country. It

will lay emphasis on development of general knowledge.” (Ministry of Education 1971:6)

It can be inferred that the educational system of Nepal was put into a focused path before it began properly on a general ‘self-awakening’ mode. The objective of meeting manpower of the nation was well reflected in the secondary level education where vocational training is mandated. Along with clear structure of higher education under a national university, the plan also envisioned a mandatory national development service for graduates of higher education. Thus, a shift from an ‘awakened citizen and proud democratic nationalist’ of the 1950s to ‘a useful manpower kind of citizen with loyalty towards the Crown’ of the 1970s can clearly be observed. Yet, both the plans emphasize on scientific methods of teaching, learning from good practices, etc.

As a way of comparing, if we look at the National Curricular Framework of 2007, we can note the following shift in educational thinking from policy perspectives in Nepal. While the human resource aspects and the ability to contribute in nation building are refined, the current thinking on education also acknowledges the need of personal development of individual citizen, recognizes inclusiveness in many aspects, and envisions the human resource to be globally competitive (as opposed to earlier thinking up to the national level). Current thinking also acknowledges creativity, sensitivity towards cultural and political freedom, and connects to the broader aspects of environmental and cultural conservation, among others. The inclusiveness can be seen in the recognition of mother tongues other than Nepali, children-centric curriculum for primary level, and more importantly the recognition of ‘local need-based curriculum development approach’. It is this ‘local need-based curriculum’ that is somehow expanded in this paper. Before we go into such details, it is also essential to look into educational scenario in Nepal beyond the policy perspectives, from a sociological perspective.

Today’s Nepali society has a very interesting sociological perception of education. What we find interesting and perhaps a parallel to what John Dewey discusses as ‘traditional vs progressive’ in his seminal work ‘education and experience’ (Dewey 2007), is the idea of ‘government schools’ vs ‘boarding schools’ in Nepali society. In our personal experience, this has come consistently over the past years of our conscious thinking about education. In Nepal, schools for children are understood of primarily of two types (this is not an official classification but this is a colloquial classification) – school (to imply mostly the government school or Nepali medium school) and boarding school (to imply English medium, often privately run school).

The term boarding school in Nepal (in colloquial sense) does not literally mean a school where students study by being in residence; rather it simply means an English medium private school. This has evolved to the extent that we are today used to hearing – particularly in rural setting, parents speaking like this in Nepali that one’s child does not go to school but to the boarding. The term school (in this colloquial sense) has remained the same, thus implying how little generic rural government school has been in terms of its infrastructure and operation, in terms of its dress code (often a sky blue shirt and a dark blue trouser or skirt), Nepali medium instruction, and the standard government prescribed curricular text books. The ‘boarding’ on the other hand, has experimented with its textbooks as well as pedagogy to some extent. Some of it have also been brought back into the government schools, but it is not uniform across the country.

Today, the institutions of boarding school has exponentially grown making ‘boarding’ available to almost each neighbourhoods in urban setting and at least one or few boarding schools in each villages. Of course, the level of education vary, and hence the number. Another new terminology has been added to the Nepali parents’ vocabulary these days, and that is ‘Montessori’. A Montessori (in colloquial and general understanding in Nepal) is where a child needs to be sent at the earliest possible age so that the parents’ dreams of whatever great personality of their child as she grows, has a good foundation. We have to keep in mind that these neighborhood-level Montessori do not hesitate to introduce some writing and reading as otherwise the parents would complain that the fees would not be justified. Same is the dilemma in the classes, nursery to secondary – English text books, mandating English as the language of communication in English, and in a satirical sense the weight of one’s school bag due to the number of text books, and the overwhelming homework (which is important part of today’s education-based economy of our society as it creates good business for private tutors many of whom efficiently help the tutees in finishing up their homework for the next day). We may be biased in our observations, because primarily these observations come from a typical semi-urban setting in Eastern Nepal – particularly the districts of Terai in the current province one, but we believe the deviation of qualitative data here would not be so significant across different parts of Nepal.

Despite a glaring misperception about education, we must also take a note of a few alternative initiatives. Nayaraj Pant’s samsodhan mandal was one such initiative which was triggered by his own dissatisfaction with the education that he went through. With an aim to produce critical historians to

'correct' the historical inaccuracies prevalent in foreign and local history-writing, Pant started 'samsodhan mandal' as a school where his disciples would not only learn a complete curriculum but also eventually master the techniques of a factual historian (Pant 2017).

