Enhancing Information Literacy and Ethics in Writing Courses: A Call & a Case

Yvonne Ying-ya Wen Gavin Thomson Shiow-Luan Wang National Formosa University #64 Wenhua Rd., Huwei, Yunlin 632-01 Taiwan E-mail: yywen@nfu.edu.tw, thomson@nfu.edu.tw, slwang@nfu.edu.tw

Abstract

In a world where knowledge is rapidly expanding in all directions, college education can no longer be regarded the end of one's learning experience. When we are trying to meet work requirements and to keep up with the advancement of the world, lifelong learning and continual education become indispensable in the modern society. Since information literacy skills are essential tools for self-directed learning in post-compulsory education, it is the educators' responsibility to train students in this respect while they are still in college. Students need to learn how to locate and evaluate information, and how to use it lawfully. Therefore, the researchers propose that information literacy and ethics be combined with traditional English writing courses. This study describes the teaching methods developed by the first author between 2002 and 2004. Suggestions are also offered for further refinement of these methods.

Key Words: information literacy and information ethics, English writing, rhetoric

摘要

時值知識爆炸的年代,大學教育已不再是人生學習的終點,為了因應工作所需、隨著時代環。時代學習的終點,為了因應工作所需、隨著時代環。的是現代社會不可或缺的一環習的學習已是現代社會不可或缺的一環。的學習是我有者應擔負起責任,在學生還在校內學習人生,在學生還在學生這方面的知識技能。學生達成如何找出資料、還要能評估找到的資料的資料、還要能評估找到的資料。對學生這方面的知識技能。到的資料。對學生這方面的知識技能。到的資料,並與實際案例說明第一作者在九十一和養與理理,並舉實際案例說明第一作者在九十一和養與十學年度、講授英文寫作課的時候,將資訊素產人與理融入課程的方法,以及當初的作法可以再加以改進的地方。

關鍵字: 資訊素養、資訊倫理、英文寫作、修辭 學

1. Introduction

In these days of rapidly expanding knowledge and technological advancement, there is greater pressure to learn imposed on every participant in modern society. The front-end educational model can no longer meets the working requirements of the modern day career (Jarvis, 1995). That is to say, no one can stop learning after graduation from college. To be literate, one must be literate in both print and electronic formats (McClure, 1996). Information literacy is now as necessary as the basic three R's [reading, writing, and arithmetic] have been to the past generations (Johnson, 2007). For personal growth, workforce advancement, and national economic productivity, everyone must learn how to use computers networks and exploit the digital information; on the other hand, those not connected or unable to use the Internet may find that they become increasingly disadvantaged in the workplace, dealing with daily issues, being an informed citizen, and in living a quality life (McClure, 1996). Seen as essential to the development of 21st century lifelong learning skills (Georges, 2004), information literacy skills need to be taught (Gray, 2004) before one's graduation from college. Schools must be held as accountable for teaching and assessing information literacy standards as they are for reading, writing, and arithmetic (Johnson, 2007). Students need to be equipped with such knowledge which they can apply to life beyond the campus (Kauffman, 1992). It is the educators who are to take up the responsibility to train students in this respect when they are still in college.

However, the technological infrastructure that supports the Internet continues to grow at a much faster rate than our knowledge about how to use the network (McClure, 1996). Its outgrowing power overwhelms us when we are still fumbling at sea for ways to deal with it. Like children, we are playing light-heartedly and dangerously, with the marvelously enormous universe that Luciano Flioridi (2001) called the "infosphere" (p. 2) long before we learn how to behave as civilized citizens in the information society (Wen & Thomson, 2007; Wen & Thomson, in press). Before any policy about the practical use of computer and the networks was figured out, the use of computer and rise of the Internet have already given rise to an ethical "vacuum" (Gotterbarn &

Rogerson, 1997, p. 3) in which prior ethics are increasingly irrelevant. Faced such an unprecedented moral chaos, we can never exclude ethics from the curricula of information literacy. Information literacy should go side by side with ethics. As seen in the "Information Literacy Competency Standards for Higher Education" issued by the Association of College and Research Libraries (ACRL, 2000), a division of the American Library Association (ALA), the ability to use information ethically and legally is listed without fail among the six qualities of an information literate. When information literacy is in focus (DeCandido, 1989), ethical issues can never be overlooked.

