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The use of Wikipedia in secondary level education in an academic curriculum in Nepalese context.

# **ABSTRACT**

Information and knowledge are the key components to be success in this 21<sup>st</sup> century. For this each and every one is searching or seeking information to make more knowledgeable. The use of Wikipedia pages as an academic curriculum in secondary level education system in Nepalese context is the main idea of this research thesis and here the focused is given to the teachers who teaches to the students in secondary level. And some comparison or the flexibility of sample Wikipedia pages in academic courses.

This study attempts to investigate the use of Wikipedia in academic courses during teaching process and its consequences. This research analyze different user's perceptions and their way of thinking for using Wikipedia in academic courses. This also highlights some challenges faced by the teachers with the use of Wikipedia information in teaching process.

The research or the study contains two different data collection techniques. The respondents are asked the various types of questions relating to the Wikipedia information in teaching process through google form, to the teachers who are directly or indirectly linked to the teaching process in secondary level education in Nepal. I.e. Kathmandu Valley. A total of 14 respondent responds their precise information for this thesis to accomplish on online survey questionnaire. The findings of this research shed light on the use of Wikipedia's information in curriculum for the surface level information rather than in deep, the research finds somehow hesitation in using Wikipedia information. This study concludes with some suggestions for making Wikipedia's pages more useful and improving its information in more systematic and synchronized way like the text book.

**Keywords**: Wikipedia, secondary level education, Nepal, Kathmandu valley, teachers, relevant pages.

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# **CHAPTER ONE**

# 1. INTRODUCTION

Wikipedia; an internet encyclopedia supported and hosted by the non-profit Wikimedia foundation is a free access internet encyclopedia containing millions of articles in many languages. By following the website's policies, one can edit the most of its articles. It is ranked among the top ten most popular websites consisting the most popular general reference work (Wikipedia.org).

It was launched in January 15, 2001 by Jimmy Wales and Larry Sanger by connecting the two different names, the meaning or the sense of portmanteau; wiki and pedia of encyclopedia. Although it was introduced in English version, it is multilingual nowadays consisting of articles in 288 different languages. The investigation done by Alexa internet shows that Wikipedia is the world's seventh-most popular website in terms of overall visitor traffic. Wikipedia's total worldwide monthly readership is approximately 495 million. Worldwide in august 2015, WMF Labs tallied 18 billion page views for the month. According to comScore, Wikipedia receives over 117 million monthly unique visitors from the United States alone.

Among the millions of visitors every months, there are many who use Wikipedia in teaching processes in secondary level education i.e. the teachers. They are making the student more knowledgeable by suggesting the students to use Wikipedia. This thesis is going to investigate the importance of using Wikipedia in the academic courses in secondary level education in Nepalese context.

Wikipedia is offered in different versions, but the most used version of language is English, Wikipedia is working to make its contents available in Nepali Languages. Nepalese people are using the standard Wikipedia pages of Universal Languages (English) and this Thesis is done by taking English version of Wikipedia.

# 1.1.BACKGROUND OF STUDY

Wants and demands of people are skyrocketing in today world. Similarly getting good education and knowledge is also an inevitable component now a days, which results in investigation and analysis of different types of information and knowledge, and how to use them to quench the thirst of knowledge. We have lots of information in this digital era but what is the most effective knowledge we are going to perceive and utilize to accomplish our requirement, depend on our information findings. We have different types of information knowledge written in different point of time and bearing different perspectives, which is directed by different writers bearing different sex, culture, ethnicity, religion, and so on, but the essence of knowledge is the same. Truth is always the truth and is purified by different session of discussion by different writers, which is the outcomes of research, invention, and scientifically proven of information on something which we are used to. In

Wikipedia the information is always in the form of upgrading through different authenticated users. The information which is new needs to be authenticated and needs to be edited but it should not change the history which is always facts for forever. The insistence on the use of the Wikipedia for the academic curriculum by the secondary level teachers is to make the student more knowledgeable of what they know through digital technology with the use of Wikipedia. Is it important for educating the student or we do not need to bother about this?

This research study is aimed at finding the views, opinions and the perceptions of the teachers on the teaching materials of Wikipedia pages as a means of teaching the students. This research will be in the context of Nepalese secondary level education.

#### 1.2.RESEARCH THEME

The theme of this research is to discuss the importance of using the Wikipedia by the teachers for their academic processes. i.e. For teaching. For this purpose, some teachers' opinions and their style of teaching process with the use of Wikipedia are collected through questionnaires in a Nepalese secondary education context. The theme is to discuss the dependability, concurrency of information, adaptability, biasness of information, frequency of updating information, and its correctness of information in the context of academic courses.

On the other hand collecting some text book chapters which are or can be used to teach with the reference of Wikipedia pages and investigating the dependability on those information for those specific chapters is another theme of this research study.

#### 1.3.THE PURPOSE OF THE STUDY

This study investigates, analyzes and attempts to discover the use of Wikipedia as a tool for academic curriculum in the context of Nepalese secondary level education. It will also discuss the use of digital information in teaching process by the teacher, and its importance for students' academic qualification, their advancement of knowledge and their behavior on Wikipedia as an information search engine.

# 1.4.RESEARCH QUESTIONS

This study on the use of Wikipedia as a learning tool in secondary level education addresses the main research question as:

❖ Use and usefulness of Wikipedia information in gaining information and knowledge in some academic courses by the students in secondary level education in Nepalese context?

Following some sub questions which were asked to the teachers to collect their opinions of Wikipedia use in education curriculum:

- 1. How you use in teaching process?
- 2. In what ways do you think that it will help the students?
- 3. Do you think it is really useful for students to gain some ideas in some topics in their academic courses?
- 4. Did you find any incompleteness in information provided by Wikipedia in the topics relating to academic?
- 5. What do you think about the completeness of the information in the Wikipedia pages?
- 6. What you prefer to students to use other than Wikipedia for academic resources?
- 7. Do you think that the information In the Wikipedia are updated, revised, corrected with the time?
- 8. What you think about the risk of using those materials without proper investigating the perfect match of information related to the academic courses?

# 1.5. SIGNIFANCE OF THE STUDY

The study on Wikipedia use in an academic curriculum shall inform the teachers and students to use it wisely. It can also help students for completing their assignments. It also help the student and teachers to gather the accurate, updated and relevant information in the academic courses.

# 1.6.MOTIVATION FOR THE STUDY

As I am a student of computer science and I use lot of time in computer either for learning purpose or just for fun, in any case I use my time in searching things. When I am searching things through different search engine I encounter results from Wikipedia, and it satisfied my queries and I think I must do something regarding this Wikipedia, which is one of my motivating factors.

When I think about it deeply I came to know about its complexity i.e. information accuracy, frequency, update, relevance, concurrency, rigidity and dependability. Then my interest goes more motivated and I am doing this for gaining more knowledge and information about it in the implementation in academic curriculum and of course because of this I will be happier to have this as my thesis too.

#### 1.7.STRUCTURE OF THE STUDY

This thesis is structured in two parts based on the data collections. The first part deals with the data collection from the secondary level school teachers, where they are asked the online questionnaire regarding the use of Wikipedia in academic courses and their importance in gaining knowledge to the student. The data regarding the views and the implementation of Wikipedia during the teaching process are collected in this part.

The other part consists of finding the effectiveness of different sample Wikipedia pages that are taught or are related to the academic course books. I have chosen different sample Wikipedia pages, consisting sites of historical importance, the most debated matters, conspiracy issues Wikipedia pages and of course they are taught in Nepalese secondary level education curriculum. I have chosen those Wikipedia pages to find out the consistency, effectiveness, biasness and other characteristics of those pages. The purpose is to analyze the dependability of Wikipedia pages.

# **CHAPTER TWO**

# 2. LITERATURE REVIEW

In this chapter the discussion will be done in the previous literatures that are related with the use of Wikipedia in curriculum or the use of Wikipedia in any sector for the development of the society and to make the users more informed. Literature review of Wikipedia contents consists mainly of two components regarding their importance.

# 2.1.TECHNOLOGICAL IMPORTANCE OF WIKIPEDIA

The age of the users and the internet access are related to the faculty of technology use, and the perception and the use of technology are the factors to make the education quality higher (Xu and Meyei 2007).