Madan Rai's initiative through the Subhadra Madan Foundation can be considered a livelihood based residential schooling system where students engage in day-long learning activities combining both practical learning on agriculture, livestock, mechanics, cooking, and other life skills along with various formal curricular learning. There are modern versions of 'ashram' based education where sometimes 'holistic' sometimes 'spiritual' education are the guiding principles. We need to see the range of models in practice in light of underlying educational philosophies. What we propose as 'contextual learning' shares some traits with many of these 'alternative education' models but we are keen on processes rather than a model for an institution. The institutions may still remain the same, but the 'contextual learning' for us is a methodology within which certain flexibility across stakeholders could be adopted, keeping in mind the larger goal of education – that is to be relevant to both the individual as well as to the society. This relevance needs to go beyond just being manpower for industries or corporates or bureaucracy, to a meaningful contribution in the society.

5. Other Concepts and Approaches of Education

We do not aim here to discuss comprehensively about major philosophies and pedagogies across the world, but we will selectively highlight a few of noteworthy ideas and methodologies.

John Dewey in his seminal article 'My Pedagogic Creed' (Dewey 1897) discusses his views on education, school, as well as the content and methods of education. Dewey emphasizes that a child's education needs to connect to him as well as to the society – which he describes as the two sides of an educational process – psychological and sociological. Dewey also sees education as a form or way of social reform (Dewey 1916). This means education as a process must have its ultimate aim of social reform. We can imagine that the institution (school) can therefore decide the kind of knowledge and ways of imparting them to acquire the knowledge that is necessary or relevant for the social reform. In doing so, Dewey suggests an experiential link with the child with what she is learning or being educated. Dewey's approach on education has been termed as 'constructivism' which has been operationalized through a widely followed pedagogical strategies such as experiential learning,

active learning, project-based learning (Willcox et.al 2016).

We can bring in French philosopher Michel Foucault to examine the institution of school at this point. Foucault, in his seminal work on prisons makes a comparison among three institutions, namely prisons, hospitals and schools, and states that they all have similar structures (Foucault 1995). Foucault's argument seems logical when one examines the structural control, system of surveillance and the power dynamics among these seemingly contrasting institutions. Without going further into details, we would like to warn ourselves that a school – if it lacks freedom and choice of what one wants to learn, may eventually be like a hospital where patients may have to go out of compulsion to be treated, but at best everyone would like to avoid it; or like a prison where one is sent to be corrected or punished or isolated from the rest of the society. This awakening is important for this discussion but we will accept institutions of 'schooling' as necessary evil, and will try to balance the power dynamics and the rigid structures by suggesting measures to re-orient the schooling or education system. It is in a similar light that we need to take notes of alternate education movements including 'de-schooling' (Ellich 1971), and unschooling or Growing without School (Holt <https://www.johnholtgws.com/>) among others.

While Dewey emphasizes on building up a child's freedom to learn, which the educational structure needs to accommodate. We would argue that 'freedom' is not useful unless the learner has her own 'agency' (as used by Bourdieu, Giddens), and a powerful agency a young learner can possess is her own keen interest. Therefore, we would like to suggest that creating and connecting to a learner's interest is the first step towards creating a 'context' for education. The context that we are advocating for is not an external agent, rather it is an intuitive field of reference for each individual with relation to one's own personal, social and environmental world, in which the education system (we can treat it as an external idea to the learner) need to situate itself. In other words, rather than the child positioning and responding to the demands of the imposed education system, the education framework needs to respond to the child's interests. This is where the concept of 'situated learning' is useful.

Situated learning (Lave and Wegner 1990) is a way of understanding human interaction with social environment and the cognitive meaning making out of that. Though the Situated Learning Theory is primarily concerned with higher or professional learning, and hence sees learners as 'peripheral participants', we think the 'peripheral' may come later in the process. Hence, we do not consider the

education for a child to see the child as peripheral participant, we would like to argue that a child learner is and should be the core participant. For our interest, it means a learner is efficient to grasp concepts and skills if the learning process is situated in the context that the learner is situated in. This is an important counter to the idea of education in the prevalent 'transmission model' where the abstract knowledge are given by teachers to everyone, regardless of any connection to the 'situations' that the learners might be.

We also find Donna Haraway's notion of 'situated knowledges' (Haraway 1990) as relevant to conceptualize the knowledge and learning processes. The notions of situatedness in knowledges (please note the plural form used here to indicate multiple forms and truths) and learning (as opposed to teaching) need to be treated as core pillars in an effective teaching and learning activity. Along with the multiplicity or plurality of knowledge, we would like to emphasize on dynamic nature of the 'situation' as well. Since the learners themselves are growing and moving both in space and time, we need to take their 'situation' as also moving or dynamic. In later part of this paper, we visualize a better education process as relying on a dynamic situated learning.