2. Background of the Study

From 2002 to 2004, the first author was assigned the job of teaching a three-hour credit course entitled "English Grammar and Writing Practice" in National Formosa University in Taiwan. It was offered to freshmen in the Department of Applied Foreign Languages where both the first and second authors serve as full-time lecturers. The students who attended this course were so-called English majors but not quite (Wen, in press; Wen & Chen, 2007). During those two years, the first author had given students assignments which cannot be done information without literacy. Following administrative decision, the course was now renamed as "English Grammar" with the emphasis shifted to the first half of its original name. The course was taught four to five years ago. Therefore, this study is more of a meta-cognitive reflection of past teaching experiences.

Yet it was not until 2006 that the first author became aware of the importance of information literacy and ethics (Wen & Thomson, 2007; Wen & Thomson, in press). The idea of asking students to employ web-based materials is not new to the first author. The main idea came from two serial workshops presented by Language Training and Testing Center in 2002 and 2003. Nevertheless, this study is presented as a call for such practice in the hope that the possibility of teaching or even mandating information literacy and ethics in courses such as English composition or rhetoric can be taken into serious consideration.

3. Review of Literature

In the Spring of 2001, the Oregon State University Libraries had developed a plan in information instruction, collaborating with the freshman composition program in the university (McMillen, Miyagishima, & Maughan, 2002). It was a joint project between English teachers and

library faculty who were less experienced in working with freshman students. They addressed the lack of information about how to implement a new instruction program and the roles and competencies of the people who would coordinate such a program. In their work with the title "Lessons Learned about Developing and Coordinating an Instruction Program with Freshman Composition," they commented on the paucity of literature from which to draw guidance in implementing a formal library instruction. After formulating a clear mission statement and a program overview, they created a clear set of goals and working objectives for the instruction program. They also outlined a set of functions that would ideally be performed by an instruction coordinator. In their planning, they placed the emphasis on student learning of information literacy in the context of separate course of study. This purposeful design was in accordance with Category 5 of ACRL Characteristics of Programs of Information Literacy that Illustrate Best Practices (ALA, 2003). According to ACRL, the best practices of information literacy programs always include other courses (Ibid.). And whatever subjects they may be, information literacy skill remains constantly an essential educational skill applicable to all subjects (Heasley, 2005). Conspicuously, the information literacy instruction program of the Oregon State University was developed from the perspectives of librarians.

As was pointed out in their study, traditional freshman composition classes had not required any research-based writing. Previous efforts of introducing library instruction into the freshman composition curriculum had been in response to individual requests from instructors rather than a programmatic decision as a whole. Therefore, this study is calling for public attention that such a programmatic decision can be made obligated once its significance is recognized. What the first author has achieved in her teaching, if recorded in print, can be useful for other people in the same profession. By raising the issue of integrating information literacy and ethics into English writing courses, the researchers of this study is proposing its feasibility and calling for its mandating. On the other hand, the authors are describing past practices for others' reference.

4. Definitions of Terms

The definitions of the term information literacy vary widely. Some think of it as the modern version of library instruction or the updated version of bibliographic instruction. In the final report of Presidential Committee in 1989 on Information Literacy (ALA, 1989), it was defined by the president, F. William Summers, then as "the ability to find, analyze, and use information." However, the most often quoted one is by ACRL (2000) in its

Information Literacy Competency Standards for Higher Education (ILCS): To be a well-educated information literate, one has to know how to "determine the extent of information needed, access the required information effectively and efficiently, evaluate information and its sources critically, incorporate selected information into his own knowledge base, and to understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally" to achieve a specific purpose (p. 2-3).

In the former, information literacy was labeled as "a means of personal empowerment (ALA, 1989)." Information literate people were considered to be "those who have learned how to learn (Ibid.)" and "people prepared for lifelong learning, because they can always find the information needed for any task for decision (Ibid.)." Undoubtedly, people need a lifelong ability to get, understand, manipulate, and manage information (Kaufman, 1992). It is said to take its place with or try to replace myriads of other literacies such as basic literacy, functional literacy, cultural literacy, computer literacy, etc (McCrank, 2002). It is generally believed that when information literacy skills are improved a person can select, search, and evaluate resources on line more effectively (UT). However, these are all operational definitions rather than substantial ones.