The e-class must use the different components as inter-related components, such as the use of email, the web for productivity of teaching, research and service. (Applegate, 2006) The studies in the classroom introducing the electronic components also confirms the attitudes of the students and the perceptions of the faculty which are the essential factors for understanding the dynamic relationship within development of scholarly information system and the academic community. To sum up his research, I think the academic community needs to examine Wikipedia's rapid development and popularity, and to study whether its development may facilitate scholarly communication and disseminate scholarly materials for research and teaching.

The use of, adaptation and rejection of Information and Communication Technology is the outcomes of the different factors like economic, cultural, educational, physical, and social (Feather, 2003). Different researchers pointed out that many information technologies, products and services are not universally perceived as beneficial to the society as a whole, and emphasized the importance of community consensus and engagement to the development of ICTs (Damodaran and Olphert, 2006).

(Borgman 2000) emphasized the relationship between "documents" and user communities. She pointed out that adequate understanding of how and why documents are created and used will enhance the development of information technologies for such behaviors. The use of information resources is an important aspect of personal information infrastructure and often has impact on each individual's information needs and sharing behaviors.

Most of the users uses the same steps to search information. When they acknowledge the necessary materials for their information, they begin searching. Beside this their existing behavior is also followed by them to find information and they will pass through some constraints of time, effort, cost, etc. which may make them unwilling to explore new resources. These steps of habit form a flow of actions to fulfil an individual's information needs (Case, 2005).

# 2.2.DISCUSSED FEATURES OF WIKIPEDIA

Wikipedia provides an environment for creating, sharing, exchanging and re-defining information (Tapscott and Williams, 2006). Some information is cited from Wikipedia by the increasing number of judges for court decisions, besides this some US Supreme Court are not adopting the citation of Wikipedia. But some academic and practicing lawyers point out that public acceptance would be key to the use of Wikipedia for court decisions (Cohen, 2007). As scholars and practitioners emphasize the relationship between information and its intended communities, the above examples in different professional fields demonstrate the need for studies on Wikipedia and professional practices. The investigator is interested in the relationship between higher education faculty and Wikipedia in terms of research and teaching.

Members from the academic community express mixed opinions at several blog sites (Chronicle of Higher Education, 2007) Several studies on Wikipedia focus on its content development (Emigh and Herring, 2004) popularity by the number of visits and editorial activities (Wilkinson and Huberman, 2007) and degree of openness in terms of access and source (Willinsky, 2007). Those studies are mainly based on the data from Wikipedia's web traffic logs and links.

The survey of Chesney (2006) in which 55 academics (research fellows, research assistants and PhD students) is investigated regarding Wikipedia's credibility, discovered that experts consider entries in Wikipedia more credible than do non-experts. However, he suggested that further work was needed to verify his findings due to the small sample size. Ayers (2006) pointed out that there are no unified factors on studying Wikipedia and formal studies are needed to date. Based on these recommendations, Chen (2009) studied 68 high-tech professionals' attitudes towards Wikipedia and found the participants treated Wikipedia as a ready reference for general information. Their concern is that Wikipedia only has a limited number of entries available at this point.

67 percent of the students for academic research use Wikipedia (ebrary, 2008). Wikipedia greatest strength lies in the online encyclopedia's ability to respond quickly and flexibly to new knowledge and to edit its entries in an immediate response time (Parry 2008).

Stagg, Adrian and lindy Kimmins (2014) has identified and defined the need to support the transition of students during their first year in a tertiary institution. Which assist in acculturating students to the higher education environment and also ensure to develop the fundamental skills required for academic success; which accelerates the higher progression and retention rates.

Arazy, O., Yeo, L. and Nov, O. (2013) has studied 96 Wikipedia articles applying multiple data collection methods, including analysis of Wikipedia system logs, manual content analysis of articles' discussion pages, and a comprehensive assessment of articles' quality using the Delphi method. They find that when group members'

(members with editors who are formally designated as administrators) disagreements, originally task related, escalate in personal attacks then, the members manage group conflict through collaboratively entries of data's in Wikipedia pages.

The research done by Gemma Bayliss (2013) on exploring the cautionary attitude toward Wikipedia in higher education also revealed that cynicism towards the Wikipedia and the issue of consistency of the Wikipedia pages. The research also raise a number of areas that need to be addressed by the higher education to achieve the maximum benefit from Wikipedia, and produce students able to operate professionally in the web 2.0 world, a world which is their contemporary reality. Research also points out that the lack of understanding and perceived detrimental effect of inconsistency do not pose insurmountable barriers to use Wikipedia. The difficulty regarding the negative attitude towards knowledge produced outside of academia, the contrasting attitudes toward collaborative knowledge production produced outside academia and the free and open sharing of knowledge reflects the debate found in the reviewed literature.

Regarding the influencing factors in teaching process of Wikipedia in Higher education, Meseguer-Artola, A., Aibar, E., Lladós, J., Minguillón, J. and Lerga, M. (2015) point out the main factors influencing the teaching uses of Wikipedia among faculty and the direct effects between them. They consider mainly two factors; one internal factor which affects internally to their Tam model (perceived ease of use of Wikipedia, perceived usefulness of Wikipedia, behavioral intention to use Wikipedia, and Wikipedia use behavior) and the other factor include six external factors (Job relevance, Sharing attitude, Social image, Profile 2.0, Quality of Wikipedia, and Perceived enjoyment). After checking the reliability and the validity of the research instrument they have estimated the model and they found that the theories that the perception of colleagues' opinion about Wikipedia and the perceived quality of the information in Wikipedia play a central role, are supported.

An empirical study on faculty perceptions and teaching practices of Wikipedia done by Lladós, J., Aibar, E., Lerga, M., Meseguer, A., & Minguillon, J. (2013, January) finds out that academic rank, teaching experience, age or gender, are not decisive factors in explaining the educational use of Wikipedia. Instead, the decision to use it is closely linked to the perception of Wikipedia's quality, the use of other collaborative learning tools, an active attitude towards web 2.0 applications, and connections with the professional nonacademic world.

Dooley (2010) notes that faculty's negative attitude towards Wikipedia is usually based on a perception of inaccuracy in its content and also on its potential for discouraging students from using other more reliable sources of information. Her survey - with 105 respondents- shows that only 7% use Wikipedia frequently for teaching or research tasks. In a similar vein, another study (Chen (2010) identifies credibility as university faculty's main concern on Wikipedia and highlights academic disciplines as a key factor in explaining attitudes towards Wikipedia. This study also shows that age

correlates with more negative views and that faculty who frequently use other online resources are more skeptical of Wikipedia

Allowing anyone to edit content is the philosophy of most wikis. Such approach does not ensure that the editor is a specialist in the topic and is well-meaning. Poor quality of the content and vandalism can be a major problem. Costa, C. J., Nhampossa, J. L., & Aparício, M. (2008, September) did a literature review on quality of information and criteria and examined a number wiki application seeking to understand the process of authorship being used in larger wiki sites, such as those run by the Wikimedia foundation, and present a conceptual model to enforce quality in wiki content. However it is important to keep the underlining principle and philosophy of wikis, of making it easy to edit and correct errors. They suggest a mid-way pragmatic balance between flexible and rigid approaches with the process rather than product orientation.

Wikipedia advocated a strict neutral point of view policy. When we compare the articles about famous persons, who are most influenced by the contribution done in their life may vary depending on different Wikipedia editions, as Wikipedia has different editions in different languages. The result of qualitative and quantitative content analyses reveal systematic differences related to the different cultures, histories and values in different languages. However the study by Callahan, E. S. and Herring, S. C. (2011) finds systematic differences related to the different culture, histories, and values of Poland and the United States in terms of quality and objectiveness of Wikipedia as a global repository of knowledge.

As we know we have lots of information around us, we are surrounded by information and we need to measure the quality of information so that it can be more productive. The research done on the measurability of information quality (Arazy, O. and Kopak, R. 2011) argue that differences in measurability stem from properties inherent to the quality dimension i.e. the availability of heuristics that make the assessment more tangible, as well as on assessors' reliance on these cues. They find that various conceptualizations of information quality have been proposed, and most frameworks concur that IQ is a high level construct that incorporates dimensions like accuracy and completeness. However, less attention has been given to the measurability of Information quality.

