Young Wikipedians' perceptions of Wikipedia:

a case study in Hong Kong

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Abstract: This paper explores young Chinese Wikipedia users' perceptions of the credibility of Wikipedia through a focus group discussing the quality of a particular Wikipedia article. A major point of criticism of Wikipedia is its principle of being open for editing by everyone making it unreliable. Instead of focusing on the ways in which Wikipedia could mislead student users, this study focused on the ways in which competent student users could make use of Wikipedia. The notion of media literacy was used as a conceptual device to facilitate the analysis. The findings suggested that a significant contribution of Wikipedia was on the part of information analysis. The platform indeed enabled the young users to assess the quality of information and acquire new information. There was a range of functional features supporting them to make judgments, for example, the "internal links", "footnotes", "external links", "equivalent articles in Wikipedia in other languages", etc.. These features enabled the users to compare different sources and perspectives and to evaluate the trustworthiness of the article. Wikipedia, when utilized properly, can be a valuable online tool that facilitates students' information practice.

Chitat and Jeromy are the authors of the essay, and Deryck was one of the interviewees of the focus groups, and also helped in the text transcriptions.

One of the aim of the research is as an academic support Wikimedia Hong Kong' Liberal Studies Toolkit project, funded by Wikimedia Foundation. As member of the Chapter, Jeromy-Yu & Deryck might also share the relate outreach efforts of the project, towards schools, teachers and students.

Key words: information literacy, media literacy, wiki, ICT in education

Banning Wikipedia?

Wikipedia, one of the biggest online encyclopedia in the world, is a multilingual, web-based, free content encyclopedia project (http://www.wikipedia.org/). It is written collaboratively by volunteers and its articles can be edited by anyone with access to the Internet. The English language version of Wikipedia was started in 2001, currently it has got more than 16 million articles (as of Oct 2010). The effectiveness of such mass collaboration is widely noticed in the West. Lih (2004) found that Wikipedia has been cited increasingly more often in the press as sources or as additional readings.

Although Wikipedia is highly popular among Internet users, there are movements, especially in the education sector, that strike to ban or discredit Wikipedia in one way or another. For example, some school officials ban the use of Wikipedia and block it on school computers, fearing any erroneous information will pollute minds and papers (Spak 2007). The History department of Middlebury College in Vermont has banned Wikipedia in citations, although the department has not banned its use (Cohen 2007). As reported by Wikipedia users, there are several U.S. universities and individual professors adopt similar policies, banning the use of Wikipedia as primary sources (Wikinews 2007). In non-school settings, some news agencies reporters are barred from using Wikipedia as sources (Luft 2008). In mainland China, certain Wikipedia articles are blocked at region-wide level, as the information is considered by the government as politically incorrect

(Cohen 2006). To summarize, the major points of criticism of Wikipedia are the claims that the principle of being open for editing by everyone makes Wikipedia unreliable and sometimes damaging. Although some Wikipedia proponents suggest that certain editorial measures, such as "Neutral Point of View" and "peer reviewing", could guarantee the quality of information on Wikipedia (Reagle 2005; Emigh and Herring 2005; Braendle 2005; Bellomi and Bonato 2005), Wikipedia can hardly get rid of the image that its accuracy is questionable.

Is this concerned with the ability to use information or the credibility of information?

Recent empirical studies research into the ways in which Wikipedia users make judgments and study the frames of reference informing their judgments. Besides focusing on the ways in which Wikipedia could mislead student users, it is equally important to better understand the ways in which competent student users could make use of that "unreliable encyclopedia" and achieve meaningful learning goals. For example, Davidson (2007) discusses the Middlebury College's decision on not citing Wikipedia as a source in papers or examinations and urges readers to take this issue as an opportunity to engage students in a discussion of how one makes arguments from evidence and on what basis. Crovitz and Smoot (2009) built Wikipedia assignments into English classes, seeing that Wikipedia provides a unique opportunity to get students involved in ongoing conversations about writing, revising and establishing credibility. Sundin and Francke (2009) studied the ways in which students in upper secondary school negotiate the

credibility and authority of information on Wikipedia. It was found that students made credibility assessments based on methods developed for traditional media such as origin and authorship, and they had difficulties when they used these traditional principles to consider the credibility of the information on Wikipedia. Instead of suggesting school teachers to ban Wikipedia, Sundin and Francke concluded that in an increasingly diverse media world, students' credibility assessments need to be informed by a socio-technical understanding of sources which takes both social and material aspects into account. In other words, instead of asking "what Wikipedia fails to do", we can explore "how users effectively make use of Wikipedia". Although these two lines of inquiry are not mutually exclusive and are complementary to each other, an overwhelming emphasis on errors and inadequacies might risk obscuring factors that might help foster effective information practice.