In his efforts to redefine the intertwining notions of multiple literacies, McClure (1996) displayed the four aspects of the same literacy with a diagram (see FIG 1). The traditional notion of literacy involves reading and writing are is represented by the "Traditional Literacy" oval. Overlapping this is the ability of "computer literacy" described by McClure as the ability to operate computer, telecommunications, and related information technologies. The third and fourth literacy components are "Media Literacy" and "Network Literacy." McClure calls the overlapping area information literacy in its narrowest sense. And the encompassing outer circle represents information literacy in its broadest sense; that is the ability to solve problems by using information. To address our new information world, we must redefine and expand our views of literacy (Gray, 2004).

David Isaacson (2003) argues that, while reading literacy is the ability first to decode letters and words and then clauses and sentences, a computer-literate person simply knows how to use a computer and does not necessarily need to know how to use information well. The same idea was echoed in McCrank's "Information Literacy: A Bogus Bandwagon? (1991)." In his opinions, information advocates have defined information literacy in far-fetching terms when they include analyzing content, evaluating sources, and all those methodologies associated with genuine research (McCrank, 1991).

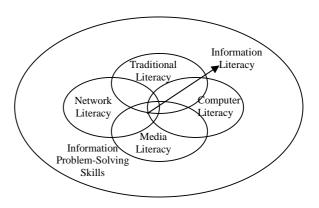


FIG 1 Thinking about Literacy Concepts McClure, 1996, p. 423

It is of interest to note that Adrian Miles (2007) redefines the network literate people as being able to participate as good peers in the information society. That is, they should not only be the consumers but also the contributors. He also mentions that the most basic quality of network literacy is recognizing that content and its containers are distributed across the network and that we weave these together easily using simple protocols that were developed to allow "inter" and "intra" communication between different sorts of internet services. For him, this represents a shift of paradigm from book knowledge to network knowledge. Network literacy, in McClure's definition, is the ability to identify, access, and make use of electronic information from the network and will be a critical skill for tomorrow's citizens if they wish to be productive and effective in both their personal and professional lives (McClure, 1996).

The term "cyber ethics" was coined by Richard O. Mason (1986) in terms of four ethical issues of the information age: privacy, accuracy, property, and access [abbreviated as PAPA]. For the present time, the following three aspects are being in the spotlight: enhancing users' sense of responsibility and morality, raising users' self-esteem and their obedience to the law, and establishing appropriate values (MOE, 2006).

4. Integrating Information Literacy & Ethics into English Writing

The lack of a core set of reading is one problem of designing literacy information curricula (Tenopir, 2005). It is not surprising because its older counterpart, librarianship, has notoriously long had a hard time defining its core curriculum for professional training (McCrank, 1991). Maybe it is part of the reason why best practices of teaching information literacy are always associated with

courses subjects. This is exactly what English writing classes share with information literacy classes: They are both taught across multiple disciplines and integrated within the context of subject-oriented courses (Kaufman, 1992). In other words, information literacy has to be integrated into other courses as an ingredient. And just like writing courses they have difficulty standing alone in themselves. There ought to be some kind of content upon which the teaching of either writing or information literacy can be based. To mend up for the lack of core content, teachers may find combining information literacy and ethics with student assignments an efficient way to motivate students when they are introducing the course content (Eisenberg, 2007) Although the first author was not even aware of this theory at the time, she designed student writing assignments which included Internet research and combined multiple skills.

For some assignments and term papers, though not every, of the course, students were asked to surf the net and find a website from which they choose topics on their own. Sometimes a range of the topics were given. For example, they were once asked to write a narrative based on an anecdote of one of their favorite celebrities. At other times, they were completely free to choose what they want to write about. The latter approach resembles the model taken by I-Search Interstate. It is especially appropriate for students who find research intimidating or who have learning difficulties, since this is motivating for students who select a topic in which they have a strong interest (Milam, 2004). The course work will seem less threatening in this way, because students are encouraged to include their own thoughts and feelings along with their research. Students were required to hand in not only the end product of their writing, but also their key words, copies of the raw data on the original web pages, and the first drafts and revised manuscripts of their writing in this process approach. Assignments and papers were not accepted if any of the above components was not readily available. That means, to complete the job, students had to go online, do network research, and revise their key words until they found at least one useful web page. The process of using a search engine online to find web pages had been demonstrated by the first author in class before students started to develop their own works.

