



Proceedings of
**Third International Conference on
Nepalese Diaspora: Hostland Challenges
and Homeland Interests**
(March 19,2011)

Nepalese Students Association
New Mexico State University
Las Cruces, NM 88003



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Editor

Suresh Gautam

Organizer/Publisher

Nepalese Students Association (NeSA)
New Mexico State University
Las Cruces, NM 88003

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Editor's Note

Nepalese Students Association (NeSA) at New Mexico State University is actively working to enhance educational, technological, scientific, health and socio-cultural activities in collaboration with Nepalese scholars, researchers, and students. The annual conference organized by NeSA is a major event of the year associated with NeSA academic affairs.



This year the theme of the conference is **Nepalese Diaspora: Hostland Challenges and Homeland Interests**. The goal of the conference is to bring together members of the Nepalese diaspora communities to discuss challenges in various aspects of socio-cultural and professional life in hostland and their potential role for the development of Nepal.

I do believe our willingness to share and collaborate on Nepalese developmental, social, cultural, and political issues as expressed at the conference will certainly contribute to our Homeland, Nepal, in significant ways. Also our extensive interactions on international experiences and challenges will help us understand complexity of ever increasing globalized world. This conference has captured these important issues of our time and I believe that this conference proceeding will highlight and help to resolve some of the important sociopolitical and academic issues of Nepalese Diaspora.

Finally, I would like to take this opportunity to thank our keynote speaker Dr. Arjun Banjade, Research Analyst, Tarrant County College, TX for sharing his valuable time and experience on Community Radio and its sociopolitical impact on Nepalese society. I would also like to thank all the presenters, participants and volunteers for their time and effort to make this conference a success. My sincere thanks extend to NeSA officers and members of Academic Affairs for taking care of management and logistics.

Thank You

Suresh Gautam
Editor and Director,
Academic Affairs
Nepalese Students Association
New Mexico State University

Greetings and Best Wishes

I would like to extend my sincere greetings and best wishes to all participants of the Third International Conference on “Nepalese Diaspora: Hostland Challenges and Homeland Interests” organized by the Nepalese Students Association at New Mexico State University. I hope the conference will provide you ample opportunities for exchanging ideas, developing interdisciplinary research networks, and generating new knowledge.



Further, I would like to take this opportunity to thank Mr. Suresh Gautam and his team for their relentless effort in organizing the conference.

Ram N. Acharya, PhD
Associate Professor and Academic Advisor
Nepalese Students Association
New Mexico State University
March 19, 2011

President's Message

In addition to the engagement in Nepalese tradition, culture and community welfare activities of the Nepalese Students Association at New Mexico State University, the Third International Conference on Nepalese Diaspora: Hostland Challenges and Homeland Interests is the result of continuous and dedicated effort of the organization to create an academic environment within the community. This conference indeed has been a platform for all the Nepalese and Non-Nepalese scholars living in the United States and all over the world to share their experiences, intellectual work, and interdisciplinary knowledge to the Nepalese community. I do believe that this conference would be able to play a substantive and meaningful role in advancing Nepal's interest in the United States.



Despite busy schedules in their own business and profession, the extraordinary efforts made by NeSA Academic Affairs to work for the success of the conference are highly commendable. With a privilege, I would like to express my sincere gratitude and appreciation to all members of the Academic Affairs, guests, presenters, participants and volunteers for your dedication and invaluable contribution to help make this conference possible. Last but certainly not least, I would like to acknowledge and express our sincere thanks to our sponsors Arts and Science Council and Associated Students at New Mexico State University who have made this event a reality.

Finally, I heartily welcome all the participants to this knowledge sharing event and wish the conference a complete success. With this third conference of NeSA, I would like to take this opportunity to express my best wishes for the successful continuation of such activities in the forthcoming years.

Thank You.
Best Regards,

Tulsi Paudel
President
Nepalese Students Association
New Mexico State University
Las Cruces, New Mexico

March 19, 2011

Message from Dr. Alok Bohara

Dear NMSU friends,

Thank you for your kind invitation to attend your conference. Because of my previous engagement this day, I am so sorry to miss the gathering of such an esteemed group of well-meaning Nepali scholars. I am simply impressed with your enthusiasm and dedication. Let me begin by sharing with you a few pieces of good news.

First, the Nepal Study Center (UNM) sponsored annual Himalayan Policy Research Conference at Madison, Wisconsin has been going strong. The Fifth Conference this year in October also added a milestone by live broadcasting its conference to South Asia. Our attendees came from all over the world –Europe, Canada, USA, India, Nepal, and Bangladesh. We just uploaded the edited proceeding from the conference.

Secondly, the Vice President of UNM led a team to Nepal to sign a pair of MOUs with Kathmandu University and ICIMOD. Consequently, the eight-country Himalayan University Consortium has welcomed UNM as an Associate Member. The good news is that the NSC-UNM has established a branch office at KU, Kathmandu to promote knowledge sharing activities of the diaspora scholars and their foreign intellectual friends.

Thirdly, NSC is also contemplating in developing a Diaspora Studies Program (see its website) to “study” the vastly growing diaspora population and their problems and potentials.

This is precisely what the diaspora connectivity is all about, and it fits quite well with the theme of this conference.

Next, let me share my thoughts on the idea of diaspora’s role in “helping Nepal”. Or more correctly, “How to engage diaspora’s energy in Nepal?”

First, I would like to lay a cautionary note in front you. Although, passion is essential to generate a movement and galvanize energy, I urge you to identify your comparative advantage first. Once you find your comparative advantage, then the next step is to outline a goal, preferably in three stages: short, medium, and the long term.

There are so many ways a diaspora community can “help Nepal.” I will break these possibilities into three major categories: *Social, Financial, and Intellectual*. The social capital asset of the diaspora can be formed in three forms: 1) through the grass-roots activism and pressure groups to safeguard human rights, democracy, and the rule of law, 2) by raising funds and performing charitable social work to help disadvantaged groups in Nepal, and 3) by strengthening cultural identities through the preservation and promotion of languages and culture.

The second diaspora asset is called the financial capital. The influx of remittance into Nepal has played a significant role to keep the economy afloat. Likewise, the diaspora entrepreneurs have been engaged in domestic investment, and they can also play a role to encourage foreign direct investment.

The third and the final diaspora asset is the intellectual capital. The diaspora intellectuals (e.g., engineers, scientists, doctors, and IT experts) can promote the transfer of sustainable technologies in Nepal. Examples may include: solar and wind power, recycling technology, portable medical devices, organic farming, and genetically resilient crops just to name a few. Research, policy analysis and knowledge sharing is another important area. Examples may include but not limited to seminar, conference, study abroad, curriculum development, IT based teaching, and volunteer teaching. The NSC's KU office in Kathmandu has begun offering seminar platform for the visiting scholars in Nepal.

Now, you can clearly see that the Nepali diaspora can engage in many facets of activities to help Nepal. Although we may have passion and desire to engage in many areas, but from an organizational perspective, it is always in our best interest to pick an area of our collective expertise.

The Nepal Study Center's focus is on the third facet "*intellectual capital*", mostly on the academic activities such as research, analysis, and knowledge discussions and sharing. Beyond academic deliberation, we have also been engaged in knowledge transfer ideas such as: introduction of the e-micro finance idea in Nepal–Kiva.org; promotion of telehealth through UNM medical school, and getting Nepali school children in ecological monitoring projects (Bagmati River) along the line of the Rio Grande Bosque project of UNM. Next year, we plan to help a school to receive some computers as a part of the Himalayan Study Abroad program.