In summary, the above literature explains the importance of information in this era and for the availability of information, development in technology is a vital components. Technology is one of the prerequisites for development in this world. Literature also emphasize the organizations of data in Wikipedia, their availability, quality, popularity also their consistency. Some researchers point out the credibility of the Wikipedia information regarding the academic curriculum, and discovered that experts considered data entered in Wikipedia to be more credible than did non-experts. Some research finds out that 67 percent of the students who are doing academic research are using Wikipedia and the

reason behind this is the ability of Wikipedia being online to respond quickly and flexibly to new knowledge and to edit its entries in an immediate response time. The literature also explore the cautionary attitude toward Wikipedia in higher education, which revealed cynicism towards the Wikipedia and the issue of consistency of the Wikipedia pages. The research also raise a number of areas that need to be addressed by the higher education to achieve the maximum benefit from Wikipedia, and produce students able to operate professionally in the web 2.0 world, a world which is their contemporary reality.

# **CHAPTER THERE**

# 3. RESEARCH METHODOLOGY

# 3.1. RESEARCH DESIGN

This research aimes to address the significance of using Wikipedia as an educational tool in the higher secondary school in the Nepalese context. This research on use of Wikipedia in academic curriculum uses a qualitative approach, the qualitative approach is often used when trying to get a more complete understanding of a certain occurrence, and methods such as observation and interviews are normally used in this types of research (Creswell, 2004; Pickard, 2007).

The reason for selecting the qualitative approach is to find out somehow the most common views from the teachers and to find their suggestion to minimize the encountered problems that they are facing by the use of Wikipedia in academic courses in Nepalese higher secondary level Education System.

#### 3.2.RESEARCH STRATEGY

This research is based on data collection through the teachers regarding the use of Wikipedia pages in the curriculum, its various advantages and its disadvantages and the way of utilizing its information in a more effective and efficient way. The strategy to find the data is to providing the questionnaire to the secondary level teachers in Nepalese context. The research is done and the data from the teachers are collected within the Kathmandu valley; the capital of Nepal. The questionnaire that are submitted to the teachers focus on the different views of teachers regarding the Wikipedia in teaching.

The questions are of mixed type and require the respondents to fill out the form themselves, taking time in the "google form" where the form was created. It was provided to them through mail or simply by a link through social media.

# 3.3.AREA OF STUDY

The study focuses on the use of Wikipedia, the electronic encyclopedia, in the Nepalese secondary school context to investigate efficient and effective use of it during the teaching process. This is done in Kathmandu Valley in different schools with the total number of 14 secondary level teachers as respondents.

The study also includes another data collection process; which is collected by myself in regard of collecting the sample teaching materials in Wikipedia relating to topics that are taught in the secondary schools. I have collected ten different sample Wikipedia pages, and have interpreted those pages considering different factors like readability, reliability, biasness, conciseness, effectiveness, concurrency, etc.

#### 3.4.SAMPLING STRATEGY

This research contain two types of data collection. The first part is to collect data and information from the respondents who participate in the questionnaire that are submitted to them through "google form". The respondents are found through a "snowball sampling" strategy. I have one friend in Kathmandu valley and he is a teacher in secondary level school. I send him my online questions created in "Google Form" for data collection of my thesis and I told him to find other teachers or his colleague to participate in my online questionnaire and so on. This is what I have done in my thesis data collection.

The second part consists of a collection of relevant Wikipedia pages relating to the academic curriculum selected by myself. The selection of Wikipedia pages is done purposefully with some probability, which could exemplify the problems involved in using Wikipedia as a learning tool. We have lots of Wikipedia pages that are related to the teaching process. But I have chosen some of them purposefully with its historical, political, cultural and technological importance. The analysis strategy is totally dependent on myself as I am the one to evaluate, perceive, predict those collected sample Wikipedia pages and interpret the result.

# 3.5.METHOD OF DATA COLLECTION

Here I have collected the data in two phases; in the first phase data was collected through online survey questionnaire to the teachers in the Kathmandu valley secondary school relating to the use of Wikipedia's information in academic curriculum and the second phase consist of finding sample Wikipedia pages related to the secondary level education system, which is done by myself.

# 3.5.1. ONLINE QUESTIONNAIRE

Online questionnaire consists of both closed and open ended questions, which are documented in appendix 1. Open ended questions were used to capture the qualitative data. An online survey is a quick way of reaching respondents. It is suitable if the researcher does not have enough time to collect data manually.

The online survey questions are in English Language. The questionnaire was designed in "Google Form" and the questions are sent to different teachers in the Kathmandu Valley who are directly and indirectly related to the education system of Secondary Level Education. Some of the teachers are my own friends and they really helped me in data collection as well as to find other participants. The main reason to use "Google form" is to collect data because of its convenience and its effectiveness to create different types of questions like choices, free text, and others.

The questionnaire is distributed to the respondents with the link to the Google form through different social medium sites like Google and Facebook. I have also made an attempt to reach more participants by forwarding those questionnaires to the other teachers, requesting them to forward the link to their colleagues.

With regard to the data collection process I face that some are unwilling to tell the truth of what they are doing or facing. It has been necessary to convince them not to disclose the identity of the responders and finally it's possible to collect somehow the data for my thesis.

The questionnaire link was sent to the different teachers in the month of March and the link was open till August. Till August I have got only the 14 respondents, the main reason of having the few respondents is because of the devastating earthquake that happened in Kathmandu valley in April 25 2015.

The answers to the questions given by the respondents are shown in Appendix 2 where there is the mixed types of responses of how Wikipedia is used in academic courses.

#### 3.5.2. SAMPLE WIKIPEDIA PAGES

Here sample pages refers to the Wikipedia pages that are somehow related to the academic curriculum. It does mean that the information that student need or want can somehow be beneficial for their information goal. The pages are selected by myself by thinking about pages of importance. I have selected different pages on a wide range of themes, based on their importance for the Nepalese society taught in school curriculum relating to historical, geographical and other topics. Some pages of Wikipedia are listed below:

- http://en.wikipedia.org/wiki/Pashupati
- http://en.wikipedia.org/wiki/History of Kathmandu
- http://en.wikipedia.org/wiki/Java (programming language)
- http://en.wikipedia.org/wiki/Mount Everest
- http://en.wikipedia.org/wiki/Gautama Buddha
- http://en.wikipedia.org/wiki/Database design
- http://en.wikipedia.org/wiki/Semantic\_Web
- https://en.wikipedia.org/wiki/Prithvi\_Narayan\_Shah
- https://en.wikipedia.org/wiki/Shah\_dynasty
- https://en.wikipedia.org/wiki/Gyanendra\_of\_Nepal
- https://en.wikipedia.org/wiki/Dharahara
- https://en.wikipedia.org/wiki/Patan Durbar Square
- http://en.wikipedia.org/wiki/Nepalese royal massacre
- http://en.wikipedia.org/wiki/Kathmandu\_Durbar\_Square

Besides the above Wikipedia pages, teachers are using other pages that can also be used for finding the meaning of the specific words or for other purposes. I will talk about the different component features of the Wikipedia pages in chapter 4.

#### 3.6.RESEARCH LIMITATIONS

- The amount of data in this research is relatively low since there are only a 14 respondents and the view of all the teachers are not covered in this study who are directly linked to the secondary level education system of Nepal. So this may impact strongly on its outcomes.
- It focuses only on views and opinions of the teachers and myself to find out the expected outcomes.

# 3.7.CONFIDENTIALITY

Anonymity could not be guaranteed for respondents who take part on the online questionnaire. However, prior to the questionnaire the respondents were informed that their answers would be treated with confidentiality and they would remain anonymous in the transcripts and the thesis in general.

#### 3.8.ANLAYSING OF DATA

The aim of data analysis is to find the answer to the research question of the dependability of Wikipedia for academic knowledge: The frequency of knowledge and information usage, and its accuracy.

Data collected from the questionnaire and sample of pages are used to support and expand the views in the surveys. The transcripts of the questionnaire are the main source of data. The Wikipedia pages are analyzed with their interval of updating frequency of data, dependability, accuracy, completeness, biasness, etc.