Further relevant works can be found in the model of 'connected learning' (Cornwell and Cornwell 2006), which is based on Barbara McComb's theory of learner-centered model (LCM) of education (McComb 2001). McComb's fourteen learner-centered principles are helpful in conceptualizing educational processes which are broadly categorized into four domains: metacognitive and cognitive factors; affective and motivational factors; developmental and social factors; and individual difference factors. These combined with the Blooms' taxonomy discussed earlier offer good strategies for reforms in existing (transmission-oriented) educational institutions as well.

As we are exploring these thinkers and educationists' principles, we must admit that we (the authors) ventured into this concern of education as parents and academic involved with higher education but without any formal training in the field of education. Hence, our approach is intuitive and experimental. Though we have not conducted a formal causal research on this, we are convinced on 'contextual learning' – drawing upon the above mentioned critique of 'transmission' mode of education and comparing various alternate educational approaches and more importantly from our own immersed experience and experimentation with our own child, which we briefly reflect below.

6. Reflections on our observations and a family experiment

Based on our own exploration and family experiment, we feel comfortable to conceptualize a model for child education. However, we anticipate a similar model could also be applicable to adult and professional education. We discuss our conceptual model here as a way of rethinking the status quo of education at large in our society, and to think towards a relevant education system for individuals and societies. We call it 'contextual learning'.

We believe that education is a process of acquiring knowledge (a product like facts or skills of acquiring those facts or doing things). It is important to distinguish between the emphasis on process in education, and the product of 'something to know' in knowledge. In the above discussion of COVID-19 situation forcing students to be deprived of going to school and stay at home, we (the co-authors) usually wonder whether people in general are worried about the disruption in the process (education) or the interruption of the daily dose of some 'knowledge'. We are concerned to observe the society being mostly confused about these fundamentally different aspects about education and knowledge. If instead, our education had some reference to 'contextual learning' as an attitude and process, the lockdown situation could have been pursued as a unique opportunity of engaged learning. What it would mean in practical terms is the students would take time to observe their own family and neighborhood during the pandemic; they would understand the relation of people with the virus and expand the understanding to explore nuances of the ecosystem and ecological principles, among others.

Depending upon their level of education, the students could be learning and wondering about economics, science, political or constitutional issues, or simply they would enjoy the free time to catch up with their grandparents or other members of family in some creative ways (this could have been studies of history or literature and so on). It would have been perfectly okay for the family if the children were not reading a book or doing a 'homework' per se. If they would be doing a homework as assigned by their teacher remotely, it would rather have been a reflection on the lockdown itself, or studying about the class of virus which actually does not fit into the standard classification of majority of life forms. If they are not given instructions, they would rather come up with a long list of questions. They would connect to kids of their age across the globe to find out how they were adjusting their learning activities in such unimagined situation. If the learners are at a higher level of learning, would not it be apt for our students to ponder upon the pandemic itself, the cause and effect of so many interlinked elements of

the global society today, think about those who have no homes while the order is to 'stay at home', and so on? If our students were able to observe the current affairs and question with some logical thinking and reference to appropriate sources, that would have been a meaningful education. For example - why a citizen is barred from entering his or her own country, and even worse repelled back to foreign territory when they somehow try to enter into their 'mother land'? How does one maintain social distance if we are a social being? Is the coronavirus response based on physical distancing or social distancing? What is the difference between the virus that cause common cold and the one that is causing COVID-19? Are these questions only for a certain disciplinary college students to ponder upon (if they do) or are these also common interest subjects that could enrich the learning of students at any level? We strongly believe that our education has fundamentally missed these important aspects.

It is in these contexts that Professor Avijit Pathak from the Jawaharlal Nehru University aptly argues:

"We must acquire the courage to speak a different language, activate our creative agency, and see ourselves beyond loyal mediators between students and the official curriculum. We must assert that education is not merely about memorizing texts like a parrot and writing the exams; it is about awakened intelligence and deep sensitivity to life. Education must prepare us to make sense of the times we live in, retain our sanity, and acquire the psychic strength to cope with the new reality." (Pathak 2020: <https://www.tribuneindia.com/news/comment/new-kind-of-learning-84951>)