Students were asked to document the source in their assignments and term papers. They were told that they could make direction quotations from the texts simply by repeating the words in identical order. They were also introduced the legal ways to declare others' ideas in their own writing by rephrasing and paraphrasing them and to document them as partial or indirect quotations. Peer editing is involved in the process. Students were evaluated according to how they edited their own and their classmates' works in the portfolio assessment. They were rewarded with

comments rather than scores; however, the researcher teacher did give them scores which were not revealed to the student writers. A checklist of editing was issued to every of the students for final review and for them to avoid basic mechanical mistakes. In some cases, students were required to rewrite their whole essays. The final grades depended on how they made progress in the writing process rather than on the final outcomes.

5. Results and Discussion

In practices things did not turn as expected. In fact, the first author found them frustrating rather than fulfilling. Although students were advised well ahead of time not to plagiarize, traces of copy-and-paste were common in students' writings. They were self-evident: it was easy to distinguish students' own writings in which mistakes were pervasive from the grammatically and semantically perfect sections pasted in from a webpage. That is why the researchers agree with Fitzgerald Georges (2004) when he said information overload is encouraging academic dishonesty. And that is also the reason why the researchers consider ethical issues vital to the information literacy teaching. The importance of rewarding positive ethical behavior and discouraging unethical behavior was identified by as Johnson (2004). Certain reinforcements do encourage ethical behavior while teachers' reactions ought to discourage unethical behavior.

Fitzgerald Georges (2004) also mentioned that the propensity for students to use Internet search engines as sole sources for their research needs is degrading the standard of student work. Other teachers have made similar complaints that their students had jumped directly to the Internet for their information needs (Grimble & Williams, 2004). It seems that some kind of balance should have been acquired between print literacy and information literacy when teachers are giving such assignments. In fact, students will rely exclusively on free Internet sources if they are not forbidden to (Frost, 2004). It could have been misleading when the first author asked students to build their writings on merely one web page. Students could have been instructed to adapt materials from diversified sources other than the Internet alone so long as the requirements had been structured differently. To check the validity of references in student research, teachers can insist that at least a portion of the periodicals cited in a paper be peer-reviewed (Frost, 2004). Some practice activities on making good ethical choices could have been designed since direct teaching of ethics should always remains an indispensable part of information literacy curriculum; it is vital to let students know that ethical behaviors are in their own long-term best interest rather than the original writers' (Johnson, 2004).

The educators have to keep themselves personally knowledgeable about the ethical and safety issues surrounding Internet use, too (Ibid.). Information literacy has to be a part of on the job training for teachers (Ibid.) as well as training that happens before the teacher arrives at the school or brings students to the public library (Fialkoff, 2001). It is an ongoing process that should never cease to be.

6. Suggestions and Implications

Apart from writing assignments, TV programs, movies, and sports can be integrated into the teaching programs to increase students' motivation. Information literacy instruction can be fun as well as informative (Cohen, 2006). With many ready made lesson plans, printable handouts and worksheets in the market (Chesnut, 2006a; Chesnut, 2006b; Libra Publishers Inc., 2003) and online (Haveman, 2006; Milam, 2004; Kenney, 2003), the teaching of literacy information can be multi-faceted. Standard-sized tests and online tools for information literacy assessment (Kearns, 2007; Lay, 2007) can also be utilized in developing such a curriculum. If possible, support from librarians or information technologies department can be sought. A joint project or a team can be set up to assure the best results.

Because more and more information services and resources are networked, those individuals who cannot access and use them will be severely and increasingly disadvantaged in society; those who are simply bypassed by the network will eventually be unable to lead productive work or professional lives (McClure, 1996). Maintaining the status quo for network development will insure an increasing gulf between the network literate and illiterate. McClure calls such a gap between the network literate "cybernauts" (McClure, 1996, P. 404) and the network illiterate "educational disconnect" (1994, p. 14) or "information gaps" (1996, p. 435). It is advised that Government mandates information skills or information literacy and ethics by enforcing tests within graduation exit exam, because "What gets tested gets taught" (Johnson, 2007, p. 98). This is the practice of some states in the U.S.; for example, the Graduation Exit Examination for the 21st Century includes information skills on the English Language Arts test in Louisiana (Young, Jr., 2005). Yet a mandated curriculum of information literacy skills is not the perfect solution, for questions of funding, of equitable assessment, and of prioritizing these skills with other basic skills can and should continue to be asked (Johnson, 2007). Anyway, the ever-growing information technologies and the Internet offering online resources with services will never cease to shape the way we learn, work, and live.