So, I am also open to any ideas you may have regarding how you can join hands with the NSC in some areas of mutual interest. For now, I wish you much success with your conference. Thank you and good luck.

Alok K. Bohara, PhD
Professor,
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Nepalese Students Association (NeSA) **New Mexico State University**

The Nepalese Students Association (NeSA) is a chartered students organization at New Mexico State University, Las Cruces, New Mexico, USA, which was established in 2006. The NeSA organizes various programs and celebrates Nepalese religious, cultural, and traditional festivals.

The core purposes of the NeSA are to:

- Introduce, promote, and expose Nepalese culture to international communities
- Introduce Nepalese culture to US born and brought up Nepali children
- Assist new Nepalese students to adjust at NMSU
- Share and support educational, technological, scientific, health and socio-cultural activities with Nepalese scholars, researchers, and students

NeSA Executive Committee

Advisor: Dr. Ram Acharya, Associate Professor, NMSU

President: Tulsi Paudel

V. President: Dilli Raj Paudyal

Secretary: Lekha Nath Adhikari

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**Third International Conference on
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Homeland Interests
Nepalese Students Association
New Mexico State University
Las Cruces, NM
(Saturday, March 19, 2011)**

8:00 – 9:00 **Registration**

9:00 – 10:00 **Opening Session**

9:00 – 9:20 Preparation and Proceeding to Conference Hall

9:20 – 9:30 Welcome Speech by NeSA Advisor Dr. Ram N Acharya

9:30 – 9:40 Welcome Speech by NeSA President Tulsi Paudel

9:40 – 9:50 Message from Dr. Alok Bohara, Prof., UNM

10:00 – 12:00 Morning Session (Health, Education, & Academics)

10:00 – 10:20 Savic, Milos (NMSU), Math Education

10:20 – 10:40 Thapaliya, Sangita (NMSU), Elimination of Tuberculosis by the year 2050-
A global challenge for the developing and developed countries.

10:40 – 11:00 Bhandari, Churna (UTEP), Quark matter and Color Superconductivity in a
magnetic field.

11:00 – 11:20 Dahal, Om Prasad (NMSU), Investigation of Various Options to Avoid
False Tripping of a Primary Distribution Feeder.

11:20 – 11:40 Dulal, Santosh, Cuaron, J.A., Yu, W. and Gustafson, J.E. (NMSU), A Purine
Metabolism Mutation in Staphylococcus aureus Selected with 2-
Fluoroadenine is Associated with Increased Antimicrobial Susceptibility.

11:40 – 12:00 Shrestha, Manjita (NMSU), Fuel Cell - An alternative source of Energy.

12:00 – 1:00 Lunch Hours

NMSU: New Mexico State University, Las Cruces, NM, UTEP: University of Texas at El Paso, El Paso, TX, UNM: University of New Mexico, Albuquerque, NM, UNT: University of North Texas, Denton, TX, ASU: Arkansas State University, Jonesboro, AR.

1:00 – 3:40

Afternoon Session (Nepalese Diaspora)

- 1:00 – 1:20 Chaudhary, Malati (NMSU), Scope of Wind power in Nepal and the Emerging Technologies for Wind Power Generation.
- 1:20 – 1:40 Chamlagai, Abi N. (UNM), Nepal: Regime Change and Democratization.
- 1:40 – 2:00 Adhikari, Dadhi Ram (UNM), Is Trade an Engine of Growth for Nepal?
- 2:00 – 2:20 Panthee, Rajendra (UTEP), Nepalese Diaspora and Their Literacy Challenges in US First-Year Composition Classrooms: A First-Year Composition Instructor's Perspective.
- 2:20 – 2:40 Pokharel, Ramesh (UTEP), Race and Ethnicity: An Exploration of Construction of Ethnicity in Nepal.
- 2:40 – 3:00 Sonyok, Desh Raj (NMSU), A Comparative Study on Emergence of Nepalese Diaspora in the USA.
- 3:00 – 3:20 Lamichhane, K., La Point, T.W. and DeAngelis, D.L. (UNT), Modeling the Chronic Effects of Pharmaceutical Mixtures at Environmentally Relevant Concentrations on the Life History Strategies of Ceriodaphnia Dubia: A Multigenerational Study.
- 3:20 – 3:40 Bista, Krishna (ASU), Perceptions of Silence among International Students: An Emic Perspective.

3:40 – 4:40

Keynote Speech by Dr. Arjun Banjade, Tarrant County College, TX

4:40 – 5:00

Vote of Thanks & Conference Conclusion by Conference Coordinator

Suresh Gautam,
Conference Coordinator & Director,
Academic Committee,
Nepalese Students Association
New Mexico State University,
Las Cruces, NM.

NMSU: New Mexico State University, Las Cruces, NM, UTEP: University of Texas at El Paso, El Paso, TX, UNM: University of New Mexico, Albuquerque, NM, UNT: University of North Texas, Denton, TX, ASU: Arkansas State University, Jonesboro, AR.

Where is the Logic in Proofs?

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Often university mathematics departments teach some formal logic early in a transition-to-proof course in preparation for teaching undergraduate students to construct proofs. Logic, in some form, does seem to play a crucial role in constructing proofs. Yet, this study of forty-two student-constructed proofs of theorems about sets, functions, real analysis, abstract algebra, and topology, found that only a very small part of those proofs involved logic beyond common sense reasoning. Where is the logic? How much of it is just common sense? Does proving involve forms of deductive reasoning that are logic-like, but are not immediately derivable from predicate or propositional calculus? Also, can the needed logic be taught in context while teaching proof-construction instead of first teaching it in an abstract, disembodied way? Through a theoretical framework emerging from a chunk-by-chunk analysis of student-constructed proofs and from task-based interviews with students, I try to shed light on these questions.

Keywords: Logic, transition-to-proof courses, analysis of proofs, task-based interviews

Why is this an interesting question? To obtain a Masters or Ph.D. in mathematics, or even to succeed in proof-based courses in an undergraduate mathematics major, one must often be able to construct original proofs, a common difficulty for students (Moore, 1994; Weber, 2001). When universities do offer a transition-to-proof course, professors often teach some formal logic (predicate and propositional calculus) as a background for proving. But how much logic actually occurs in student-constructed proofs? In this paper, I begin to answer this question by first searching for uses of logic in a “chunk-by-chunk” analysis of student-constructed proofs from a graduate “proofs course,” and then by coding student-constructed proofs from a graduate homological algebra course. If formal logic occurs a substantial amount, then teaching a unit on predicate and propositional calculus might be a good idea; however, if formal logic occurs infrequently, then teaching it in context, while teaching proving, may be more effective.