The fundamental question we have on prevalent education paradigm is about the relevance of most of our education. We understand that education is treated as a basic right today, but does a child have a right to ask for a kind of education that may be of interest to him? Instead, it seems that we have imposed 'education' in a 'one size fits all' mode to all the children since very early age – truly very early age. We have stolen their childhood freedom and locked them into 'play group', 'nursery', 'kindergarten', Montessori somewhere in between, then various standards in ascending order. In a typical city in South Asia today, it is a common scene that children rush out of their homes into school vans and buses early in the morning with seemingly 'force-awaken' eyes and a heavy bag, and their daily routine is so unnaturally busy with books and academic exercises that it gives an impression that they are already tuned to a corporate job-culture that their parents may be accustomed to. Rarely the kids have a time to think what their interests are or

what they could excel for. The children have been converted into robots to fulfil the dreams that their parents were vying for in their own lives. As the child grows into adulthood, then the multi-dimensional persona that child was developing while growing up, by virtue of his/her parents' wish list gradually vanishes; and ultimately at higher level of education, the young adult is so confused that she often asks what subjects she should study or what topic she should write her thesis on. This is the reality in majority of young generation as they climb the ladder of education to attain a status of a well-educated person with everything but they lack an independent thinking and decision making ability.

A major consequence due to the flaws in the prevalent education system is that it kills the 'agency' of curiosity in young children by engaging each child into a set of expectations, structures and ambitions which may or may not resonate to them. In this process, many children just become desirable 'avatars' for their parents or well-wishers, but an avatar can go only as far as the 'players' can take them. Instead what we need to do at the very beginning is to free the children from these 'avatars'. We should let them be 'what they want to be', or 'what they enjoy being' by letting them chart their own pace and path of learning. This is the fundamental shift we would like to advocate for.

As we are writing this piece, we are 2000 kilometers away from our son (9 years old). This was an unexpected situation in which we are at our 'home' while the young kid has to assume the role of a guardian to his grandparents at a foreign land. Two generations (grandparents and the grandchild) are taking care of each other in a unique situation. One generation which does not know any 'digital' tool except using a smartphone in the most basic way, whereas the other generation has not been away from his mother for this long (and increasing). The only behavioral comfort is that the closing of school in India has not affected him as he has stopped going to school for the past two years. So, he plans his day on his own way and can keep himself busy and meaningfully engaged all day. This time though, he has to ensure that the grandparents are also positively occupied. Needless to say, this is an unprecedented situation that everyone is facing, and hence we were never prepared explicitly for such a situation. Emotions and panic aside in the first 1-2 days of the lockdown, our family geared up to make the most out of the uncertainties.

Not only we began to study viruses and to look into history of pandemics, we also began to discuss the broader socio-economic consequences due to a pandemic. We also learned the power of creativity and strengthened the close relation by being far away. The difficult situation has been a context for

him to explore about our emotions, writing a poem, begin a long story (which is not yet completed), write a script for a short drama, plan the plots, employ the old grandfather as the camera man and the grandmother as the assistant in setting up anything on shooting, position himself as an actor with multiple roles, edit the video, and ensure that each episode is posted on the family's viber group on time as announced by an occasional newsletter that he brings out. No body taught all this to him, and he is not perfect on any of these activities. What is important for us is that he is bringing out his own potentials, yet without being stuck to any of the potential – that makes the journey open for him, rather than fixing it to a destination. We are sure that he may have forgotten some of his mathematics lessons that we had carefully figured out through some games, but that is not a problem at all. He can learn it again. If he loses his patience, his responsibility, his investigation about the situation, his connection to his parents and other relatives, if he does not sanitize any external thing coming into the apartment or remind his grandfather to wash his hands when he brings a packet of milk from the neighborhood parlor, or if he cannot figure out how to put an order for online delivery of their grocery, then that would create a problem. Isn't that the most needed education this child should have at this very moment? At least we think the education (or the lack of it in the institutional sense) at home worked well in this crisis.

Our family experiment has a few core principles. From the very beginning, we did not want to restrict the child's movement, activities and questions as we believed we would learn the limits of our own 'educated' self by being re-educated in the process of the child's education. That was the fundamental motive that led us into the current path, and yet we don't know where we are headed. The second principle is we pursue this as a collaborative process at all levels of decision making. This is something very difficult to practice in Nepali society as we often encounter challenging situations when we deal with societies – particularly situations where a child's existence is entirely ignored, his or her voice does not matter when we have to 'teach' them what is good or bad for them, or the extreme is when we think all the time that 'we know what is best for them'.