References

- [1] Association of College and Research Libraries (ACRL). (2003). Characteristics of Programs of Information Literacy that Illustrate Best Practices: A Guideline. Retrieved June 25, 2007, from http://www.ala.org/ala/acrl/acrlstandards/characteristics.htm
- [2] Association of College and Research Libraries (ACRL). (2000). Information Literacy Competency Standards for Higher Education. Retrieved June 25, 2007, from http://www.ala org/ala/acrl/acrlstandards/informationliteracy competency.htm
- [3] American Library Association (ALA). (1989). Presidential Committee on Information Literacy. Retrieved June 28, 2007, from http://www.ala.org/acrl/legalis.html
- [4] Chestnut, M. T. (2006a). Information literacy instruction that works: A guide to teaching by discipline and student population. [Review of Information literacy instruction that works: A guide to teaching by discipline and student population]. *Library Journal 131* (17): 90.
- [5] Chesnut, M. T. (2006b). Creating a comprehensive information literacy plan. [Review of Creating a comprehensive information literacy plan]. *Library Journal* 131 (7): 118.
- [6] Cohen, S. E. (2006). Using Pop Culture to Teach Information Literacy: Methods to Engage a New Generation. [Review of *Using pop culture to teach information literacy: Methods to engage a new generation*]. *Booklist 103* (4): 95.
- [7] DeCandido, G. A. (1989). *Library Journal*, *114* (4): 21-21.
- [8] Eisenberg, M. (2007). Essential Information & Technology Skills for Student Success. Workshop presented in the International Conference of Teaching & Evaluation of General Education. June 25, 2007. Taichung, Taiwan: China Medical University.
- [9] Fialkoff, F. (2001). Educate the educators. *Library Journal 126* (11): 2.
- [10] Flioridi, L. (2001). Information ethics: an environmental approach to the digital divide. *Philosophy in the Contemporary World*, 9 (1), 1-7. Retrieved April 17, 2007 from http://www.philosophyofinformation.net/pdf/ieeadd.pdf
- [11] Frost, W. J. (2004). Do we want or need metasearching? *Library Journal 129* (6): 68.
- [12] Georges, F. (2004). Information literacy, collaboration, and "killer apps": New challenges for media specialists." *Library Media Connection*, 23 (2), 34-35.
- [13] Grimble, B. J. & Williams, T. D. (2004). Students' perceptions of their information literacy skills in the media center. *Library Media Connection*, 22 (4), 26-28.
- [14] Gotterbarn, D. & Rogerson, S. (1997). Computer