At the beginning of transition-to-proof courses, teachers often include some formal logic, but how it should be taught is not so clear. Epp (2003) stated that, “believe in presenting logic in a manner that continually links it to language and to both real world and mathematical subject matter” (p. 895). However, some mathematics education researchers maintain that there is a danger in relating logic too closely to the real world (Ayalon & Even, 2008b). Other authors have noticed that the way logic is taught in transition-to-proof courses is at variance with how it is actually used in proving (Selden & Selden, 1999). There are also those who think that logic does not need to be explicitly introduced at all (Hanna & de Villiers, 2008). Taken together, these differing views suggest that it would be useful for mathematics education researchers to further examine the role of logic and logic-like reasoning within proofs in order to inform professors on the ways they might best include logic in transition-to-proof courses. However, to date, only a little such research has been conducted (Baker, 2001). I intend to expand on Baker’s examination by conducting my own “chunk-by-chunk” analysis on student-constructed proofs.

This research was done in three separate phases: (a) By examining all of the 42 student-constructed proofs from a beginning graduate level “proofs course,” and (b) by examining 10 student-constructed proofs from a more advanced graduate homological algebra course. The 42 proofs from the “proofs course” were first subdivided into “chunks” for coding. The “chunks” are similar to those in Miller’s (1956) article, in which he stated that chunks are a “meaningful unit” in thinking. In the analysis described here, a chunk can refer to a sentence, a group of words, or even a single word, but always refers to a unit in a proof. During several iterations of the coding process, 13 categories emerged. In this paper, I discuss in detail just 5 of the 13 categories. The first two of these deal with the question posed at the beginning of this paper, “Where is the logic in student-constructed proofs?” The remaining three categories are those that occurred most often. Proofs from both the “proofs course” and the homology course were coded using the same categories. All 13 categories are briefly described in the Appendix.

Informal inference (II) is the category that refers to a chunk of a proof that depends on common sense reasoning. While I view informal inference as being logic-like, it seems that when one uses common sense, one does so automatically and does not consciously bring to mind any formal logic. For example, given $a \in A$, one can conclude $a \in A \cup B$ by common sense

reasoning, without needing to call on formal logic. By *Formal logic (FL)* in this paper I mean the conscious use of predicate or propositional calculus going beyond common sense. The distinction is that formal logic is the logic a student does not normally possess before entering a transition-to-proof course. Modus Tollens and DeMorgan's Laws are two examples of formal logic that are usually not common sense for most students (Anderson, 1980; Austin, 1984). For example, given $x \notin B \cup C$, one can conclude $x \notin B$ and $x \notin C$, a typical use of DeMorgan's Laws that students often do not perform automatically, or do perform automatically, but incorrectly. *Definition of (DEF)* refers to a chunk in a proof that calls on the definition of a mathematical term. For example, consider the line —Since $x \in A$ or $x \in B$, then $x \in A \cup B$.” The conclusion —then $x \in A \cup B$ ” implicitly calls on the definition of union. *Assumption (A)* is the code for a chunk that creates a mathematical object or asserts a property of an object in the proof. The category is further divided into two sub-categories: —Choice” and —Hypothesis” *Assumption (Choice)* refers to the introduction of a symbol to represent an object (often fixed, but arbitrary) about which something will be proved – but not the assumption of additional properties given in a hypothesis. In contrast, *Assumption (Hypothesis)* refers to the assumption of the hypothesis of a theorem or argument (often asserting properties of an object in the proof). An example to demonstrate the difference between the two is provided by the theorem —For all $n \in \mathbb{N}$, if $n > 5$ then $n^2 > 25$.” The chunk “Let $n \in \mathbb{N}$ ” would be coded Assumption (Choice), and the chunk —Suppose $n > 5$ ” would be coded Assumption (Hypothesis). *Interior reference (IR)* is the category for a chunk in a proof that uses a previous chunk as a warrant for a conclusion. For example, if there were a line indicating $x \in A$ earlier in the proof, then a subsequent line stating —Since $x \in A$...” later in the proof would be an interior reference.

In the chunk-by-chunk analysis of the proofs in the —proofs course,” just 6.5% (44 chunks) of the 673 chunks were Informal inference, and just 1.9% (13 chunks) were Formal logic. However, I found that 30% (203 chunks) were Definition of, 25% (166 chunks) were Assumption, and 16% (108 chunks) were Interior reference. Thus, Definition of, Assumption, and Interior reference accounted for nearly 71% of the chunks in the analyzed proofs. These large percentages brought up the question: Was this due to the somewhat unusual nature of the —proofs course” with its wide spread of topics that entailed the introduction of many definitions? In the subsequent chunk-by-chunk analysis of 10 proofs from the homology course, only 10% (17

chunks) of the 170 chunks were Informal inference, and just 0.6% (1 chunk) was Formal logic. Indeed, I found that 21% (36 chunks) were Definition of, 18% (31 chunks) were Assumption, and 18% (30 chunks) were Interior reference, for a total of almost 57%. This lends some support for the hypothesis that the above large percentage (71%) of Definition of, Assumption, and Interior reference was due to the nature of the “—proofs course”. However, there is not much difference in the percentages of both formal and informal logic used in the two courses (8.4% vs. 10.6%).

At first glance, these results may seem surprising. While the chunk-by-chunk coding is a convenient tool for a surface analysis of a finished written proof, there are underlying structures to, and within, proofs, such as proof by contradiction. I see these as “—logic-like structures” that are not often explained in the predicate and propositional calculus discussed in most transition-to-proof courses. “—Logic-like structures” are structures that preserve truth value in an argument, yet are not easily expressible in the language of predicate or propositional calculus. For example, if one wishes to prove “For all $x \in A$, $P(x)$,” one starts with “Let $x \in A$ ” and reasons towards “ $P(x)$.” Beginning a proof of a theorem whose conclusion is of the form P or Q by supposing *not* P and arriving at Q is another example of a logic-like structure. Structuring a proof in this way has the effect of using logic.

The fact that from the “—proofs course,” 30% of the chunks were definitions and 25% were assumptions suggests that there is a need to teach undergraduates how to introduce mathematical objects into proofs and how to read and use definitions. Indeed, there have been documented instances of students’ struggle with definitions (Edwards & Ward, 2004). What this and the results of the chunk-by-chunk coding suggest is that there needs to be a focus on how to unpack and interpret concept definitions in order to create usable concept images (Tall & Vinner, 1981) with components that can be used directly in proofs. For example, by definition, $A \cup B$ is $\{x | x \in A \text{ or } x \in B\}$, but one usage is if one has “ $x \in A$ or $x \in B$ ” then one can conclude “ $x \in A \cup B$.” Some students do not immediately connect this definition, with its set notation, to this usage. Bills and Tall (1998) introduced a similar notion saying that a definition is *formally operable* for a student if that student “—sible to use it in creating or (meaningfully) reproducing a formal argument [proof]” (p. 104). Another implication for teaching that stems from this

research is that because formal logic occurs fairly rarely, one might be able to teach it in context as the need arises. Also there is a possibility that doing so might be more effective. It would be interesting to examine whether the kinds of chunks used in proofs varies by mathematical subject area. For example, would topology have a different distribution of categories of chunks than abstract algebra? In future research, one might also look for instances of logic-like structures and techniques in student-constructed proofs. Can one identify a range of logic-like structures that students most often need in constructing proofs? Further, one might investigate the degree of a prover's automated behavioral knowledge of logic-like structures that could help to reduce the burden on his or her working memory. This might free resources to devote to the problem-solving aspects of proofs. Finally, there may be additional logic that does not appear in a final written proof, but that might occur in the actions of the proving process.