We do not fit into the prescriptions and usual practices of the society when it comes to giving the child his own space, giving his voice a place in our conversation, recognizing his presence wherever he is, respecting his privacy and seeking his consent anything pertaining to him, and of course engaging him in every decision making in the family. Yes, recognition, respect and responsibility are mutual

practices; and we maintain this behavior of mutual acceptance. We believe in child's freedom and responsibility for his learning, and we work our learning around it as co-learners. Most importantly, we collectively discuss and review the outcomes, and discuss what direction we would like to take. It may sound imaginative, but for us it is the reality and it is working fine so far.

Our COVID-19 situation has received sympathy from our well-wishers, but we are turning this into a rare opportunity. It is a new context that we find ourselves situated in, and hence we just engage with the context rather than lamenting about it. To our surprise, our well-wishers do not seem to be convinced that we are doing fine in such a situation and the showers of sympathy is the first thing anyone offers. The society does not consider the unprecedented situation as a rare opportunity of learning important lessons in life. On the other hand, we are not in a trauma of physical separation due to COVID-19 situation, rather we have been busy to grasp with the unfolding situation and facts for us to ponder. While doing that, we connect back to history, memory and our imagination for a better future. Is that out of purview of what education is supposed to be? We are in a continuous journey and seek dialogue and feedback from other members of the society as well.

We have had challenges and we are also able to address them – but in a gradual manner, on the basis of mutual consent, and not through punishment or enforcement. Past ten years of parenting and co-learning have made us believe in what we call 'contextual learning'. If we find out it is not enough in future, we are open for changing the course. Therefore, our intent on sharing this anecdotal experience or evidence is to reflect on what we learned, with the hope that it may be useful somewhere at individual as well as societal level.

We are not claiming a success or a model here, but we would like to only hint to a simple thing. Never force something into a child's mind, rather go with his or her mind's calling and pitch in or work out the particular thing that the child may be interested in. This simple gesture goes a long way as there is a direct connection, it builds partnership, both parties understand the learning process on which they can help each other, and both the parents and the children grow accordingly. If it is a matter with teacher, it is even better because a teacher does not have to spend the entire day with the students as the parents have to. Hence, planning a few hours of friendly and collaborative learning relationship is much easier for teacher, than for parents. But it requires an understanding of context, a willingness to work with the context that a child can connect to, and it requires a flexible and acknowledging

pedagogy. This is a small confidence that positions us to speak out loudly about child’s freedom, humbleness of education, and the roles that all of us have to play in creating an enjoyable educational process. The bottom line is all stakeholders need to be learning through this process. If any stakeholders have mastered everything, that is the end of the story. We don’t know enough, and therefore with each learner, there is a learning opportunity for teacher or parents or anybody.

7. Contextual Learning: A suggestion for rethinking education

Dewey has identified two aspects with education: psychological and social. We would like to expand this to a third one, which may be considered as part of social aspect (as nature is sometimes treated as a social construct) but the nature of scientific development requires us to think of a third aspect, which is equally important, that is environmental or ecological.

Hence, we propose three pillars of contextual learning:

- (i) Personal (can be a mix of physical or biological and psychological but also partly social like family),
- (ii) Social (can have multiple levels starting from family, neighborhood to national and global), and
- (iii) Environmental (immediate physical environment as well as larger ecological context)

These are three spheres within which a learner is situated. Hence, the fundamental tool to drive an effective learning is to ‘connect’ the learner with these three spheres of his/her contexts. The following diagram visualizes these three contexts and the position as well as relation of a learner with these contexts. Within these three major context spheres, we can position discrete contexts to which each individual learners are always related.