In summary, all the data collected from sample Wikipedia pages was used to support and provide more insight into the survey (i.e. the questionnaire)

# **CHAPTER FOUR**

# 4. DATA ANALYSIS AND FINDINGS

In this chapter the analysis and the result of the data collected through two different methods are presented. The theme from questionnaire are illustrated in the data collection process, and will be elaborated briefly. Every respondent is aware of using Wikipedia for general Information rather than broad information. About three fourths of the respondents are using Wikipedia on teaching process directly or indirectly. Sites are frequently organized and updated, this can be seen on several pages on Wikipedia. Due to the devastated earthquake happened last month many pages are updated, especially the historic places pages. There are plenty of references in the Wikipedia pages for the facts of the information.

# 4.1.RESPONDENTS BACKGROUND

The total number of respondents in this survey is 14 and they share the same professional background and they are recognized as the secondary level teachers in Kathmandu valley of Nepal, in different Schools. This number is the number of respondents who give their precise experiences and views in my research thesis questionnaire. Actually the number that I had send the questionnaire is around hundred but due to some technical difficulty for some and because of devastated earthquake that happened in April 25 the participants are less in number. Here the total number of valid responses is the total number of respondents.

The respondents were asked to identify their status and their subject of expertise at first, but they feel it completely odd to respond to this, and so they do not respond at all. Only after I convinced them not to disclose their identity they were willing to respond to provide their views.

# 4.1.1. RESPONDENTS SUMMARY

Here the respondent's summary refers to the overall result of the response of the data provided by the teachers who took part in the questionnaire survey. Since these data are collected with qualitative approach the collected data are not easily reduced to numbers and the data are related to concepts, opinions, values and behaviours of respondents in social context. Collected data are of text and some figures. I have focused on different components like their experience on using Wikipedia in education, their opinion, feelings and knowledge in the questionnaire. And they provide different types of feelings and opinion.

So for analyzing it the range of processes and procedures must be followed from qualitative data to some form of explanation, understanding or interpretation of the people and situation. Actually the analysis is based on interpretative philosophy to examine the meaningful and symbolic content of collected data.

So, here I have used the content data analysis technique to analysis the collected data. Content analysis is the procedure for the categorization of verbal or behavioural data for the purpose of classification, summarization and tabulation. The total transcript of the collected data are given in Appendix 2. The content data analysis follows two levels.

# 4.1.1.1.DESCRIPTIVE DATA ANALYSIS

The data collected is simply the responses provided by the respondents. They are quite aware of using Wikipedia data for educational purpose, most of them use and advice to use it for simple information like finding meanings of unknown topics. Most of the teachers use Wikipedia in teaching process, some uses wiki for preparing their teaching material, and some are quite unfamiliar about the use of it and they only use the traditional teaching process. But everyone agreed on the point that using Wikipedia in teaching can help the student gaining some ideas and knowledge to solve their curriculum difficulty.

On the other side, they are quite aware of the misleading of wrong information that may affect to the user of the Wikipedia either for academic or for other purposes. Some says that the information is searched superficially, while other point out that the information is timely updated and it needs to be updated frequently.

Wikipedia is an ocean depth of knowledge where if you want to learn something then the information and knowledge you receive is infinity; this is the thought of some respondents. And every one are quite aware of implementing its data positively to get know of something in research and scientific material quickly, which is difficult for students to know from their text books because the books materials are printed several years back and then new inventions and new facts cannot be up to date in hard copies, it is a time consuming process to change the books when the new facts are discovered.

Some point out Wikipedia as a search engine like the other search engines in the market (Google, Yahoo, Bing, etc.) but other point to Wikipedia as an encyclopedia where information can be found within its own database.

Most of the respondents focuses on the information bias, that it is controversial and not often timely updated. In spite of being positive about bias and controversial, teachers are suggesting to the students for the simple search in some specific topics to find the meanings.

The data that are collected from the respondents; who are teachers in different educational institutions are given below in different geometric figures relating to the different questions they are asked.

Do you use Wikipedia in the teaching process?

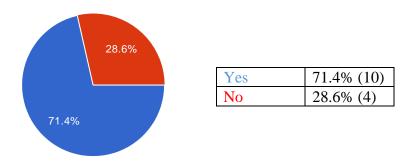


Fig 1: pie chart of respondents regarding using Wikipedia in teaching process.

When the teachers are asked about the use of Wikipedia in the teaching process, then 10 respondents give their answers as yes, which is 71 % and the remaining 4 teachers told that they are not using Wikipedia in teaching process, the number of teachers who does not use Wikipedia in teaching process is around 29%. Which clearly shows that around three fourths (3/4) of teachers are using Wikipedia in teaching process.

Do you think it is really useful for students to gain some ideas in some topics in their academic courses?

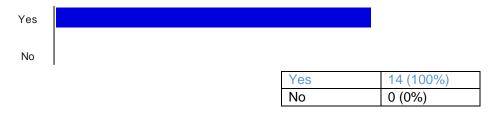


Fig 2: Bar Graph regarding to gain idea in academic courses.

All the teachers who are participated in the online questionnaire give the same view regarding the usefulness of Wikipedia for the students to gain some ideas in some topics related to their academic courses. Where, all the teachers give the same answers and they give yes for this question. This clearly justify according to teachers that, Wikipedia is useful for the students to gain some ideas in some topics in their academic courses.

Did you find any incompleteness in information provided by Wikipedia in the topic relating to academic?

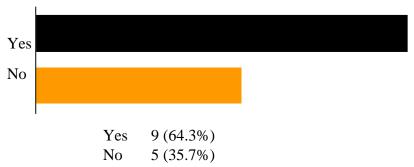


Fig 3: Bar Graph regarding incompleteness of Wikipedia in teacher view.

When the teachers are asked regarding the completeness of information that Wikipedia provided in the topic related to academic curriculum, then they give the mixed responses consisting "yes" and "No". The number of teacher feeling incomplete information are 9 which is around 64%. And the number of teachers who think that the information provided by Wikipedia is complete in the topic relating to academic curriculum are 5, which is around 36%. This figure shows that around two third of teachers find incompleteness in information provided by Wikipedia in the topic relating to the academic curriculum.

# What you use Wikipedia for?

When the teachers are asked about the use of Wikipedia, then almost all the teachers give their opinion that they use it for general and preliminary information on some topic. But some teachers also point out the in-depth information in their teaching process, research, knowledge about sports, and also for historically important topics. Where some use Wikipedia for learning. Some search for new things when they are in confusion, search for definition of words and synonyms. And some teachers asked the students to search in Wikipedia for assistance on new technical topics.

### How you use in teaching process?

When the teachers are asked about the use of Wikipedia in the teaching process then some teachers replied that they don't know how they use it, and some say that they use some relevant official sites but they did not clearly explain how they use those sites, in which way they use them. Here the teachers are giving the answers regarding why you use in teaching process? Rather than how you use in teaching process? Without any justification or examples. But the one thing common in them

is that they use and refer the student to use Wikipedia if they face some problems during their project or for definitions or for the latest information on invention which is not in the textbook.

*In what ways do you thing that Wikipedia will help the student?* 

Some teachers point out only the general information, not the deep information which creates burden to them, as Wikipedia contains vast amounts of information. Some says that "is a doorway for students to the global and up-to-date information. Which is useful to get help for their homework, exercise etc." It can be used in learning, some says. Some teachers says that "Wikipedia encourage them to keep them searching as it make them clear when they are in confusion in defining terms."

# Should students totally depend on it? Why? Why not?

Almost all teachers are aware of dependability in Wikipedia. They all have the common view of not depending on in totally only to gain some ideas in subject matter. Some responders point out the authentic references, and the information in Wikipedia pages may lead the student to the wrong direction. Others point out that most of the information is not relevant for academic purposes. Only one responders thinks that Wikipedia has large amount of information processed by different experts of different field so the student can depend on it. But he truly does not recommend to be totally or blindly dependent on it. So in this perspective all the teachers are quite aware of the dangers of dependability on Wikipedia by the students.

What do you think about the completeness of the information in the Wikipedia pages?