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Elimination of Tuberculosis by the year 2050- A global challenge for the developing and developed countries

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Introduction

Tuberculosis (TB) is an airborne infectious disease caused by bacteria called mycobacterium tuberculosis. In fact, TB is both preventable and curable. Mycobacterium tuberculosis usually attacks the lungs first, but may spread to other organs. Tuberculosis was first isolated in 1882 by the German physician Robert Koch, though experts assume that TB probably transferred from cows to humans about 8,000 to 10,000 years ago (Reichman & Tanne, 2002). Statistics show that more than 2 billion people, equal to one-third of the world's population, are infected with Tuberculosis bacilli, the microbes that cause Tuberculosis (WHO update 2009). Every year, Tuberculosis destroys millions of lives from all over the world (Kaiser Health news, 2007 Jan 10). Moreover, current therapeutic medicines being developed to treat new strains of bacteria causing Tuberculosis will be unable to improve the situation in near future because of their fast changing drug – resistant characteristics (Kaiser Health news, 2007 Jan 10). The extent of the disease's progression, together with HIV/ AIDS, in both developed as well as developing countries makes it a major global health concern today. Within this scenario there are many international programs currently being sponsored by WHO, UNAIDS, the Global Fund, to save people's lives, control the burden of this infectious disease and halve TB deaths and prevalence rate from the world by 2015 and eliminate TB by the year 2050 (WHO, March, 2010). The programs that were initiated have made broad inroads into the spreads of the disease in many regions and halted it to a large extent, saving thousands of lives, but there are still no signs of the total elimination of Tuberculosis from the world, as planned by WHO and others, by the year 2050.

Thesis statement

Despite many efforts by different health organizations such as WHO to control the spread of TB in both developed and developing countries, the prevalence rate for TB is still rising. As a result, this poses challenges that continually face these organizations today.

Method:

The paper has examined much literature related to the subject using NMSU library websites and also used my own personal knowledge and experience gained throughout my nursing career.

Result:

TB has been affecting millions of people every year from both developing and developed countries, and remains a challenge to today's world and the WHO Millennium Goal for many reasons; the existing economic state, the long term medication therapy for TB cure and its correlation with HIV/ AIDS, Multi Drug resistance, population movement and social status are some of the obstacles and problems to be overcome and solved if TB elimination is to be an achievable goal. Tuberculosis is still a major public health problem from Western Region to Eastern region and worldwide (Maaren, 2010). Following table shows the estimated TB incidence, prevalence and mortality rate in different regions in the year 2009 by Global Tuberculosis Control program.

WHO region	Incidence			Prevalence		Mortality (excl. HIV)	
	No. in thousands	% of global total	Rate per 100 000 pop	No. in thousands	Rate per 100 000 pop	No. in thousands	Rate per 100 000 pop
Africa	2 800	30%	340	3 900	450	430	50
The Americas	270	2.9%	29	350	37	20	2.1
Eastern Mediterranean	660	7.1%	110	1 000	180	99	18
Europe	420	4.5%	47	560	63	62	7
South-East Asia	3 300	35%	180	4 900	280	480	27
Western Pacific	1 900	21%	110	2 900	160	240	13
Global total	9 400	100%	140	14 000	164	1 300	19

Source: Global Tuberculosis Control program, WHO report, 2010

Conclusion:

Tuberculosis is a major challenge for the public health sector today. The world is advancing on many stages and at numerous levels, nevertheless there are still millions of people suffering from TB, which is almost 100% curable and indeed, was isolated to only a small portion of the threat it is today, only a century ago. TB is presently, for all intents and purposes, out of control in many developing countries. In developed nations there is even a "knock on" effect of TB cases due to increasing migration of people from underdeveloped countries. In order to meet the target of TB elimination from the majority of regions identified as priorities by governments, non-governmental organizations and civil society, all of latter must continue to act in concentrated effort in order to improve and continue efforts to control or even stop the spread of TB world-wide. We would not be struggling to combat this curable disease in 21st century if resources were made available together with a forceful, coordinated, international effort. We need to give our hand to the WHO's hand, to make its effort even more effective and then possibly make the world TB free. Public health services should focus on continuation of existing therapy, without interruption, for people who are in therapy to prevent drug resistance. There is also the necessity of frequent upgrade training and a positive attitude for health professionals involved with TB treatment.

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Fuel Cell - An alternative source of energy

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It is well known that energy consumption for various purposes is growing day by day all over the world. Global increase in population and rapid industrialization are the prime factor for rapid increase in energy consumption. Fossil fuel (gasoline, natural gas, and coal) are primary resources for energy generation from the past up to recent day; however they are carbon rich, limited and non-uniformly distributed all around the world. Therefore, it is important to think about reliable alternative source of energy which will be able to meet energy requirement in near future. Furthermore, another important aspect is desire of environmentally favorable alternatives.

There are numbers of viable alternative energy resources for example geothermal energy, nuclear energy, solar energy, wind energy. However, these resources are primarily suitable for stationary energy application. In contrast, fuel cell could be promising technology for mobile energy application (from cellular phone to automobile). Fuel cell is a device that converts chemical energy stored in fuel into electrical energy which can be used for various purposes. The fuel used in fuel cell, is oxidized in the anode and the electron produced is passed through external circuit into the cathode to reduce oxygen. The efficiency of fuel cell depends on vigorous reaction rate, and thus it will be beneficial if suitable catalyst could be used. Another unavoidable factor is analysis of micromechanical properties of the material that are used in fuel cell as material facilitates the flow of fuel, gas and byproduct within the fuel cell.

Researcher has been looking for the best fuel for the fuel cell. Pure hydrogen is used as a fuel in which case the only byproduct is water. But hydrogen is a difficult fuel to handle and possess few limitations namely storage and its distribution. Ethanol could be an alternative to hydrogen in which case we do not need to worry about its handling, storage, and distribution, as it could be supplied exactly in same way as the gasoline, which we are using currently. Furthermore, it is in principle carbon neutral and can be produced from sugarcane, corn, straw

etc, but its excessive use could lead to scarcity of food product. Thus, ethanol could be a partial solution to the fuel problem. Recently, researchers have been studying to use Algae as a fuel in fuel cell. Catalyst plays important role for optimized generation of energy from a fuel cell. Current *state of art* catalysts in fuel cell are from Platinum group metals, which are very rare and are thus expensive. Therefore, designing a cheap, highly abundant catalyst with similar performance as platinum group catalyst for fuel cell application is always a challenge.

Apart from these, another important aspect of fuel cell research is micromechanical property analysis of the material used as electrode (cathode, anode) and electrolyte of the fuel cell. This research mainly focuses on the change or variations that appear in the properties due to microstructure of the porous materials used in fuel cell. The focus is on the porous electrodes, which is permeable for the fluid flow through pores and has (electron or ion) conductive solid skeleton. Cross-property connection for the material, relates the change that appear in the physical property, to the structural defects, such as inhomogeneities or more generally the microstructure. For highly interconnected solid and pores in a porous material, the microstructural parameter tortuosity can be assigned for both phases (pores and solid skeleton). Based on variational bound in literature cross-property link of electrical conductivity and fluid permeability could be determined in terms of single parameter porosity. Thus, research of this type would be beneficial to design suitable material for fuel cell that offers maximum performance.