It is increasingly recognized that ensuring the credibility of a piece of information is not only a matter of comprehension and value judgment, but there is indeed a wide range of techno-social competences behind sensible use of information in the new media age. Various competence frameworks, usually termed as "media literacy" or "information literacy", note these various sets of competences. For example, Center for Media Literacy (CML) in the U.S.A. sees media literacy as "the ability to access, analyze, evaluate and create media in a variety of forms" (CML 2003). Office of Communication (OfCom) in the U.K. suggest a media literacy framework that addresses "the ability to access,

understand and create communications in a variety of context" (Ofcom 2008). Chartered Institute of Library and Information Professionals (CILIP) sees information literacy is "knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner" (CILIP http://www.cilip.org.uk/). UNESCO sees information Literacy as the capacity of people to recognize their information needs, locate and evaluate the quality of information, store and retrieve information, make effective and ethical use of information, and apply information to create and communicate knowledge" (Catts, Lau, and UNESCO 2008).

These various frameworks arise from different yet closely related conventions. In general, those information literacy frameworks are more related to library studies, and they are more concerned with information retrieval and academic referencing. Those media literacy frameworks are more related to the consumption of media and cultural artifacts which are available to the general public. However, in the age of media convergence, the boundaries between reading and writing, between entertainment and education, and between different forms of communication are breaking down (Lister et al. 2003; Kubey 1997; Kress 2003; Kress and Van Leeuwen 1996; Livingstone 2002; Luke 2002; Street 2003; Buckingham 2000, 2003). For example, Wikipedia is an online platform that functions as an encyclopedia, an online writing tool and a search tool, in which the distribution happens simultaneously with the editing, the writing may go before the reading and the reading may further inform the

writing. Moreover, both juicy news items (e.g. the Lewinsky scandal) and serious academic matters (e.g. Albert Einstein's theory of relativity) are available on that platform.

Despite the classification and terminology differences of those information or media literacy frameworks, the analogy "literacy" does usefully denote that those information skills are not merely some isolated techniques, but that they are a set of related skills constituting a kind of caliber. For internal consistency, this article uses the term "media literacy" to inclusively address those diverse types of information or media literacy frameworks. This is also because the technical platform of Wikipedia is called "Wikimedia", denoting a "media" nature. Therefore, the term "media literacy" sounds appropriate, at least in the context of this study. The analysis was based on three major "domains" which were commonly shared among those literacy frameworks, including: (i) "information access" (e.g. search, searching strategies); (ii) "information analysis" (e.g. understand, compare, organize), and; (iii) "production" (e.g. apply, further develop, authoring).

A case study

Instead of focusing on the ways in which Wikipedia could mislead student users, this research study aims to better understand the ways in which competent student users could make use of that "unreliable encyclopedia" to achieve meaningful learning goals. Wikipedia users who contribute to Wikipedia,

especially those regular contributors versed in the ways of Wikipedia would call themselves "Wikipedians" (WMF http://en.wiktionary.org/). In this study, young Chinese Wikipedians in Hong Kong were studied.

The young Chinese Wikipedians participated in the study were senior secondary school students and junior college students nominated by Wikimedia Hong Kong (WMHK). There were altogether 8 young persons participated in this study, 2 of them aged between 18-20, 5 of them aged between 21-23 and 1 of them aged above 27. They were chosen because of their active and outstanding involvements in the events organized by WMHK. **WMHK** (WMHK http://wikimedia.hk/) is the local chapter of the Wikimedia Foundation in the Hong Kong Special Administrative Region, PRC, which aims to promote a correct usage of the Wikimedia Projects and draw more free contents to the Projects. WMHK was founded in 2007 and was recognized by the Wikimedia Foundation in the U.S.A. in 2008.