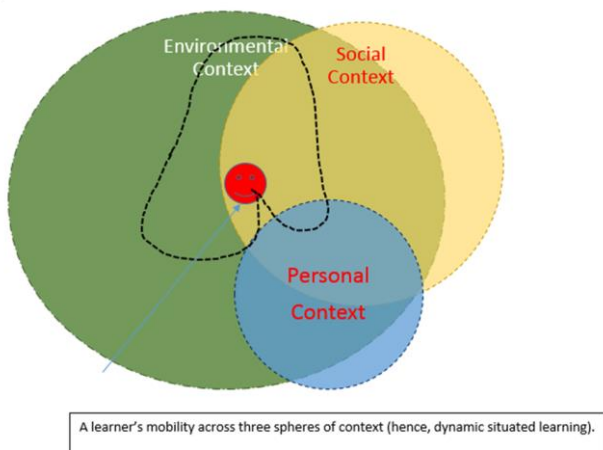


Figure 1. A Conceptual illustration of a situated learner and three key contexts

A learning process happens effectively when the learner connects to the concepts or the skills to be learned. This is not a new concept both in theory and in empirical data. Each one of us has experienced this at different times as well. For example – I may not be interested in any sports or a particular sport. When I am abroad, and I see a television channel airing a match playing my country, all of sudden I may fix my gaze on that and actually watch the game which I may not have cared for otherwise. Here, the context that I am in, and the connection that I have, both are important for me to have the patience to watch and watch the game with interest. Learning is a similar process. None of us in my family were interested in a topic of virus. Even when Italy was being locked down, we hardly paid attention to the television documentaries that were about viruses. When we ended up in a locked down situation and knew that it was the virus-led crisis, all of sudden learning about virus seemed like everyone’s interest. If ‘education’ is pitched in at the right moment in this example, everyone may have had reasonably accurate information about virus, otherwise the curiosity about virus may be fed in badly by so many misinformed rumors that are making rounds through social media. This is a right moment to reflect on the education in the similar manner. If we don’t identify a right moment to introduce a key concept, then both lack of information or misinformation may take place. These processes and points are captured by what we call as ‘contexts’ – context of learning, connectedness and the ways of learning. This context-based learning is what we would like to call as ‘contextual learning’. Because of the context and the learner’s connection to the context, we believe learning will be effective. Hence, it could offer a reasonable model of education.

We believe that learning is effective when a learner draws inferences from her own contexts – any of the three spheres above, and hence education needs to be conceptualized as a process to facilitate this learning. This means that the learner herself is the key driver of this process, and there are a range of facilitators around her including parents and immediate family members, immediate society, community of practitioners including a dedicated community of teachers which are mandated to be the formal facilitators, and a range of enabling systems including the institutions and other communities.

Once a context for learning is established, the facilitators need to be assisting the learner in achieving the learning. In this model, since the learning takes place in response to certain observations and ‘wondering’ about the context in which the learner is situated, what is learnt is directly applicable to the context. These processes need to be understood as consisting of a series of building

blocks – in educational terms, these can be understood as a series of scaffolding learning outcomes, which will lead to higher level of learning to the extent the learner is desirous of, or as the context or other needs demand from the learner. The facilitators accordingly have to act at different levels with different tools and processes. Thus, this model is not necessarily a replacement for whatever does exist today in our society; rather it is just a rethinking of making education effective. However, certain fundamental adjustments will be required, for example – acknowledging the position of the learner in the educational system, providing necessary support to the learning process in line with the learners’ demand, patience and courtesy to each other, and so on. It can be anticipated that these ‘fundamental adjustments’ may at times be revolutionary demands onto our existing educational system. Therefore, it is safe to assume that the idea of contextual learning requires a re-thinking of what is happening, in order to take the status quo of education to a meaningful and effective learning.

In general, the following are the fundamental adjustments that we anticipate:

a. *Redefining the role and goals of education in our society*

This is a major shift required in our thinking about education. Education should be pursued as a process of awakening oneself and equipping one with the processes of seeking knowledge, using skills, interpreting situations and solving problems.

b. *Recognizing the learner’s central position in education system*

This is not a new concept. This has been the core of learner-centered pedagogy that the education professionals today talk about. Students are not passive recipient of wisdom from the teachers. They are new engines, which need to be started, put to work so that they can travel miles and miles. The teacher is just the starter, not the engine itself.

c. *Freedom as well as responsibility of the learners*

Learning can neither be effective by imposition nor can it be spoon-fed. Even if it is done that way and there may be incidents of success, these are often meaningless. Academicians may have come across good students preparing for their PhD who may ask a fundamentally simple question: what should be my thesis on. Or, we find graduates running around trying to sell themselves. During lockdown, many parents are bothered about how to manage their kids, and the kids seemed bored with television or books or games after some point. It is not their fault to be in such dilemma, it is the fault of the education

system. They just climbed the ladder without knowing and preparing themselves for where they are headed. Often job interviews become a frustrating experience for interviewers or prospective employers when they see that the young graduates lack fundamental competence that a job connected to certain degree or specialization would require. This problem is not merely a gap between the educational institution and the employing industry, but it is more severe indication of the learners not connecting to their future activities. This may be happening for multiple reasons but one of the important one happens to be the fact many of our students are just climbing from one level to the next in education system without their interest. Sometimes they are forced to study something by family or society, and other times they just study something thinking that may be the best thing to do for their future. Therefore, it is important to revisit this paradox in our society, which is ruining even the best of educational practices that exist today.