- ethics: The evolution of uniqueness revolution. Paper presented at the ACM Computer Ethics Conference CEPE'97, Erasmus University, The Netherlands, 1997. Retrieved April 17, 2007, from http://www.e-gov.gr/local/ism-egov/resourc es-ism/Computer%20Ethics%20-%20The%20Evolution%20of%20the%20Uniqueness%20Revolution.pdf
- [15] Haveman, S. (2006). S.O.S. for information literacy. [Review of S.O.S. for Information Literacy http://www.informationliteracy.org/defa org/default.php.
- [16] Heasley, P. J. (2005). Teaching and testing information literacy skills. [Review of *Teaching and Testing Information Literacy Skills*]. *Library Media Connection* 24 (2): 88.
- [17] Isaacson, D. (2003). Let's talk libraries, not "information literacy". *Library Journal* 128 (19): 42.
- [18] I-Search Interstate. http://www.edc.org/FSC/MI H/i-search.html
- [19] Jarvis, P. (1995). *Adult and continuing education: Theory and practice*. 2nd Ed. NY: Routledge.
- [20] Johnson, D. (2007). Head for the edge: What gets tested gets taught. *Library Media Connection*, 25 (7), 98.
- [21] Johnson, D. (2004) Proactively teaching technology ethics. *Library Media Connection* 22 (4): 24-25.
- [22] Kaufman, P. T. (1992). Information incompetence. *Library Journal* 117 (19): 37-39.
- [23] Kearns, J. (2007). TRAILS: Tool for real-time assessment of information literacy skills. [Review of TRAILS: Tool for Real-time Assessment of Information Literacy Skills, www.trails-9.org]. Library Media Connection 25 (7): 94.
- [24] Kenney, B. (2003). Syracuse creating web-based database for K-8 info literacy. *Net Connect 128* (1): 5.
- [25] Lay, S. (2007). Information literacy assessment: Standards-based tools and assignments. [Review of Information literacy assessment: Standards-based tools and assignments]. Library Media Connection 25 (5): 90-91.
- [26] Libra Publishers Inc. (2003). Teaching Information Literacy. [Review of Teaching information literacy: 35 practical standards-based exercises for college students]. Adolescence 38 (151): 582-583.
- [27] Mason, O. R. (1986). Four ethical issues of the information age. Retrieved June 28, 2007, from http://www.misq.org/archivist/vol/no10/issue1/vol10no1mason.html
- [28] McClure, C. R. (1996). Chapter 19 Network literacy in an electronic society: An educational disconnect? In *Media literacy in the information age: Information & behavior*, (pp. 403-439). Edison, NJ: Transaction Publishers. Retrieved July 27, 2007, from http://search.ebscohost.com/login.aspx?direct=true&db=ufh&AN=11631684 &lang=zh-tw&site=ehost-live

- [29] McClure, C. R. (1994). Public access to the information superhighway through the nation's libraries. Retrieved June 28, 2007, from http://www.eric.ed.gov/ERICDocs/data/ericdocs 2sql/content_storage_01/0000019b/80/13/71/28. pdf
- [30] McCrank, L. J. (1991). Information literacy: A bogus bandwagon? *Library Journal 116* (8): 38-42.
- [31] Milam, P. (2004). A road map for the journey. *Library Media Connection* 22 (7): 22-23.
- [32] McMillen, P. S., Miyagishima, B., & Maughan, L. S. (2002). Lessons learned about developing and coordinating an instruction program with freshman composition. *Reference Services Review 30* (4): 288-299.
- [33] Miles, Adrian. (2007). Network literacy: The new path to knowledge. *Screen Education 34*: 24-30.
- [34] M.O.E. (2006). *Information literacy & ethics*. 《資訊素養與倫理》. Taipei: M.O.E.
- [35] Tenopir, C. (2005). Teaching student searchers. *Library Journal 130* (4): 33.
- [36] University of Texas. (n.d.). Tutorial on information literacy. Retrieved April 21, 2007, from http://tilt.lib.utsystem.edu/
- [37] Gray, A. (2004). Redefining literacy for the 21st century. [Review of *Redefining literacy for the 21st century*]. Library Media Connection 23 (1): 88.
- [38] Wen, Y. Y. (in press). A curriculum design of cultural literacy courses: A case study of transforming a professional course into a general education course. Paper presented in the Conference on the Planning and Practice of General Education Courses in Technical Universities on May 10, 2007. Kaohsiung: Tung-Fang Institute of Technology.
- [39] Wen, Y. Y. & Chen, D. F. (2007). Teaching cultural literacy to students in TVES, Taiwan: An integrated-skills approach. In the *Proceedings of the 2007 International Conference & Workshop on International Education: The Prospect of International Education in the 21st Century* (pp. 30-46). CD-ROM. Taoyuan, Taiwan: Ming-chuan University.
- [40] Wen, Y. Y. & Thomson, G. (2007). Applying cyber literacy & ethics to the teaching of translation from Chinese to English. In *Proceedings of 2007 International Conference on English for Specific Purposes* (pp. 67-80). Taipei: Department of Applied English Studies, China University of Technology.
- [41] Wen, Y. Y. & Thomson, G. (in press). ESP as a Way to Enhance Cyber Literacy and Ethics: A Case Study. Paper presented in the International Conference on e-Education 2007 on Aug. 16, 2007. Hong Kong: Harbour Plaza Hotel.
- [42] Young Jr., T. E. (2005). Better data, better decision. Library Media Connection 23 (4):14-19.