The Wikipedia article studied was the one about the Diaoyu Islands Dispute (釣魚岛列嶼主權問題) presented on the Chinese Wikipedia (retrieved on the 27th of October 2010). In brief, there is an on-going sovereignty dispute between Japan, the People's Republic of China (PRC) and Taiwan over the Diaoyu Islands (or Senkaku Islands in Japan's version) raises a number of significant issues related to island and maritime disputes in Asia Pacific region. While the issue of ownership of natural resources is the main point in this dispute,

the dispute itself is not simply about the resources. Domestic pressures and political issues related to other disputes make the issue complicated. For example, on September 7th, 2010, just one month before the second focus group meeting of this study, a Chinese fishing boat and a Japanese patrol boat collided near Diaoyu Islands, the captain of the Chinese fishing boat was arrested by Japanese government. The collision stirred up the Chinese national sentiment as well as the anti-Japanese sentiment in China (McCurry 2010; BBC 2010). The "Protect Daioyutai Movement" once again happens in mainland China, Hong Kong and Taiwan

The Wikipedia article about Diaoyu Islands Dispute was chosen because this was a controversial topic which all Chinese people would have some knowledge on it but they might also have some uncertainties. Moreover, because of its political nature, there could be biased positions presented by the Chinese Wikipedia article or the equivalent Wikipedia articles in any particular languages. The article, therefore, served as a useful entry point that helped explore whether the young users could notice or make use of those potential biases or defects.

This case study explored the ways in which the young Wikipedians assessed the credibility of that Chinese Wikipedia article. The notion of media literacy was used as a conceptual device to facilitate the analysis. The major research questions are: First, in what ways the information practice of the students can be enabled or limited by that "unreliable" online encyclopedia?

Second, how does the information practice of the young Wikipedians help illuminate the discussion of media literacy education?

Methods

Focus group was used in this study. Focus groups is "as a qualitative method for gathering data, focus groups bring together several participants to discuss a topic of mutual interest to themselves and the researcher" (Morgan and Spanish 1984). There are at least two widely recognized advantages of focus group method noted by a wide range of researchers. First, focus group members can have a sort of "synergy" or "common language" to describe similar experiences, producing data and insights that would be less accessible in questionnaires or individual interviews (Morgan and Spanish 1984; Asbury 1995; Twinn 2000). Second, focus groups provide an opportunity to explore complex feelings and topics in a relatively short period of time (Cameron et al. 2005; Grover and Nangle 2003). The main objective of the focus group interview was to explore the ways in which the young Wikipedians assessed the credibility of the information on Chinese Wikipedia using a particular article that they had got some preliminary knowledge.

Focus group participants were nominated by WMHK. They could bring along with them notebook computers and used Wikipedia and other Internet resources during the interviews. There were two meetings. The first meeting generally focused on the ways in which they perceived the credibility of wiki in

general. The second meeting focused on assessing the quality and credibility of a particular Wikipedia article. The interview questions are listed in Table 1.

The data from the focus group interviews were analyzed using a general content analysis approach. First, interview materials were transcribed and organized using a spreadsheet. Second, the statements reflecting focus group participants' assessments of the credibility of the Wikipedia article were identified, forming the meaningful units of the analysis. These meaningful units were reasons or examples supporting the participants' assessment of the credibility of Wikipedia articles. Statements elaborating the same reason would not be counted as separated meaningful units. However, different reasons presented by the same participant in the same dialogue session would be counted as different meaningful units. Third, the notion of media literacy was used to facilitate the organization and categorization of the meaningful units, three categories were addressed: (i) meaningful units reflecting knowledge about information access (e.g. searching additional information sources other than the article studied); (ii) meaningful units reflecting knowledge about information analysis (e.g. using the internal hints or contents of the article to arrive a judgment), and; (iii) meaningful units reflecting knowledge about information production (e.g. edit the article or adding new information to the article). Each meaningful unit can affiliate with more than one of these domains. Fourth, the meaningful units related to each domain of media literacy were further categorized based on their contents, serving to reveal any common themes. Finally, the details associated

with the meaningful units were compared and contrasted, aiming to reveal any special features that might be worth noting. To minimize the influence of potential biases of the researchers, an inter-rater reliability check was performed. After the first rater coded the "meaningful units", a second rater coded the meaningful units again without knowing the coding done by the first rater. The respective results were compared and noted.