Scope of Wind power in Nepal and the Emerging Technologies for Wind Power Generation

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Introduction:

Energy consumption is one of the main indicators of development of a country and hydropower is one of the cleanest and most reliable sources of energy. Although, it is well-known that Nepal is the second highest potential country after Brazil in hydropower, only around forty percent of the population has access to electricity in Nepal out of which 33% of electricity is supplied from the national electrical grid of Nepal Electricity Authority (NEA) and the remaining 7 % from renewable energy source as shown in Fig. I. For remaining sixty percent of the entire population mostly hailing in rural areas, every day is load shedding.

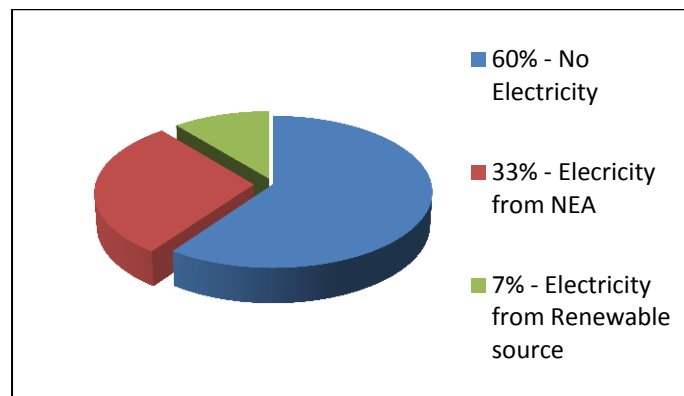


Fig. I: Availability of Electricity in Nepal

Nevertheless, at present, the two third of the day of the load-shedding has darkened the nation and the future seems more frightening, disastrous if conditions are not improved on time. So, the nation needs careful attention from the government and private sectors for electricity generation. Wind derived power could be one possible way in order to overcome the increasing energy crisis of Nepal despite the nation's diverse topography, and the consequent variation in meteorological condition.

Energy Resources and Status of Wind Power in Nepal:

The major source of energy in Nepal consists of traditional or biomass, hydroelectricity, petroleum, natural gas and coal reserves. Among the entire energy resource, it is evident that biomass is the dominant source of energy. Nepal has huge potential of hydropower production but this is currently remains untapped. About 84% of total population lives in rural areas. So, among the total energy consumption, 89.3 % of energy is consumed in household applications and the remaining small portion of energy is in industrial, transportation, commercial and agricultural activities as shown in Fig. II.

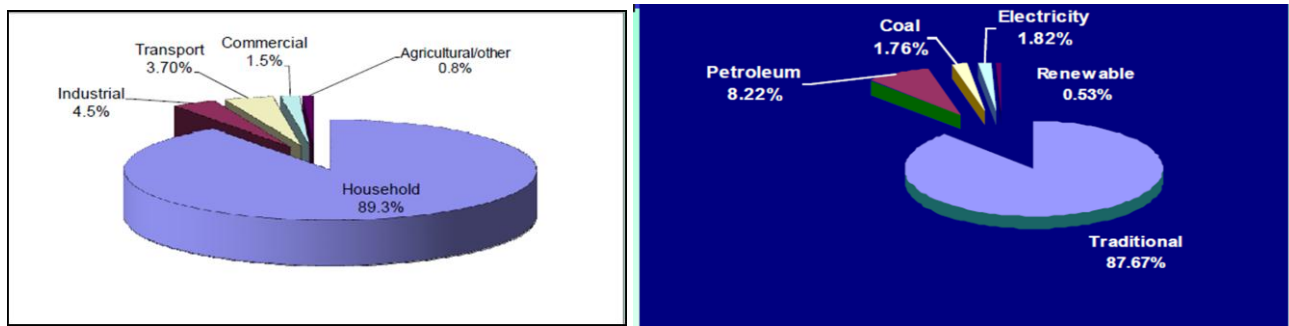


Fig. II: Total Energy Consumption by Sector and Fuel Type

Because of extreme dependence on traditional energy resource, the energy crisis has been increasing in an immense rate. So, there is a dire need to substitute as well as supplement the traditional energy supply system by modern forms of sustainable energy in terms of resources and technology. Because of the country's dependence on imported fossil fuel, high cost of grid connection, and low scattered population density, a decentralized supply system becomes the natural and feasible choice. Decentralized new and renewable energy supply systems such as wind, micro-hydro, photo-voltaic etc. provide feasible and environment friendly energy supply options in rural areas. So, the positive role of renewable energy resource was recognized by National Planning Commission, Nepal in early nineties. And now, among all the possible renewable energy resource, wind power has become an increasing attention for project planners especially for rural electrification. MAST stations have been installed at different locations to measure the wind power potential as shown in Fig. III.

Specific areas such as Khumbu, Mustang have been identified as a favorable location for

wind energy generation according to the study conducted by the World Bank in 1977. The study by DANGRID, a Danish consulting firm in 1992, reported a potential of 200 MW of electrical power from the wind resources between Kagbeni and Chusang in Mustang District of Nepal. This is about 33 percent of the present electricity production of Nepal. WECS along with DHM, Alternative Energy Promotion Centre (AEPIC), and Nepal Academy of Science and Technology (NAST) carried out a study on the Potential of Wind Resources in Nepal in the year 1999-2002 and showed a high potentiality of wind energy in Nepal. According to the recently published report of AEPIC, 2008 under Solar & Wind Energy Resource Assessment in Nepal (SWERA), the commercial potential of wind power is 3,000 MW. International Technology Development Group (ITDG) has installed nineteen 100 and 200-watt wind turbines at various locations such as Kavre, Tansen Palpa, Makawanpur, Chisapani (Karnali), and Udayapur for the stand-alone system whereas AEPIC has installed one 400-watt wind turbine at Nagarkot for demonstration purposes. So, with the growing interest of different sectors for wind power generation in Nepal, it becomes an interesting topic to put forth the emerging technologies related to wind power and how the wind power would help for the betterment of Nepal.