d. *Re-positioning teachers’ position as a support system*

Teachers should have the attitude and ability to offer support in flexible ways (this may be a major shift in the system, for which we envision that we may have to think of ‘learning engineers’ as a set of champions to help on this transition). The concept of learning engineers is entirely different than the model of a teacher which often is seen as the ‘knowledge giver’. A learning engineer model of a teacher would be like that of a starter of an engine that we discussed above.

e. There would be more nuances requiring more adjustments, and each child or each context would need its own unique set of strategies. It is an orchestra consisting of multiple stakeholders but the conductor is the learner. This is the most important mental shift that we have to make in this initiative.

f. At policy level, it requires decentralization of curriculum with some flexibility for co-designing of curricular details between an institution and the learner or learner’s family.

g. At quality assurance and monitoring level, this requires acknowledgement of informal, personal or family based learning processes or a mix of these with the standardized institutional model, instead of fully controlled structured certification system on an annual basis.

h. For accreditation and certification, this would require a competency based framework with a flexibility in time and methods of attaining those competencies. As UNESCO is driving the competency based educational frameworks

globally, we can imagine that national policies may eventually be aligned to that. This should be taken up as an opportunity to democratize our educational system.

8. Conclusion: Way Forward

Amidst the school closures in Nepal during the lockdown, Dr. Bidya Nath Koirala (2020) has suggested the implementation of decentralization as the key to a successful education system. In the same line of thought, we believe that decentralization in education means that local levels of educational units need to be empowered to create their own curriculum (or at least customize the prescribed curriculum to fit to their local contexts) to make education meaningful. In our conceptual mapping, the fundamental educational unit is the learner along with her family or an equivalent social entity. Recognizing that not all the family may have similar comfort and care, therefore we would need to draw upon resources in each context to create an equivalent social entity like a learning family. Each of these units do not necessarily need to create an entirely different curriculum but the standard curriculum needs to have opportunity of decentralization in terms of local language, history, culture, and ecology – as a minimum to practice a decentralized education. The model we suggest here is an elaboration towards that concept, but we are ambitious beyond the administrative management of education, to make it a process where the parents and neighborhoods also need to own a fundamental part of children's learning journey.

We suggest internalizing in policy and practice that education is a collaborative process that needs to be practiced where the child is at the center of education and all educational processes. This collaborative process begins from the child, depends on the family or the neighborhood support system, and gets recognized by a local school system which operates through a decentralized government policy and mechanism. What this would have meant during the lockdown crisis is that the children and the parents or teachers would not have felt a massive disruption as they would have been fundamentally positioned to their own 'contexts' for learning processes. With such a system, a teacher or a remote television program or an online tool would have easily mobilized the 'context' to tackle the global disruption. More importantly, this would have shifted the learning process around the current crisis rather than ensuring the completion of a textbook curriculum and conducting of examination (which does not contribute even in a rote memory once the exam is over).

Though there are models of education both in government-provided and privately paid, and in-

between, we believe this collaborative model can bring in role for all the stakeholders mentioned above. However, the key in contextual learning is to offer choice, ability to take decisions at each level, and a flexible system of accreditation which recognizes a learner's competency based on higher levels of learning rather than the basic lower level of rote learning. The ultimate aim of such education shall be to prepare a child to grow into adulthood with an independent thinking ability, a set of skills and knowledge in one or more areas of interest, and a humane attitude towards the larger society. If any of these three ingredients are missing in the education process or in a graduate of any educational system, we would argue that such education has no meaning and relevance – neither to the individual nor to the society. Hence, this model is neither at the extreme of 'individualism' nor it is about setting up yet another imposing educational framework. Rather, contextual learning is about facilitating each individual's learning by connecting to the context, which gives an interest and agency to the learner, and which gets appreciated and nurtured by the system at schools and the national education policy. We do not claim to have suggested a perfected model of education, rather we have attempted to suggest some subtle shifts in our thinking and practice in education that may make the educational processes enjoyable and effective to the learner. We will revisit our own positions as we learn more and share the lessons as we move along, as that is the dynamic nature of 'contextual learning'.

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None declared.