Results

There were altogether 8 young members nominated by WMHK. All of them were male, 2 of them aged between 18-20, 5 of them aged between 21-23 and 1 of them aged above 27. The first focus group meeting was conducted on the 28th of August and the second meeting was on the 27th of October in 2010. There were 8 members participated in the first meeting and 5 of them participated in the second meeting. A total number of 40 meaningful units were identified and coded, inter-rater reliability of the coding was 95%. Major themes were as follows:

Observation 1: Information assess — Wikipedia was perceived as a knowledge gateway instead of a primary reference source

Among all the meaningful units derived from the focus group interviews (N=40), 53% were about information access (see Table 2). In this set of meaningful units concerning information access, many of them indicated that the young Wikipedians perceived Wikipedia articles as knowledge gateways to different

perspectives and information sources (see Table 3). They mentioned that the Wikipedia editors followed a neutral point of view principle and collected relevant and even contrasting opinions which could be traced to reliable sources. They used the metaphors or descriptors like "market", "bucket", "sea", "introduction", etc.. to denote the nature of Wikipedia:

E: I think Wikipedia is like a street market. As you may find a batch of vegetable claimed from Yuen Long in a street market is actually from Mainland, many things in Wikipedia just many be true. You may need to think carefully what is true in Wikipedia, just like you need to check a batch of vegetable organic or not, by find it out if there are pest bites.

G: I would consider Wikipedia is like an Ocean. There are many unwanted things in the Ocean, like the garbage floating on it. It is worth a look into the things claimed in Wikipedia are true, just like you need to check the Ocean waters when it waves in.

D: I think Wikipedia is just an introduction to something. If you want to know more, you should go search online for more relevant information. After you research and learn, then you can enrich an article with your findings. I think such feedback is the essence of Wikipedia.

In the discussion on the article about the Diaoyu Islands Dispute, the focus group members brought along with them notebook computers and used Wikipedia and other Internet resources during the interviews. Most of these young members were of science background and they did not really have good prior knowledge on historical or political issues. The researcher observed that they did search immediately within Wikipedia using the functional features of the platform such as "footnotes", "internal links" (to other Wikipedia articles), "external links" (to other Internet resources), "similar topics in other languages" and "search box", etc. to enable them access many other information sources. Among the set of meaningful units concerning information access (N=21), 38% of them indicated that Wikipedia provided the young Wikipedians with some hints to search inside Wikipedia, 31% indicated that the platform provided the young users with some hints to search other external sources (see Table 3).

Observation 2: Information analysis – the hints in a Wikipedia article largely helped the users evaluate the quality of that article

Among all the meaningful units derived from the focus group interviews (N=40), 88% were about information analysis (see Table 2). In this set of meaningful units concerning information analysis, nearly half of them noted that the

participants usually compared the contents with other external sources, and more than half of them indicated that the young Wikipedians did make reference to internal hints, such as "number of contributions", "discussions", "revision history", "internal links", "footnotes", "external links", "equivalent articles in English Wikipedia", etc. (see Table 4). In the discussion on the article about the Diaoyu Island Dispute, the use of these internal hints was usefully illustrated. For example, checking the quality and quantity of footnotes and external references was a very common practice among the young Wikipeidians:

E: We all know how to determine an article, by looking at the references in the footnote section, the last part of an article. If you can see lots of links, lot of numbers, or you find a lot of clickable numbers, which lead you to the sources, then I will tend to find it believable. If something we are not sure, we will add some "Citation needed" signs in the text. If you see many signs like this, this might not necessarily mean that the article is unbelievable, is might mean that it is an article after careful scrutiny.

A: As I was a science student, I tend to quantify my measurements. This article only has 85046 bytes, with only 49 sources in the footnote section. In comparison, for example the article of the Manila bus tragedy, it has

more than 129 thousand bytes, with 236 listed sources and less "citation needed". So I think the Diaoyu Islands one is relatively unbelievable.