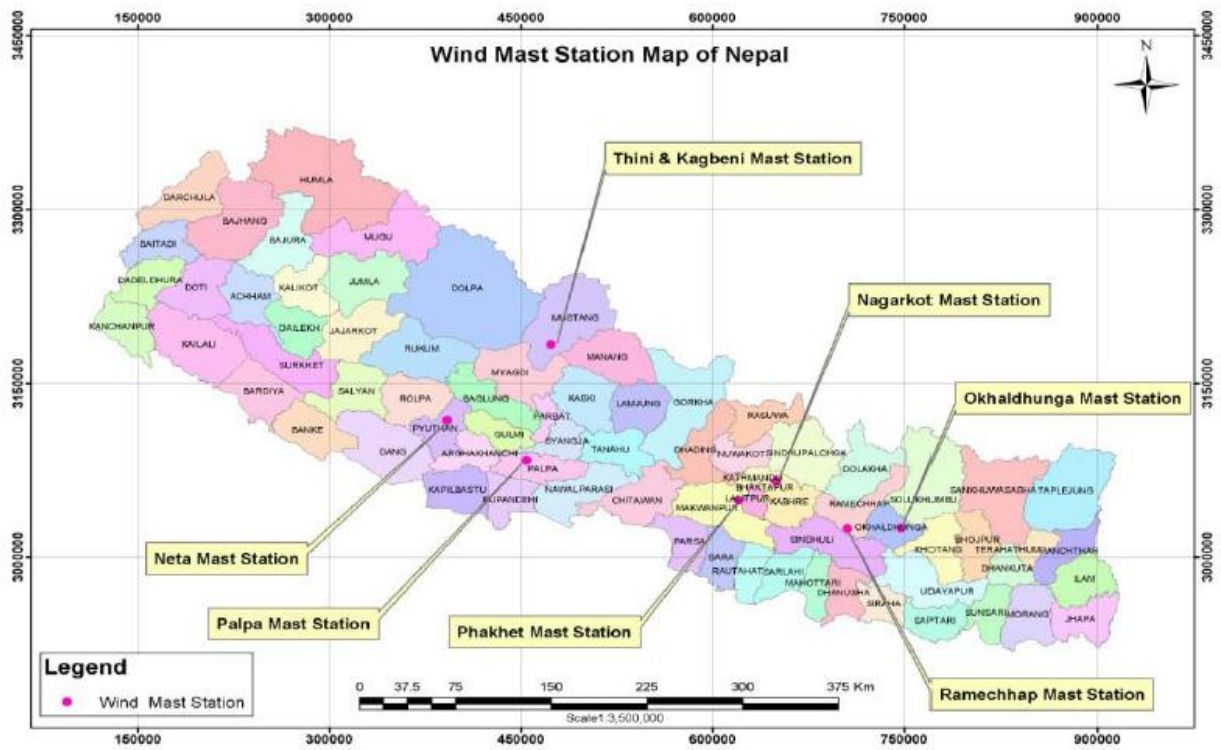


Fig.III: MAST Stations currently installed at different locations of Nepal

Conclusion:

The present unstable political situation, energy crisis, and high capital cost for hydro power plant installation, wind power could be one possible option to decrease the load shedding proliferation rate and ultimately, improving lives of Nepalese people.

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Is Trade Engine of Growth for Nepal?

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Introduction

A Positive impact of international trade on growth of an economy has been widely advocated on both theoretical (*see* Grossman & Helpman, 1997) and empirical (*see* Keller, 2002) grounds. Nepal was opened to international market during mid eighties. The process of opening the Nepalese economy was accelerated further after the restoration of democracy in 1990 through the introduction of new policies and amending existing policies in order to make them compatible with an outward oriented regime. Some of such policies are Industrial Policy 1992, Trade Policy 1992, and Commercial Policy 1992, Privatization Policy 1994.

Despite several efforts including the planned development effort of more than five decades and liberalization of the economy, Nepal is experiencing subdued growth of less than 4 percent. The Nepalese economy grew at an average of 4.3 percent per year during eighties followed by 4.9 percent during the nineties and after the year 2000, it is growing at an average of about three percent only (ADB, DFID, ILO, 2009).

Lewis (1980) termed trade as the engine of growth. Proponents of international trade argue that trade liberalization leads to higher income and output for a country through a static (i.e. a short run) increase in income and output due to from reduced costs (*see* Krugman and Obstfeld, 2000), from economies of scale (*see* Bhagwati, 1988), efficiency gains from exploiting comparative advantage, reduction in distortions from imperfect competition, and increased product variety (*see* Berg and Krueger, 2003) and dynamic gains, i.e., long run productivity growth of an economy that is achieved mainly through technological spillover caused by international trade (*see* Grossman & Helpman, 1997), and learning by doing (*see* Young, 1991).

On the empirical side of the problem, mixed results have been found. Most recent paper by Wacziarg & Welch (2008) has analyzed the impact of trade liberalization on growth for thirteen countries. Authors' found that, out of thirteen countries, seven countries (Indonesia, Republic of Korea, Chile, Taiwan (China), Uganda, Ghana, and Poland) recorded higher growth rate after the trade liberalization while other four countries ((Israel, Botswana, Mexico, and

Hungary) had negative growth difference. However for Colombia and the Philippines, there was no change in growth rate. This finding indicates that trade liberalization is not necessarily a growth enhancing factor.

Growth and Trade scenario of Nepal

Nepal's GDP growth rate is one of the poorest in the south Asian region and has rarely shown consistency. After 1990, Nepal experienced its highest growth rate in the year 1994 (7.4 percent) and lowest growth rate in the year 2002 (0.12 percent). In other years, growth rate remained in between these two values.

Nepal attempted to open up its trade sector from the mid-1980s with a conviction that economic reforms and trade liberalization would attract investment, promote development and contribute to the generation of productive employment and alleviate poverty, in a general framework of equity, participation and market based efficiency (MOICS, 2004 *cited in* Ghimire, 2009). In order to transform the economy to market oriented and liberalized economy, government of Nepal implemented series of reforms under —economic stabilization program” after 1985. Major reforms included; (i) devaluation of currency, (ii) deregulation of financial sector, (iii) liberalization of trade, (iv) reduction in budget deficit through curtailing public expenditures, and (v) removal of various subsidies, (vi) deregulation of the trade, industry, finance, and foreign exchange regimes, (vii) streamlining of price controls and subsidies, (viii) privatization of key public enterprises, (ix) massive reductions in trade related tariffs and many other reforms (*for detail list of reform see* ADB, DFID, ILO, 2009).

Adoption of liberalizing policy has put Nepal on the position of most open economies in South Asia (Nwosu, 2007). Enabling Trade Index (ETI) report ranks Nepal in the second position for the category of —access to foreign market” (WEF, 2010). It means policies are no longer barriers to the promotion of international trade in Nepal.

Although, as mentioned earlier, Nepal is one of the most open economies, increasing import and almost same level of export is the major problem of Nepalese trade . Nepal's value of real export for the year 1985 was more than Rs. 51751 million which reduced to only about Rs. 30692 million in 2008, (measured in 1995 prices). On the other hand real import for the same period increased from about Rs. 28306 million to Rs. 128970 million. But the trend was just opposite for export from 1975-1995. During this period, real export increased from Rs. 6975

million to Rs. 19881 million. However, total trade volume increased during both periods due to increased import. These evidences indicate that trade liberalization policy has not been supportive for enhancing Nepalese export.

Now the question is why trade liberalization is not contributing in GDP growth of Nepal. The most valid reason is that Nepal is lacking behind for reaping the benefit of openness due to lack of supply capacity. Although Nepal has good market access, Nepal is not able to produce commodity efficiently for selling in the international market.

Nepal's competitive capacity in the international market is one of the lowest in the world. According to Global Competitiveness Report 2010, Nepal ranks in 125th position out of 133 countries (WEF, 2010b). Investments in education and skills, machinery and equipment, physical and technological infrastructure and innovation (including commercialization) are contributing factors for improving productivity and competitiveness (Ara & Rahman, 2010). But Nepal's labor productivity is one of the lowest in South Asia (MOICS, 2004). Similarly, Nepal's infrastructure quality as indicated by infrastructure quality score is also lowest in South Asia (Ghimire, 2009). Expensive and irregular electricity, small and low quality road network, expensive and deficient transportation and relatively less coverage and poor quality of telecommunication are features of Nepalese economy. Nepalese exporters' incur almost double cost to export a container from Nepal in comparison to India, Bangladesh and Pakistan.