A vast source of information in the same site is a great characteristic of Wikipedia pages. They contain the information from history to theory, they further contain reading and references, so some respondents think that the Wikipedia pages are complete. Some respondents think the pages of topics related to underdeveloped countries are incomplete, that for example the pages of culture, regions and other local important facts are incomplete. They think that those pages contains very few information. Some point out that "anything in this world either knowledge or anything else is incomplete so in Wikipedia there is also incompleteness", some say the information on the pages are fairly ok, and some say that "we don't need to expect all information in Wikipedia, to find complete information we need to consult to the subject matter experts and their findings rather than taking information from Wikipedia".

What you prefer to students to use other than Wikipedia for academic resources?

Here, different respondents have different preferences; some refer to Google scholar for research material rather than Wikipedia. Some refer to the college library for scientific journals. Some refer to reliable sites like Springer Link, J-store etc., some refer to YouTube for video tutorials for their academic curriculum. Some refer to the Google, Yahoo, and Bing search engines, and some refer to the use of an online dictionary as alternatives to Wikipedia.

Do you think that the information in the Wikipedia are updated, revised, corrected with time?

Among 14 respondents 5 think that the Wikipedia pages are not updated, revised and corrected with the time but the rest (9 teachers) think Wikipedia pages are updated. Some think that the Wikipedia pages are trying their best to update frequently, some think that as Wikipedia is community based and anyone can update, revise or correct, the pages are often updated. Some says that the hotly debated topic pages are up-to-date and are revised by adding various new references for their authenticity.

What you think about the risk of using those materials without proper investigating the perfect match of information related to the academic courses?

Regarding the risk of using materials without proper investigating the perfect match of information related to the academic courses all the respondents are on the same side. They are quite aware of the risk that leads to false knowledge; that the use of Wikipedia may mislead in information, cause misconceptions and may lead to plagiarism. Some refer to the knowledge deficiency. False information can victimize the readers so alternative sources need to be consulted. Some teachers says that false information can spoil students work. Some point out the problem in taking citation to use that information in research papers. Some think that the Wikipedia pages are wrongly interpreted, which is a possible threat and risk for the student as well as the readers and which creates wrong understanding regarding the topic.

# 4.1.1.2.INTERPRETATIVE DATA ANALYSIS

While interpreting the data that I collected form the questionnaire I would just say that the teachers are serious with regard to the educational qualification of the student and want to guide the students to acquire knowledge through study of information of Wikipedia pages in case of some difficulties, but at the same time they explain to them not to fully depend on it as it may contain some unstructured

and unnecessary materials which will be a burden for them and may be unnecessary for the examination point of view, but they never discourage student to use it for the wider concept on some topics

The teachers are all positive towards using Wikipedia in an academic curriculum it. But they are hesitant about its consequences, which may affect the students by not finding the right information related to the curriculum. This can be easily remedy through guiding/helping the students to find the required information.

# 4.2.EVALUATION OF SOME WIKIPEDIA PAGES

As I have mentioned earlier, this examination of relevant pages are based on pages that are selected by myself keeping in mind that these Wikipedia pages should be helpful in an academic curriculum, to help the students to meet their goal of finding information. So I have collected different Wikipedia pages relating to different aspects of social and cultural values like the cultural heritage, and the facts about something like the mountains, facts of historical importance like Buddhism, and the facts of some of the most popular tourist sites like the Dharahara; which is totally destroyed by the devastated earthquake. The motivation for including the Wikipedia page of Dharahara is to investigate the effectiveness of Wikipedia pages from different perspectives, and for the students to know the history of it through the information provided in Wikipedia. And I will focus on several features of Wikipedia with the Dharahara Wikipedia page. I will briefly explain its effectiveness and efficiency.

As an instance, I will target the Wikipedia page of "**Dharahara**" to analyze each and every characteristic of Wikipedia.

Starting with the page about Dharahara, which is the most historical pillar of the Nepalese society, and which looks like as follows:

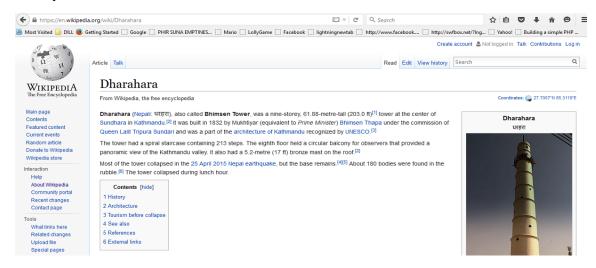


Fig 4: Dharahara (source: Wikipidia.org/wiki/Dharahara)

The above fig illustrate the Wikipedia page of Dharahara, which is also a subject in the Nepalese secondary level education system within social studies. Social studies are the subjects that deals with the sites of historical importance, cultural heritage, traditions of the way of living for people of Nepal, as well as all the information relating to the Nepal's historical importance facts as well as modern development facts, to present the country's development path to the students.

# 4.2.1. EDITOR PERSPECTIVE

Describing something more specifically and more accurately we have to use different factors (Atkinson, Rita, L; 2000) so here also I am going to describe the importance of Wikipedia and its legitimacy within this factors to make them more responsible with respect to the page of "Dharahara".

The editor perspective refers to the character or the behaviours of the editor who is editing the Wikipedia pages for the benefit of the user, to gain some ideas and knowledge. The following factors are related to the legitimacy of the Wikipedia pages for the editors to make the pages more reliable and updated.

#### **4.2.1.1.OPENNESS**

Here openness in Wikipedia refer to the use of Wikipedia with no restriction at all to all the users who wants to access the information. Openness reflects the degree of intellectual curiosity, creativity and a preference for novelty. And the extent to which it is imaginative or independent and depicts a personal preference for a variety of activities over a strict routine. I am talking about this because in Wikipedia the content can be edited and updated by any user and they need this characteristics as high openness can be perceived as unpredictable and unfocused and low openness users are concerned with practical matters and urged to action through moral pressure of data; appealing to a person's moral sense, finding himself under pressure to complete the task as soon as possible. Sometimes perceived to be dogmatic and closed-minded. So a balance between this openness in user may create information that is more accurate and more liable to reflect the actual information.

In my example of Wikipedia page above, it is totally open to the all the users who want to use this page and can get the things they want but the descriptive history is not complete enough as in text book; here we need to click on several links to obtain more vivid information, and this can make the users lost.

## 4.2.1.2.CONSISITENCY

Is the information provided consistent on Wikipedia? This deals with the criteria, where the facts shown or stated are agreed accordingly. It is the sate or quality of holding or sticking facts together and retaining its shape in more smoothly and organized way to make complex information in a more uniform way of data organization.

As we can see the consistency of information relating to the wiki page of Dharahara. It is structured as a history of its origination to its destruction in latest earthquake happened last April. Consistency of information relating to the Dharahara Wikipedia page is described in evaluation of Wikipedia pages by user perspective.

# 4.2.1.3.EXTRAVERSION

Here extraversion in Wikipedia pages refers to the manifestation of outgoing, talkative, energetic behaviours of different editors, regarding information in Wikipedia pages. I.e. the process of making discussions timely on some information in Wikipedia pages which leads to the main concept of information that actually needs to be presented. The page taken by me as sample has also different conversation and discussion within it to make the information more accurate and more reliable. This can be seen in figure 2 below:



Fig 5: Edited History after Discussion of Dharahara

In the above figure we can clearly see that the latest update was made on April 27 2015, after 2 days of the devastating earthquake that collapsed Dharahara. And there you can see some talk link to discuss about the specific information if you have different opinion and facts.

# 4.2.1.4.AGREEABLENESS

Agreeableness in this context is the personality trait manifesting itself in individual behavioural characteristics that are perceived as kind, sympathetic, cooperative, warm and considerate in the common issues on data related content in pages with a cooperation between the users who edit the pages. And discussion on some topics in Wikipedia pages by editors reach to the final solution, so the editors can feel the information as their own. We can see different users argue on some facts in different pages but not everywhere. The facts are always the facts whether someone believe or not.