B: Beside quantity, I will also look into where they (quoted sources) come from. I found that in the footnote section, more of them are from Chinese materials than from Japanese sources.

Besides checking the footnotes and references, the young Wikipedians were very sophisticated in comparing the Chinese article with equivalent Wikipedia articles in other languages:

B: I have not yet finished reading the article in Japanese Wikipedia. There are some obvious biases in both the Chinese and Japanese versions, as they are opposite sides of the conflict. Editors on the English Wikipedia may have less involvement in the conflict. I had a look into the article in English, and I found more sources there. In my opinion, English language does not solely belong to any single country.

H: Compared with the version in Chinese Wikipedia, is the English one more balanced or more neutral? I think the answer is yes..... For example, some articles about news about China, or created by Chinese, they may have a pro-Chinese orientation. Similarly, those sources from Japan will have a pro-Japanese orientation. I will look into the sources, to determine it is believable or not.

A: I would like to talk about the naming, which I talked about it earlier. This group of island has two names, Diaoyutai and Senkaku Is, which later one was actually adapted from the Pinnacle Island. I actually don't know how does the name "Pinnacle Island" come from, but the Japanese did translate rather than transliterate the name into Senkaku, and widely used in German, French, even in Chinese-politically friendly Russian & Vietnamese version of Wikipedias, except Portuguese. You can see we Chinese don't have many friends in this issue.

Wikipedia has editions in more than 260 different languages, the left margin of a Wikipedia article lists out equivalent Wikipedia articles in other languages. The young Wikipedians in the focus group interviews generally perceived that cultural and political biases did create diverse representations of

the same issue, so they would check different language versions as far as possible. At the end of the interview, the focus group members were asked to state and explain their positions in the Diaoyu Island Dispute. Most of them adopted an open and non-populist attitude to the issue, for example:

H: I would remain neutral, unless there are strong evidences appear, for example, something which was overlooked before or there was some treaties before. Nobody knows how the conflict between the two governments continues, we cannot say we are Chinese, then support China -- that's a Chinese traditional approach. But for me, it is impossible to decide my stance simply by my origin.

B: I don't know which side I should support, after all in a Chinese territory, if I claim I am Pro-Japanese, I might be attacked. I obviously say that I support China. But is there sufficient evidence for the Chinese claim on the islands? The Japanese currently administrate on the islands. Can I say that is a group of Chinese islands, simply I am a Chinese. There are many factors, depends on national awareness, political facts, and military power. People in different sides have their own answers, it is hard for me to determine.

A: I think it belongs to Taiwan, as it is the nearest island by physical distance. Only 6 hours of boat ride from Taiwan to reach the island, 10 hours from the Mainland China, 12 hours from the Japanese who stationed on the Yaeyama Islands. The claims are bases on different approaches. Shall we consider the distance or the Mainland Chinese idea of Continental shelf?

It is worth noting that the young Wikipedians' assessment on the article was not mainly facilitated by their prior knowledge on the issue. As noted earlier, most of the focus group participants were of science background and they did not really have good prior knowledge on historical or political issues. Instead of "misled" by any biased or incomplete information, the article in fact provided a range of hints that enabled the users to assess the quality of that article and to develop a more informed view on the issue. Meaningful learning did happen in their engagement with Wikipedia.

Observation 3: Information production – editing and writing activities were irregular and infrequent

Among all the meaningful units derived from the focus group interviews (N=40), only 20% were about information production (see Table 2). In this set of

meaningful units concerning information production, half of them indicated that when the young Wikipedians identified errors or inadequacies, they would revise them. And there was only one meaningful unit indicated that one of the young Wikipedians did create a new article when he noticed that there were some information gaps. Another half of this set of meaningful units indicated that the young Wikipedians hesitated to edit the article even though they identified some inadequacies, for example:

H: I don't Know German, French and Japanese; I just understand Chinese, English and Simplified Chinese. So, based on my Chinese and English reading, I will have a pro-Chinese bias. Moreover, I am in Hong Kong, which is indeed, under Chinese surveillance, if I make my unique statement online, like saying anything that the islands shall belong to Japanese, I will be worried about my own safety in such a sensitive period.