The quality of institutions has a strong bearing on competitiveness and growth (WEF, 2010b). But quality of institution as reported by WEF (2010b) is very poor in Nepal. Excessive bureaucracy and red tape, overregulation, corruption, dishonesty, lack of transparency, political dependence of the judicial system etc. which increase the economic cost to business significantly and bring down the competitiveness is rampant in Nepal.

Conclusion

Trade liberalization is regarded as engine of growth. Nepal started to open up her economy in 1985 and the process accelerated after 1990. Now Nepal is one of the most liberalized economies in the region. Unfortunately, as shown by regression result, trade liberalization is not contributing for the growth of the country. Trade liberalization facilitated to increase import heavily but export level remained almost in the same level. The major reason for this is the supply capacity constraint of Nepal. Low productivity and competitiveness due to low

labor productivity, poor infrastructure and poor institution are contributing factors for supply constraints. Hence Nepal need to focus on improving infrastructure and institution for getting benefit of trade liberalization and enhancing growth rate of the economy.

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Nepalese diaspora and their literacy challenges in US
First-Year Composition classrooms:
A First-Year Composition instructor's perspective

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Diaspora refers to dispersion or a flight of a group of people from a country or region to another. It originally refers to the Jewish population around the Mediterranean that was forced to live outside of Palestine after the Babylonian invasion. Since then, the term has been used by the African-American community to refer to the forced migration of groups from Africa under threat as well as by other groups to describe their situation while being located in different places other than their original homeland. The systematic study of these different groups has led to the development of a separate area of scholarship known as Diaspora Studies. In this presentation/paper, I use this particular term ‘diaspora’ to refer to Nepalese students, who have come to USA leaving their homeland back, in US universities in general, and in First-Year Composition (FYC) in particular.

Nepalese students in a very enormous number come to US for their higher study with high hopes and ambitions. Odari (2010) estimates “[E]very year 11, 000 Nepali students come to the U. S. for higher Studies!” According to him, some succeed some don’t, and no matter what, their struggle continues. Since they are located in a foreign land, they should overcome a number of challenges: linguistic, cultural, ideological, technological and financial to name just a few. These different challenges as a whole contribute to another very important challenge known as literacy challenge itself. Literacy is a very complicated notion and its meaning and scope keep on changing with changing time, location, national or social politics, economy, culture, social values and scientific and technological development. Williams (2008) argues “[l]iteracy is not a stand-alone set of skills but social practices influenced by context and culture” (p. 683). Due to this evolving concept of literacy, when they come to US universities, their literacy is challenged and contested.

The concept of literacy has drastically changed in the 21st century. Clark and Bramhoff (2009) explore the literacy ideas of the practicing educators who put forward the concept of basic, critical, visual, information, social and outdoor literacies. The practicing educationists argue that technological literacy is a must since the technology in has been a part of lifestyle in this 21st century. Due to it, one is not regarded to be literate if one cannot understand and operate computer and other digital technologies, and cannot work in a digital environment. Selfe and Hawisher (2004) argue —[T]oday, if U.S. students cannot write on the screen—if they cannot design, author, analyze, and interpret material on the Web and in other digital environments—they will have difficulty functioning effectively as literate human beings in a growing number of social spheres” (p. 2). But the literacy concept and practice back in Nepal are not up to this level due to various factors required for the literacy promotion, and, due to which, mastering the traditional or conventional literacies is still regarded to be a great achievement.

Among many different challenges Nepalese diaspora students face in US universities or FYC classroom, teaching curriculum and pedagogies are one of them. Traditional sage-on-stage pedagogy is still very popular in Nepal, and it has promoted banking model of education in contrast to the concept of critical pedagogy or literacy. The result is they are more teacher-dependent. Due to which, when they have to read, interpret, and research independently, they get totally lost and find themselves helpless. Another problem they face is related to English language which gets intensified in the US English only environment of composition classroom. They feel their linguistics proficiency challenged when the US standard English is used in the teaching/learning process. The culture, ideology, and popular practice embedded in it alienate and frustrate them, and it, very often than not, hamper their learning capabilities and skills. Even if they know English, the English are exposed to US composition classroom is totally different from their English. Another serious problem is Nepalese students lack of exposure to the digital technology in the writing classrooms. Teaching writing with computer technology is still not practiced in Nepalese academia. But in the context of US FYC classroom, on the other hand, Cushman et al. argue that —[W]e believe that all writing courses should be taught with computer technology—to prepare students for their future professional lives and for their civic lives as participants in an increasingly digital and global world”(p. 2). Composing in the digital environment is almost unheard of whereas they have to work in a completely digital environment in FYC classrooms. Designing webpage, doing extensive research on social, economical,

academic and scientific issues, and even making a documentary film are some of the assignments that the students practice as a part of FYC curriculum, and to my knowledge and experience, they are challenging to US students themselves. In such a situation, these assignments are more challenging to Nepalese students.

As a FYC instructor at the University of Texas at El Paso (UTEP), I think that there is a great role to be played from the side of instructor in order to address those literacy challenges of these diaspora Nepalese students in the composition classroom. The use of technology itself can play an invaluable role in the process, and, for this purpose, the Web 2.0 tools will help to bring dramatic changes in the students' writing process. Mason and Rennie (2008) argue "Web 2.0 supported social networking sites —Blogging, Wikis, e-portfolios and social networks allow learners to clarify concepts, establish meaningful links and relationships, and test their mental models" (p. 6). They create a constructivist environment in which learners need to be active and interactive as Boyd (2008) argues "[I]nteraction as a method for learning is a core principle in both theories of LCE (learner-centered education) and composition pedagogy and praxis" (p. 226). Similarly, the online environment created by these sites is immensely invaluable to these students that Boyd further argues "[A]s is common knowledge in our field, one of the biggest potential benefits of online education is new and unique opportunity for students to interact with instructor, their peers, and the content of the course" (p. 226). Through these tools, Nepalese diaspora students can interact with their instructors and peers without hesitation as they normally do in face-to-face interaction because of their language proficiency, accent and cultural differences. Validating their linguistic, cultural and ideological knowledge will immensely help them because "learning has far-reaching implications for students' values, identity, and community solidarity, and that students will always make connections between classroom proceeding and the outside world" (Canagarajah, 1999, p. 14). Also, providing them a freedom to deal with the issues related to their language, culture, and ideology whether while doing their assignments or interacting with their friends on those online collaborative learning platforms can definitely solve their technological issues as well as other issues related to their language learning and developing their writing proficiency.

To sum up, Nepalese diaspora students do have different literacy challenges to overcome in the US universities in general, and in FYC classrooms in particular. Their literacy challenges

intricately related to the linguistic, technological, cultural and pedagogical issues. Hence, a FYC instructor can play a very crucial role in addressing their literacy issues in the composition classroom by participating them in online collaborative learnings facilitated by Web 2.0 technologies and validating their linguistic, cultural, and ideological knowledge as well as providing them an opportunity to deal with them.

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Race and ethnicity: An exploration of the construction of ethnicity in Nepal

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Introduction

Race is a product of social conflicts between different groups of people, and hence it is a social construction emerged from this conflict guided by the interests and politics of privileging some groups of people over the other groups. Omi & Winant (2002) define it as —a concept which signifies and symbolizes social conflicts and interests by referring to different types of human bodies” (p. 123). Race and ethnicity are taken interchangeably if they are defined loosely. Ethnicity is a concept related to race—a politically correct word for race (Miles & Brown, 2003). By and large, it denotes a category that distinguishes groups based on sociocultural characteristics, such as ancestry, language, religion, custom and lifestyle. However, like race, ethnicity does not denote innate or inherent attributes of humans. Rather, it is a relational concept that sets one group of people apart from another—a process of constructing differences.