#### 4.2.1.5.NEUROTICISM

The tendency to experience negative emotions, such as anger, anxiety, or depression (Jeronimus, B.F. 2014). If some pages on the Wikipedia don't publish the right information that people recognize as the facts about their own tradition and cultural belongings then they will certainly feel neuroticism about that information and they will be negative to Wikipedia. With regard to my sample page regarding this issues is quite clear but we have others pages like the pages that get involved in interfering of nationalism and factsim of different social and cultural belief and facts which is worldwide renowned, like the page of Buddha and its Birthplace which was previously misinterpreted and misguided to the users about the facts.

#### 4.2.2. USERS PERSPECTIVE

Keeping in mind that Wikipedia is a non-profit organization working to provide data and information free of cost to the users, this has different advantages and disadvantages and everything in this universe has two sides. To make Wikipedia pages more accurate over time, the pages need to do a lot to increase their trustworthiness for the user.

Everyone are well aware of the information that they are seeking and can be distracted from their aim during search, if they cannot find within a short time with accuracy and conformity.

Some criteria from user perspective on sample Wikipedia pages are described below. User refers to all the people who uses Wikipedia for academic search or for other purposes.

#### 4.2.2.1.HOW OFTEN THEY ARE UPDATED?

Regarding update; everything is in this universe is in a state of progression. It does not mean that every fact needs to be updated. Facts about things such as historical places needs to be documented without any update, but the discoveries done through research regarding historical places or the facts of ancient civilizations always needs to have appended any new information to make those presentations more informative and take care of the right of every one to know the factual information. In this sense, editing of information is a prerequisite over time.

Here in the sample Wikipedia page, There has been some edited in information with respect to time, as we have already discussed regarding "Dharahara" where we can see some updates done in October 2 2015 at 06:45. This is the result of the devastating earthquake which happened on April 25 this year, and because of which Dharahara was completely destroyed. Looking to the Gautam Buddha page we can find that the content is updated at 17 Nov 2015. Which shows it update not only once but is update twice on this date in an interval of an hour. This page is updated more than twice in every days. This shows that this page is highly important and it is related with the religious beliefs and values of the people associated with Buddhism. The history of it updates is shown in the following figure:



Fig 6: Edit History of Gautam Buddha

The above figure shows the frequency of update in the Buddha Wikipedia page. It shows that it has a particularly high update frequency.

If we go to a Wikipedia page of historical importance which is also a part of the curriculum in secondary level education: "Kathmandu Durbar Square"; this page is also updated after the earthquake, with October 27 as the latest edit date. It has been updated several times after earthquake till October 27 with lots of discussion and

talks. This also shows that the pages are updated frequently. This is also one of the places which has been badly destroyed by the earthquake.

Similarly, Pashupati is one of the sites of religious importance. This denotes an incarnation of Hindu lord Shiva as "lord of animals". The Wikipedia page for this site has also been updated frequently and this was updated at 30 September 2015. This also shows that this site is in the process of updates if there is new things that needs to be included in Wikipedia pages. The updates are done for the correction of information and adding some information purified by the discussion with competing points of view.

However, talking about the greatest mountain in the world "the mount Everest" which is also called "Sagarmatha" in a Nepali language, this page shows the consistency, bravery, and boldness of people of Nepal. Talking about this site in Wikipedia, this is also updated lately on 15 November 2015. This shows that the sites on Wikipedia pages are frequently updated. And because of this page importance it is semi protected from editing.

Whereas, when we talk about the Nepalese royal family, we the general people believe in different perspective and different views. But no one knows the facts and till now the facts is not been publicized. Regarding the Nepalese royal massacre, the Wikipedia pages presents the information that the Nepalese government give them to published, as well as the views of the normal people. This shows its updating status giving right to every views of massacre and it was updated last on 24 October 2015.

These types of pages of historical and religious importance are frequently changed with time if something new is obtained. But when we talk about another Wikipedia sites like "database design" then it has less updates. It is the fact that everyone should know like the universal truth "life is always for ending". But each and every day new research claims new facts and new truths. So the Wikipedia pages needs to be updated frequently and here in the case of Wikipedia page "database design", It has lately updated on November 12 2015.which shows it's update status.

In conclusion, it is clear that every Wikipedia pages that I have investigated are updated frequently. When something new happened than the user can update and it will be validated later through different discussion and talks.

# 4.2.2.2.FULL OR RELEVANT INFORMATION

We know that no one in this universe knows the information fully, we believe that god knows everything but not man and its creation. But when we look towards the relevant information that we need to know, what type of information is relevant for us or for the students to rely or stick with on? Is that information helpful for the student or not? The above questions creates trouble for students to have the

information that they need and to understand the information. But to some extent we can minimized the impact, by only gaining or perceiving information of more specific topics.

Wikipedia pages are full of information but all the information is not related to the curriculum. For example when we talk about the information contained in the Wikipedia page of Mount Everest then the secondary level student does not need all the information in the Wikipedia pages, they just need only a few facts regarding Mount Everest. Which shows that the students can get full information that they need. But this information must be relevant to the text book.

Relevant information in Wikipedia must obtained just by reading it superficially or reading through skimming technique. If the students read all the information in Wikipedia page then the exact information they want to search may disappear. So to find the exact information they want they need to use some certain technique like skimming and scanning the text while reading this information.

# 4.2.2.3.CONSISTENCY AND FREQUENCY OF INFORMATION WITHIN THE PAGES

Here frequency of information refers to the information repetition or the information consistency within the Wikipedia pages. Consistent information represent the sticking of the factual information provided earlier in the page to the rest of the page. But here in the case of sample Wikipedia page of "Gautam Buddha" there is not the consistency of information. It something like an ambiguity. Which is clearly seen in the figure below. It says "in present-day Nepal to be the birthplace of the Buddha. Kapilvastu". And later it says that "the exact site of ancient Kapilvastu is unknown" what is the reason behind it? Yes we the Nepalese people know that the birthplace of Buddha was in Nepal and in Kapilvastu and it lies in Nepal at that time also. But now a days India is claiming that Buddha was born in Nepal. Even the prime minister of India speaks wrong about the birthplace of Buddha. As this is the historic politic issues. Indian are willing to renowned as the birthplace of Buddha. India wants to publish the birthplace of Gautam Buddha as "Bodhgaya" which is in fact a place of India where Buddha did meditation and got enlightened with knowledge. .And want to disrespect the sovereignty of the Nepal.

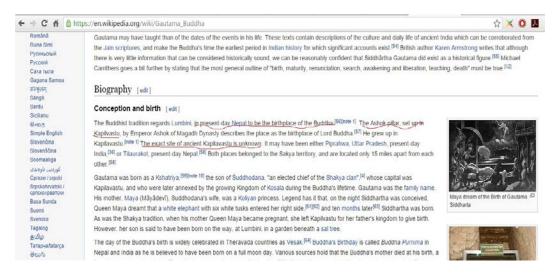


Fig 7: inconsistent information regarding Buddha Birthplace

This is the most discussed page in the Wikipedia among the investigated sample of Wikipedia pages and is the most controversial one. The controversial lumbini is also built by the Indian government in "Uttar Pradesh"; a place in India, to make this issue more controversial. They are teaching their students that the birth place of Buddha was in India. So when you ask about the birthplace of Buddha to the Indian students they will probably give India as an answer, but the gist information in Wikipedia page is correct. If this type of materials is taught in school, the students are misguided and it can detrimental to their curriculum.

Regarding whether the other sample Wikipedia pages are useful and might be taught to the student in the curriculum, I found that they are really useful. In the sense that every page starts with some brief introduction of the topic. And then the contents, the importance of their contribution if the pages is related to the person; their honors and the notes and references if there are any. This is a universal standards and can help the students identify and grab the information without reading all. They can search for the title looking for and grab the information they want. But they need to use skimming technique to find the required information.

# 4.2.2.4. Fact Information/Reliability

Fact and reliability are the two components of information which are necessary for its effectiveness. True information refers to the fact on which we can depend fully and can rely on as true information. And factual information leads the students and the people to increase and expand their knowledge so that they can compete in this world more effectively.

Here in the sample Wikipedia pages there are lots of factual information that are discovered till now but one page relating to the Buddha does not contain enough facts regarding its birthplace. But the rest are facts as far as we know now.