E: Whatever which side we support, to look into the event is not easy. First of all you need to understand the history, from original documents, or materials in the library. Making a right judgment is hard. So we don't ask you to believe in Wikipedia, but as a reference. We understand wrong edits will disturb everyone, not well to everyone. If I am not familiar with

the article, I would rather not to edit until I learn more about it, so that is why I have not edited the article.

Although in principle any Internet users could edit or create Wikipedia articles, among these competent young users, information production was not a usual and regular activity. They created or edited articles when they identified errors or information gaps, seldom did they create an article because of sudden inspirations. The motivations to create or edit articles were informed by their perceptions of the information gaps and their considerations of their own strengths and limitations.

Discussion

Instead of handy information access or easy editing, the young Wikipedians in this study show that the most significant contribution of Wikipedia is on the part of information analysis. For these young Wikipedians, the platform indeed enables them to assess the quality of information. They do not simply judge the articles based on prior knowledge concerning the issues or naively shaped by the contents presented in the articles. Meaningful learning does happen in their engagement with Wikipedia.

As mentioned in the beginning of this article, a major point of criticism of Wikipedia is its principle of being open for editing by everyone making it unreliable. This study provides some more insights into this "defect". The

findings show that even among the core members in the Chinese Wikipedian community in Hong Kong, editing or writing is hardly a common and regular activity. On the positive side, this means the editing or writing of Wikipedia articles is not an arbitrary personal activity, and therefore the information is not some lousy personal stuff. On the negative side, this reveals a prominent weakness of the Chinese Wikipedia platform. The main problem of the platform may not be that "everyone can edit, making it unreliable", but that whether the platform has got enough competent members to contribute to the editorial work, making diverse perspectives available and comparable.

Evaluating the credibility of a piece of information is not merely a matter of critical attitude, but there is a range of techno-social competences supporting an informed judgment. For example, the functional features of the platform such as "internal links", "footnotes", "external links", "equivalent articles in Wikipedia in other languages" can enable users to compare different sources and perspectives, and then evaluate the trustworthiness of an article. Wikipedia, when utilized properly, can be an online tool that facilitates students' information practice. Nevertheless, users must know how to use those functional features in the first place, implying that certain training or practice is necessary.

The notion of media literacy provides a relevant analogy for understanding and developing these essential skills relating to the use of Wikipedia. As such, the disputes related to Wikipedia in the education sector are more like a media literacy crisis in schools than a credibility crisis of Internet contents. It is more

sensible to enhance students' media literacy than to complain about the credibility of information sources. The young Wikipedians interviewed in this study are senior secondary school students and junior university students. Rather than being misled by that "unreliable encyclopedia", these students can effectively use it as a knowledge gateway to access many other valuable reference sources. The young Wikipedians are aware that some articles may contain errors. However, they do not criticize Wikipedia indiscriminately for its content model, they tend to use it with an informed understanding of what it is and what it is not. The concepts and practices of the young Wikipedians help clarify the very nature of Wikipedia. Neither being an authoritative nor an "unreliable" encyclopedia, Wikipedia can be an online platform that helps support students' information practice. This partly implies that the movements in the education sector that strike to ban or discredit Wikipedia may reflect problems on the part of the teachers rather than on the part of the learners.

Finally, it should be noted here that there are several limitations of this study. First, we are aware that the findings from focus group method do not scientifically represent the entire population and there could be "conformance or censoring" (Carey 1995; Morrison 1994). However, we see that our methods could provide us with useful data that could not be easily found from other quantitative methods. Second, all the participants in the focus group are male students, this might present certain gender biases. Third, the coding of the transcripts did rely on the researcher's subjective judgments, but this subjective

influence was minimized as the study adopted an inter-rater reliability test. Fourth, Chinese Wikipedian community in Hong Kong certainly does not represent Wikipedians in other countries. This study, however, does not aim to prove a general trend. It aims to illuminate the ways in which competent student users could make use of Wikipedia using a particular case. Notwithstanding these limitations, the study helps contribute to the discussion of students' information practice in the new media age.

Acknowledgments

The transcription and translation of the interview materials was supported by the volunteers of Wikimedia Hong Kong.