References

- Anderson LW, Krathwohl DR, Curikshank KA, Maver RE, Pintrich PR, Raths J, Wittrock MC. A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives, (abridged edition). New York. Addison Wesley Longman, Inc. 2001.
- Blanchard A. Contextual Teaching and Learning; web-article in <http://faculty.csusb.edu/faculty/scarcella/siu463/Contextual%20Learning.htm> (accessed 25 March 2019)
- Bourdieu P.. Outline of a theory of practice. Cambridge [England]; New York: Cambridge University Press. 1977.
- Chapagain NK.. Rethinking cultural heritage conservation at historic settlements: the case of Lomanthang, Nepal. Unpublished doctoral dissertation. University of Wisconsin-Milwaukee. 2011.
- Chapagain NK. Contextual Learning: Exploring multi-level

- pedagogy for ICH education and ICH-based education. APHEN-ICH International Seminar on ICH Pedagogy in Higher Education: Status and Challenges in the Asia Pacific region with reference to UNESCO's Overall Results Framework. Co-organized by Asia-Pacific Higher Education Network for Safeguarding Intangible Cultural Heritage (APHEN-ICH) International Information and Networking Centre for Intangible Cultural Heritage in the Asia-Pacific Region under the auspices of UNESCO (ICHCAP), UNESCO Bangkok Office In Collaboration with Department of Intangible Cultural Heritage, Korea National University of Cultural Heritage (KNUCH), National Museum of Korea, Supported by Cultural Heritage Administration of the Republic of Korea (CHA). 2019.
- Cornwell WR, and Cornwell JR. *Connected Learning: A Framework of Observation, Research and Development to Guide the Reform of Education*. The Center for Internet Research and The Focus on Education Foundation. 2006.
- Dewey J. *My Pedagogic Creed*. Available at https://en.wikisource.org/wiki/My_Pedagogic_Creed. (accessed on 9 May 2020). 1897
- Dewey J. *Democracy and Education: An Introduction to the Philosophy of Education*. The MacMilan Company, New York (scanned copy available at <http://books.google.com/>).1916
- Dewey J. *Experience And Education*. Simon and Schuster. (original 1938, republished in 1997). 2007.
- Foucault M. *Discipline and punish: the birth of the prison*. New York: Vintage Books. 1995.
- Giddens A. *The constitution of society: Outline of the theory of structuration*. Berkeley: University of California Press. 1984.
- Haraway D J. *Situated knowledges: The science question in feminism and the privilege of partial perspective*. Simians, cyborgs, and women: The reinvention of nature (pp. 183). New York: Routledge. 1990.
- Holt JC. *Growing without schooling*. Cambridge, MA: Holt Associates. 1999.
- Illich I. *Deschooling Society*. Downloaded from <http://philosophy.la.psu.edu/illich/deschool/>. Holt J. *Growing Without School* <https://www.johnholtgws.com/>. 1970
- Koirala BN. Robotlaai jitney ki sikshan pasha chhadne? (in Nepali; translation: will you win the robots or leave the teaching profession?). *Naya Patrika* daily, available online: <https://jhannaya.nayapatrikadaily.com/news-details/969/2020-05-09> (accessed on 12 May 2020). 9 May 2020.
- Lave J, Wenger E. *Situated learning: legitimate peripheral participation*. Cambridge, UK: Cambridge University Press. 1990.
- Macaulay TB. *Minutes on Indian Education* (original version 1935, republished by Victoria Institutions, www.victoria.org.in). 2007.
- McCombs BL. What do we know about learners and learning? The learner-centered framework: Bringing the educational system into balance. *Educational Horizons*, 79(4), 182–193. 2001.
- Miller RA map of the alternate education landscape. <https://www.educationrevolution.org/store/resources/alternatives/mapoflandscape/> (accessed 15 May 2020)
- Ministry of Education, His Majesty's Government of Nepal. *The National Education System Plan for 1971-76*. 1971.
- Pandey SRR, KC KB, Wood HUB. Editors. *Education in Nepal: Report of the Nepal National Education Planning Commission; Bureau of Publications, College of Education, Kathmandu, Nepal*. 1956.
- Pant DR. Television interview with Tikaram Yatri; Tamasoma Jotirgamaya (talk show), Ramsar Media Pvt Ltd. Kathmandu. https://www.youtube.com/watch?v=IHPsRLs_fko. (accessed on 10 May 2020). 2017.
- Pathak A. A new kind of learning. *Tribune India*, 15 May 2020. <https://www.tribuneindia.com/news/comment/new-kind-of-learning-84951> (accessed on 15 May 2020).
- Rai M. Shubhadra Madan Foundation (youtube video). Khotang Media, accessed via <https://www.youtube.com/watch?v=2T7AQc6fWK0> (accessed on 10 May 2020)
- UNESCO. COVID-19 Educational Disruption and Response. n.d.<https://en.unesco.org/covid19/educationresponse>
- Willcox KE, Sarma S, Lippel PH. *Online Education: A catalyst for higher education reforms*. Massachusetts Institute of Technology. 2016.
-