Sometimes factual information is treated as wrong and the wrong information is treated as facts or true information. In the ancient era the people used to believe that the sun rotate around the earth which is true at that time but now science and the research discover the truth and the factual information regarding the rotation and the revolution of planets. Which results in amendment or editing in the paper to include anything new found in research topics? At an instance, regarding the Nepalese royal massacre, we are given the information that the massacre is done by the then crown prince Dipendra, but some believe in rumours that is done by the Indian intelligence agency RAW or the American CIA and for promoting this massacre "Gyanendra"; Brother of king Birendra, had a hand. There are lots of evidence and places that points to Gyanendra for this massacre happening, as his family members are the only ones who survived in this massacre. God knows what had happened at that very night. Until the truth come out we are forced to believe the official investigation report. Nepalese people are waiting for its facts.

Reliability is the thing that we have to believe in information because we don't know whether the information is right or wrong just by reading once. Often students who are totally reliable to the teacher's notes may get lower grade than those who do their research on some subject's curriculum which are important in the exam. In my opinion students should be provide with different materials so that they can extract the information they need to gain knowledge. The Wikipedia pages listed above are the examples of pages in which they can get more information and materials to supplement their textbook and they can be benefit from this.

In summary, analyzing the different sample Wikipedia pages it is clearly seen that the Wikipedia pages are up to date and we can rely on the information included in the text. The pages include lots of discussion and revisions of the information which ensures a greater probability of information accuracy. It is totally dependent upon the students to grab the information in a correct way. As we know that Wikipedia is an encyclopedia containing lots of information on specific topics and it is the job of the users to grab those information what they really need by using some technique like scanning and skimming the text.

# **CHAPTER FIVE**

# 5. CONCLUSION AND DISCUSSION

This chapter contains the conclusion and discussion part of my thesis; supplementing with the facts that are collected form the survey of my questionnaire and sample relevant Wikipedia pages.

#### 5.1.CONCLUSION

Wikipedia; a free-access, free-content internet encyclopedia where those who can access the site can edit most of its articles. Do we totally or blindly depend on its information, or should we use some skimming technique to obtain the exact information or the knowledge, or should we totally ignore the information on the Wikipedia pages. These types of perception of using Wikipedia in curriculum is going to answer by this thesis and the data that are drawn from the respondents.

More relevant and the most precise information to some extent can be found in Wikipedia pages and they are useful for students according to the respondents, they only fair the misconception or the misinterpretation of the data, and the huge amount of data may make the students divert for their target goal of information seeking. But some respondents are of a quite traditional type and they don't want to use Wikipedia in the teaching process. Ten respondents out of fourteen are using Wikipedia in teaching process, the rest are do not.

When asked for the implementation of Wikipedia in academic courses they just give the general opinion, not specific examples to illustrate their facts. All of the respondents thinks that the use of Wikipedia in academic courses can help the students to gain some ideas in some topics. Where only five of the respondents finds an incompleteness in the information provided in Wikipedia relating to academic courses, the remaining 9 thinks that the information provided in Wikipedia is complete.

In conclusion, the majority of the respondent thinks that the use of Wikipedia in education curriculum system can make the student more informed and more knowledgeable. The information that is already on the textbooks or the information that they can find in Wikipedia in a broader context full of sources both leads to their academic betterment.

#### 5.2.DISCUSSION

In academic curriculum in secondary level education system in Nepalese context, Wikipedia has advantages as well as disadvantages in the student's life. I have done this research with the aim of investigating the use of Wikipedia in academic curriculum to provide some positive affects in education of students and to make and maintain the academic standards of curriculum, so that the student can gain the knowledge of the text-

book, as well as the vivid view of the latest information of the world. It does not only mean using the Wikipedia for the same content of the textbook but it should be for the latest research and inventions, the latest journals of invention and research can be taught like the textbook so that the students can know the latest things happening in today's world in their childhood period which I think will be suitable to make their own interest path to reach their aim.

I have been able to collect only 14 responses, which is a smaller number than desireable even for qualitative methods of analysis, but my target of reaching a higher number of respondent could not be accomplished, which is one of the shortfall of my expectation. But I have got different view as results of different minds form professional teachers, and I am happy to get these results. Regarding the validity of the research design, I am satisfied that I have got responses with different opinion supporting Wikipedia besides some doubt of using it in academic curriculum of some factual information related issues.

The result shown in this research clearly explains the importance of using electronic data in student' life, the information are updated electronically and to access these information the users should have the electronic devices like the computer, mobiles, etc. The result obtained from different perspective of Wikipedia regarding frequency of data, availability, consistency and openness, etc. motivates the users or the students to use it for their updated and latest information standard in their curriculum.

One cannot depend on something fully whether it is for data or for something else, because this may harm you in the course of time. So do search whatever you search for in but in limited amount so that you will be knowledgeable and refreshed else you will be bored.

The following are some of the key **findings** relating to the objectives of the study:

In analyzing the common needs encountered by the different teachers to make their students more informed and more knowledgeable, the study results clearly point out that Wikipedia can be useful for findings general type of information about somethings that is related to the curriculum or somethings else which makes the students more updated in the latest inventions and research done.

The respondents explores the need of validity of information originated from the authenticated source, so that the information will be used for academic curriculum and this findings may help Wikipedia for its effectiveness in educational organization.

A range of expectation with the Wikipedia were identified and these included the users behaviours in searching data, here the expectations of users refers to information that is unbiased, updated, consistent, and the most important feature is the citation.

After conducting the online questionnaire and sapling relevant pages, when analyzing the result from both method it come to the findings that there is increasing in the number of people using Wikipedia page in academic curriculum not just only for some common definition search..

However, the following suggestions were made by the respondents as ways of encouraging their use, thus improving the use of Wikipedia for academic curriculum:

- Making better Wikipedia pages in a more structured way according to the text book.
- Giving the specific information with authentic source
- Not giving every one the authority to edit.
- Providing the information with full of evidence and sources like the pictures and the videos.
- Attractive layout
- Up to date link to the content
- And of course it does need the marketing for implementing it in academic curriculum and make pages according to the curriculum requirements.

### 5.2.1. LIMITATIONS

Everything has its limit and this is not an exception, the limitations are illustrated below:

- The very first thing is the scarcity of the related literature as I could not find any one of the previous literature that can guide me through this research in secondary education curriculum.
- The small number of respondents that is used in this research, small number of respondent only provide small data and sampling small data does not provide more accurate and effective solution.
- Problem provided by the devastating earthquake for data collection form the respondents, since my research is based on education system of Kathmandu valley where in 25 April the devastating earthquake destroyed the buildings in the Kathmandu as well as nearby location and because of this respondents are not focusing on the questionnaire as they are physically and mentally disturbed of the situation. But because of this my research finds the updates of some Wikipedia pages destroyed by earthquake.

## **5.2.2. RECOMMENDATIONS**

This research is on using Wikipedia in the academic curriculum in secondary level education system in Nepalese context. And this research only accumulate the views, opinion, thinking, experiences and actions of different schools teachers. So there may be further research need to be done including different teachers, students, school staffs, general people, etc. in Higher, university level education system.

So I would like to give suggestions for other researchers to research on Wikipedia as a tool to empower the knowledge of information, as I think knowledge is knowledge

whether it is granted from text book or from internet like Wikipedia or from the teachers (modern or traditional teaching practice) which lighten the knowledge of human heart for the betterment of living standard and innovations.