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Table 1: Focus group questions

Table 2: Domains of media literacy reflected by the meaningful units (N=40)

Table 3: Major themes in the meaningful units concerning information access (N=21) (Each meaningful unit can affiliate with more than one theme)

Table 4: Major themes in the meaningful units concerning information analysis (N=35) (Each meaningful unit can affiliate with more than one theme)

Table 5: Major themes in the meaningful units concerning information production (N=8) (Each meaningful unit can affiliate with more than one theme)

References

- Asbury, J. E. 1995. Overview of focus group research. *Qualitative Health Research* 5 (4):414.
- BBC. *Boat collisions spark Japan-China diplomatic row*, 20100908 2010. Available from http://www.bbc.co.uk/news/world-asia-pacific-11225522.
- Bellomi, F., and R. Bonato. 2005. Network analysis for Wikipedia. Paper read at Wikimania 2005-The First International Wikimedia Conference, at Frankfurt, Germany.
- Braendle, A. . 2005. Many cooks don't spoil the broth. Paper read at The First International Wikimedia Conference, at Frankfurt, Germany.
- Buckingham, David. 2000. *After the death of childhood: growing up in the age of electronic media*. Cambridge: Polity.
- ——. 2003. *Media education: Literacy, learning and contemporary culture*. Cambridge, UK , Malden, MA: Polity.
- Cameron, K. A., L. F. Salazar, J. M. Bernhardt, N. Burgess-Whitman, G. M. Wingood, and R. J. DiClemente. 2005. Adolescents' experience with sex on the web: Results from online focus groups. *Journal of Adolescence* 28 (4):535-540.
- Carey, Martha Ann. 1995. Comment: Concerns in the analysis of focus group data. *Qualitative Health Research* 5 (4):487.
- Catts, Ralph, Jesus Lau, and UNESCO. *Towards information literacy indicators conceptual framework paper*. UNESCO 2008. Available from http://unesdoc.unesco.org/images/0015/001587/158723e.pdf.
- CILIP. Chartered institute of library and information professionals. Chartered Institute of Library and Information Professionals (CILIP) [cited 20100830. Available from http://www.cilip.org.uk/.
- CML. 2003. *CML's mediaLit kit -- teacher's / leader's orientation guide*. US: Center for Media Literacy.
- Cohen, Noam. 2006. Chinese government relaxes its total ban on Wikipedia. *The New York Times*, 20061016.
- ——. 2007. A history department bans citing Wikipedia as a research source. *The New York Times*, 20070221.
- Crovitz, Darren, and W. Scott Smoot. 2009. Wikipedia: Friend, not foe. *English Journal* 98 (3):91-97.
- Davidson, Cathy N. 2007. We can't ignore the influence of digital technologies. *Education Digest* 73 (1):15-18.
- Emigh, W., and S. C. Herring. 2005. Collaborative authoring on the web: A genre analysis of online encyclopedias Paper read at The 38th Hawai'i International Conference on System Sciences (HICSS-38) at Los Alamitos.
- Grover, Rachel L., and Douglas W. Nangle. 2003. Adolescent perceptions of problematic heterosocial situations: A focus group study. *Journal of Youth and Adolescence* 32 (2):129-39.