Nepal is a multi-ethnic, multi-linguistic, and multi-cultural country having a different history of the construction of ethnicity and race (though race as it is taken in the world does not exist in Nepal). For long ethnicity was a matter of imposed categorization on some ethnic groups who have different origin, language, culture, and tradition from the dominant groups—Brahman and Chhetri—in order to marginalize them. As the ethnic groups became conscious of their marginalization, they formed ethnic organizations and fought for their rights. With the revival of democracy and formation of a republican state, the ethnic groups in Nepal have themselves defined and categorized ethnicity, unfortunately associating it with indigeneity. In this paper, I will attempt to critique and analyze the politics and problematics of the construction of ethnicity as done by the ethnic groups at present time in Nepal. While so doing, I will engage in critical discourse analysis of the definition and categorizations of ethnic groups.

Problematics and politics of the definition and categorization of ethnicity

I see problems in their definition and categorization of ethnicity and indigeneity, because the definition and categorizations of ethnic groups and construction of ethnicity falsely based on indigeneity not only contradicts with the history of composition of Nepalese population, but also indirectly mediates the definition of indigenous people. The discourse used to define and categorize ethnicity should be viewed in relations to other discourses. As Fairclough (2010) argues, “Discourse is not simply an entity we can define independently: we can only arrive at an understanding of it by analysing sets of relations” (p. 3), in the following part, I would like to do Critical Discourse Analysis (hereafter CDA) looking at the discourse in relations to other discourses. While so doing, I will first talk about the history of the construction of Nepalese population; and on that basis I will analyze the problematics and politics of the construction of ethnicity in Nepal as done by ethnic group.

Looking at the discourse of the definition and categorization of ethnicity in relations to its dialectical relations with historical discourse, we find the categories much problematic because it does not only politicize a concept; rather it provides historically erroneous knowledge. Talking about the making of Nepali population, —Political scientists Joshi and Rose broadly classify the Nepalese population into three major ethnic groups in terms of their origin: Indo-Nepalese, Tibeto-Nepalese, and indigenous Nepalese” (Savada, 1991). The history also supports this argument. The first group of people, all Hindu, migrated to Nepal from India when there was Hindu/Muslim conflict and settled in the more fertile lower hills, river valleys, and later on in Tarai plains, whereas the second major group that consisted of communities of Tibeto-Mongol origin migrated to Nepal many years earlier than the Indo-Nepalese from the north (Tibet) and settled occupying the higher hills from the west to east. The third and much smaller group (the indigenous Nepalese) comprised a number of tribal communities, such as the Tharus and the Dhimals of the Tarai, and Kusunda, Raute, Surel, Hayu, Raji, Kisan, Lepcha, Meche, Kuswadiya, Majhi, Chepang, and the like of the hills may be remnants of indigenous communities whose habitation predates the advent of Indo-Nepalese and Tibeto-Mongol origin.

As stated earlier, the Tibeto-Nepalese settled on the north, and were politically, socially and economically marginalized by the Indo-Nepalese group from the right beginning. This group consists of many castes/ethnic groups, namely, Sherpa, Tamang, Rai, Magar, Limbu, Gurung, and Thakali, who define them as ethnic group, *janajati*, and indigenous people. Now a big

question emerge: what are the criteria to categorize ethnicity and indigeneity? The universally accepted criterion for defining indigenous people is that the people who inhabit in a place from the time immemorial as their native land, who are not immigrants in that land. How do they categorize themselves as ethnic group? Is it socio-political and economic aspect? Do the people who are socially, politically and economically deprived of belong to ethnic group? If this marginalization is the basis of belonging to ethnicity, are all the categories marginalized people? They are not. For example, Newar and Thakali, who are categorized as advanced ethnic groups, are not marginalized groups. They are in fact advanced and privileged group of in Nepal.

Newars migrated from India and settled in Kathmandu valley, the center of business and market from the ancient time to now, and dispersed later on in other areas basically in the town with the expansion of trade and business. Some of the Newars are also descendants of royal family and so they have close relation with power. Because of economic and political privilege, according to a 1991 newspaper report, summarized in the *Nepal Press Digest*, 13 percent of the post in civil service, the army, and the police were held by Kathmandu valley Newars, whose share of the total population was merely 3 percent, whereas 80 percent of those posts were held by the Brahmin and Chhetris of the hills, who comprised less than 50 percent of the population (Savada, 1991). Likewise Newars have strong hold in government cabinet and business and trade sector. Similarly, Thakalis from the Mustang District adjacent to Manang have moved to Pokhara, a major urban center in the hills about 160 kilometers west of Kathmandu, and to Butawal and Siddhartha Nagar, two important urban areas in the central part of the Tarai, directly south of Pokhara. They are successful businessmen, who have economic privilege because they own many hotels and motels.

There is a tension in Nepali ethnic groups in conceptualizing ethnicity. While on the one hand ethnic people believe that ethnicity is socio-political racist construct to divide humans and rule, which implies that there is no such difference among people, on the other, they own these differences for political purpose. There is a tendency among some groups to categorize themselves as ethnic group for political purpose, e.g. Newars and Thakalis categorized themselves as ethnic groups. There exists a distinction between dominant (Newar, Thakali, Sherpa, Tamang, Magur, Rai, Limbu, Gurung) and dominated ethnic groups (the Other) who belong to endangered group, highly marginalized group and marginalized group in the above

categories. As convention, a few ethnic groups are in power, and so it is not inclusive, hence perpetuation of hierarchies among ethnic groups.

To go back to the question of indiginity, which I briefly mentioned above, it is erroneous to define all ethnic groups as indigenous people because all ethnic groups as categorized above do not belong to indigenous people's category because some of them are migrants to Nepal from Tibet. Many groups of people categorized as indigenous Nationalities are not in fact indigenous, e.g. Sherpa, Tamang, Magar, Gurung, Rai, Limbu, Thakai belong to Tibeto-Mongol origin, whereas Newars belong to Indo-Nepalese origin. Ethnicity and indigenous nationalities are not the same. To define them loosely in one category is solely based on political motive—the politics of inclusion and exclusion.

Conclusion

Infiltration of some advanced groups into ethnic groups and infiltration of some ethnic groups into indigenous group is fundamentally done only for political purpose. While this infiltration brings political, social and economic problems because the real ethnic groups and real indigenous groups always lag behind in the race of cashing opportunity with the advanced groups, it develops a tendency to define and categorize them as backward group which subsidizes the real problem thereby benefiting only advanced groups within that category. This helps the advanced groups and the elites in those groups benefit from the affirmative action whereas the real ethnic group and the real indigenous groups always lag behind because they cannot compete with the more advanced groups. So, in order to address the problems of ethnic groups and indigenous groups, it is high time to revise the construction of ethnicity and indiginity by incorporating critical multiculturalism that does not simply celebrate the differences as diversity rather examines the difference of races and ethnicity by situating in historical and social context from normative perspective to capture the essence the very concept in such a way that benefits the real ethnic and indigenous groups.

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