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# APPENDIX 1

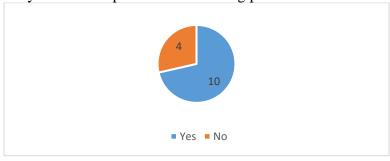
2. Do	you use Wikipedia in the teaching process? *
Mark	only one.
	Yes
	No
3. Hov	w you use in teaching process? *
4. In v	what ways do you think that it will help the students? *
5. Do	you think it is really useful for students to gain some ideas in some topics in
acade	mic courses?
	only one.
	Yes No
	you find any incompleteness in information provided by Wikipedia in the tog to academic?
	only one.
	Yes
	No
7. Sho	ould students totally depend on it? Why? *
0 111	at do you think about the completeness of the information in the Wikipedia

10. Do you think that the information In the Wikipedia are updated, revised, correct with the time? $^{\ast}$	
11. What you think about the risk of using those materials without proper investigating the perfect match of information related to the academic courses? *	

### **APPENDIX 2**

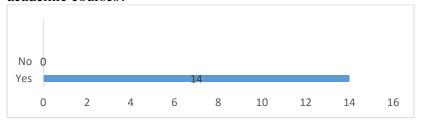
- 1. What you use Wikipedia for?
  - for general information
  - Searching for information
  - For getting information
  - All purposes such as teaching, research, knowledge about sports, historical prospective, knowledge to unknown topics as well.
  - Learn
  - Information
  - I usually use to Wikipedia for looking new things while I am in confuse during the task.
  - I use Wikipedia to find out proper meaning of the specific things. Sometime I use it to find out the definition of words, synonyms and antonyms as well.
  - During my research and also the teaching.
  - I needs Wikipedia when i need to search what I don't know instantly.
  - To find the meaning of some words that are unknown for me
  - In fact, I had rarely used Wikipedia for teaching indirectly. Indirectly in the sense that I asked my students to search about some new technical topic and take assistance of online site like Wikipedia.
  - Preliminary information
  - To gather knowledge and information.

2. Do you use Wikipedia in the teaching process?

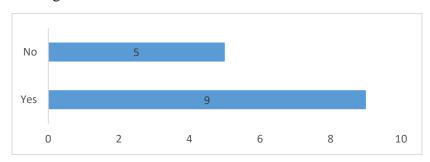


- 3. How you use in teaching process?
  - I don't know
  - Some relevant sites official site for the teaching process
  - Finding Fact information.
  - No
  - I collect information for teaching content
  - I go through its website to give general idea to the student when I am in trouble of defining some terms.
  - To search some examples to get more information about the subject.
  - If I got some new words and do not know more about it and should have to describe for the student.

- I refer Wikipedia to find the relevant materials and references in teaching process. If the students want to learn more things which they do not find in the books then I prefer them to use Wikipedia.
- I give links of Wikipedia to students Wikipedia gives some direction to different authentic sources
- To understand and let the students understand about certain things
- as a source for preliminary information about the selected area or subjects
- I asked student to use it to research about the technological matters and prepare project report.
- Normally, I did not use Wikipedia while teaching time but I supposed to student to see it and learn about it.
- 4. In what ways do you think that it will help the students?
  - It can help to the students for the general information. I think students shouldn't go deeply in this page
  - Gives a doorway for students to the global and up-to-date information Students can get help for their homework, exercises etc.
  - May be it can help student to work out themselves.
  - From my point of view, I hope it helps the students in the different ways.
  - it will help students in learning
  - No
  - Wikipedia is the ocean of knowledge. provides them general as well as specific knowledge regardless to the field makes them clear when they are in confusion in defining terms encourage them to keep them searching
  - It is a large store of knowledge which can help to all.
  - Students can do the same, can gather information.
  - Of course it will help the student understand the meaning and finally the meaning of the sentence or the paragraphs.
  - It helps students in gathering information about any subject matter.
  - In many cases this gives the basic idea about the subject matter.
  - They can elaborate their range of knowledge and understandings.
  - Student can find a lot of study materials rather than books. They can get many ideas in their academic courses.
- 5. Do you think it is really useful for students to gain some ideas in some topics in their academic courses?



6. Did you find any incompleteness in information provided by Wikipedia in the topics relating to academic?



- 7. Should students totally depend on it? Why?
  - No. Absolutely not. They should use other source of information as well.
  - No, it will not help them in long term.
  - Because of student can find anything on it.
  - No, because horizon of knowledge should not be determined by any entity, should that be Wikipedia or any else.
  - No, because of its academic authenticity
  - No. The information on Wikipedia are updated by independent users. These information may not have authentic references. Depending on these information solely can misguide the students.
  - No. most of the information in Wikipedia are not relevant for academic purposes.
  - No. It's a just general information rather than pure scientific.
  - No, students do not depend on it, according to philosopher Plato students are that things whatever they want they have to use their mind there.
  - No, students should not totally depend on it because the information provided in it may
    not be up to date so that students may miss the important information's required for
    them.
  - No they should try to get the alternative meaning from the dictionary as well as other sources and should not depends on Wikipedia because sometime the meaning may not be clear from it as well.
  - Not totally because there is not enough info in wiki necessarily.
  - No. The information provided over Wikipedia is not fully relevant
  - Yes they can, because Wikipedia has large amount of information processed by different experts of different field.

- 8. What do you think about the completeness of the information in the Wikipedia pages?
  - A vast source of information in same site is a great properties of Wikipedia pages. They
    contain the information from the history to theory. They also contain further readings
    and some references as well. Which is a kind of completeness of the information in the
    pages.
  - Some of the pages are incomplete especially when it comes to topics related to underdeveloped countries. As very few would enter data about its culture, or regions hence leading to no or very few information.
  - I think the completeness of the knowledge is not complete itself so that the information in the Wikipedia pages also may not have completeness.
  - It's good.
  - It's good for preliminary information.
  - Sometimes they are in completes so refer to other sources.
  - I don't know.
  - After all, it is administered and managed by volunteers across the globe, they are doing their best. However, they cannot be the ultimate knowledge depository.
  - completeness refers to the details regarding to field contextual meaning, scopes, structure, history, users, authors, references, implications, limitation.....etc.
  - The explanation is broad and general. Should be more specific
  - I don't think the Wikipedia information is complete
  - Satisfied result.
  - I have used only the basic source of knowledge and I don't expect all the information in Wikipedia. In my opinion the people who need a complete information must consult to the subject matter experts and their findings rather than taking information from Wikipedia.
  - its good
- 9. What you prefer to students to use other than Wikipedia for academic resources?
  - I prefer to students to use it while in difficult position.
  - I don't know.
  - google scholar
  - Scientific literature.
  - some official sites also some research paper/journal articles
  - Anyone but it should be reliable E.g. Springer. Link, J store etc.
  - i prefer to use Wikipedia for academic resources.
  - Authentic websites on any topic from authentic entity (organizations).
  - Different educational websites maintained by the schools, colleges and universities also contain major source of academic resources. These places has also provided the links to different research articles which can be obtained from scholar.google.com.
  - I have no idea about this sir. But however I believe students would google anything they want and go to the most popular link which may or may not be Wikipedia.

- I prefer students to use YouTube for the video purpose.
- Use the selected website for the subject matter.
- Google.
- There are other sources such as dictionary, online dictionary and other internet sources as alternative to Wikipedia.
- 10. Do you think that the information In the Wikipedia are updated, revised, corrected with the time?
  - Yes they are updated, accurate and correct.
  - Yes, I do.
  - I think, the information are updating
  - trying its best
  - yes
  - No they are not.
  - No!
  - Yes but not often.
  - Nope
  - I think so as it community based and anyone can update, revise or correct the information presented.
  - I don't think so because i do find the controversial materials as well.
  - Most of the hot topics are up-to-date in Wikipedia pages, some other are not. Some of them are revised by adding various new reverences for their authenticity. Many pages does not contain good quality and relevant references which raises the question of their authenticity.
  - No must of the time they are not updated especially when they refer to data like population hence they need to be updated with time.
  - Normally, yes.
- 11. What you think about the risk of using those materials without proper investigating the perfect match of information related to the academic courses?
  - It's quite risky. False knowledge is not good at all.
  - Plagiarism, misleading, misconception etc.
  - it is possible risk of knowledge deficiency
  - Probability, I do not think that.
  - Some time it may be risk in using the data provided by Wikipedia since they are not corrected and updated with time and this may victimized in some cases. So double check is necessary from other alternative sources.
  - Lack of in-depth knowledge.
  - Could lead toward wrong decision.

- The information in Wikipedia can obviously guide a student toward facts. However, these information should be cross examined before any consideration. Without cross examination, these can mislead the students.
- That will lead to the fault information.
- I will spoil work.
- It's not a good idea to use the materials without taking citations. One of the main disadvantage of Wikipedia is that anyone can edit the topics without the limit so risks of getting irrelevant knowledge is always high.
- Some of the information might not be true and wrongly interpreted. That is the possible threat or risk.
- It may cause wrong understanding among the students
- Yes think so.