- Kress, Gunther. 2003. *Literacy in the new media age, Literacies*. London: Routledge.
- Kress, Gunther, and Theo Van Leeuwen. 1996. *Reading Images: the Grammar of Visual Design*. London; New York: Routledge.
- Kubey, Robert. 1997. *Media literacy in the information age: Current perspectives*. New Brunswick, NJ: Transaction.
- Lih, Andrew. 2004. Wikipedia as participatory journalism: Reliable sources, metrics for evaluating collaborative media as a news resource. In *5th International Symposium on Online Journalism*. University of Texas at Austin.
- Lister, Martin , Kieran Kelly, Jon Dovey, Seth Giddings, and Iain Grant. 2003. *New media: A critical introduction*. London, New York: Routledge.
- Livingstone, Sonia. 2002. *Young people and new media: Childhood and the changing media environment.* London: SAGE.
- Luft, Oliver. 2008. AFP reporters barred from using Wikipedia and Facebook as sources. 20080117.
- Luke, Allan. 2002. Towards a critical, worldly literacy. *Journal of Adolescent & Adult Literacy* 45 (8):668-673.
- McCurry, Justin. *Japan-China row escalates over fishing boat collision*, 20100909 2010. Available from http://www.guardian.co.uk/world/2010/sep/09/japan-china-fishing-boat-collision?intcmp=239.
- Morgan, David L., and Margaret T. Spanish. 1984. Focus groups: a new tool for qualitative research. In *Qualitative Sociology*: Springer Science & Business Media B.V.
- Morrison, Ruby Shaw. 1994. Critical issues in qualitative research methods. *Journal of Advanced Nursing* 20 (6):1179.
- Ofcom. 2008. Review of Ofcom's media literacy programme 2004-08. edited by O. o. Communications. London.
- Reagle, J. 2005. A case of mutual aid: Wikipedia, politeness, and perspective taking. Paper read at Wikimania 2005-The First International Wikimedia Conference, at Frankfurt, Germany
- Spak, Kevin. *Schools ban Wikipedia*. Newsers, 20071127 2007. Available from http://www.newser.com/story/12556/schools-ban-wikipedia.html.
- Street, Brian. 2003. What's 'new' in new literacy studies? Critical approaches to literacy in theory and practice. *Current Issues in Comparative Education* 5 (2).
- Sundin, Olof, and Helena Francke. 2009. In search of credibility: Pupils' information practices in learning environments. *Information Research: An International Electronic Journal* 14 (4).
- Twinn, S. 2000. The analysis of focus group data: A challenge to the rigour of qualitative research. *NT Research* 5:140-146.
- Wikinews. Several US universities ban Wikipedia as primary source. Wikimedia Foundation, 20070322 2007. Available from

- http://en.wikinews.org/wiki/Several US universities ban Wikipedia as primary source.
- WMF. 2010. *Wikipedia*. Wikimedia Foundation (WMF) [cited 20101119 2010]. Available from http://www.wikipedia.org/.
- ——. 2010. *Wiktionary*. Wikimedia Foundation (WMF) [cited 20100801 2010]. Available from http://en.wiktionary.org/.
- WMHK. 2010. *Official website of Wikimedia Hong Kong*. Wikimedia Hong Kong (WMHK) [cited 20100801 2010]. Available from http://wikimedia.hk/.

Table 1: Focus group questions

- 1. Can you briefly introduce yourself and tell me how have you engaged in this organization (Wikimedia Hong Kong)?
- 2. How do you perceive the Chinese Wikipedia? Can you use a metaphor to describe it? Can you further explicate your metaphor?
- 3. Was there any impressive article you read from the Chinese Wikipedia? How did you make sure that the information you read was valid?
- 4. How do you perceive the credibility of the Chinese Wikipedia article concerning the Diaoyu Islands Dispute?
- 5. What is your position in that issue/dispute? Why?
- 6. Is there anything that you see important but we have not covered in the interview?

Table 2: Domains of media literacy reflected by the meaningful units (N=40)

Domains of media Literacy	Information access	Information analysis	Information production	
Participants	(Each meaningful unit can affiliate with more than one of these domains)			
A	5	8	1	
В	6	7		
С	1	2		
D	2	2	1	
E	2	4	1	
F	1	3	1	
G	2	4	2	
Н	2	5	2	
All (N =40)	21 (53%)	35 (88%)	8 (20%)	

Table 3: Major themes in the meaningful units concerning information access (N=21) (Each meaningful unit can affiliate with more than one theme)

Themes	%
"knowledge gateway" (Functional features of the platform such as "footnotes", "internal links" and "search box", etc. could enable a Wikipedia article to serve as a knowledge gateway to many other valuable perspectives and information sources)	19%
"Search inside Wikipedia"	38%
"Search external sources"	31%

Table 4: Major themes in the meaningful units concerning information analysis (N=35) (Each meaningful unit can affiliate with more than one theme)

Themes	%
"compare with external sources"	40%
"make reference to internal hints" (such as "page views", "number of contributions", "discussions", "revision history", "internal links", "footnotes", "external links", "equivalent articles in English Wikipedia", etc.)	57%

Table 5: Major themes in the meaningful units concerning information production (N=8) (Each meaningful unit can affiliate with more than one theme)

Themes	%
"go create"	13%
"go refine"	50%
"Hesitation"	50%