Information Literacy in France and Japan: B2i and Information Moral Teaching model

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Abstract: The Brevet Informatique et Internet (B2i) is a certificate and the method is a checklist to verify pupil's information skills in France. The B2i consists of five domains; learning environment, attitude responsible, information processing, utilization of information and communication. The ministry of Education in France has conducted the B2i for all pupils. The B2i is intended for pupils in every final school year of elementary school, middle school and senior high school. The model of the Information Moral Teaching model curriculum (IMT) in Japan resembles the B2i. The model is composed of five domains as well as the B2i, but that emphasizes the information ethic and adverse effects on the health rather than the utilisation of social network service.

Keywords: B2i, Checklist, France, information ethic, information skills, Japan, learning environment, school library, OPAC, effects to health

1. Introduction

In modern society where information technology has developed, the education of information literacy/skills is a crucial issue. In all the countries of the world, school teachers and instructors are facing this issue.

This is a comparative study education of information literacy/skills in France and Japan. We discuss the features of the Brevet Infromatique et Internet (B2i) in France and of the Information Moral Teaching model curriculum (IMT) in Japan. The B2i is an elaborate and systematic approach to learning of information literacy/skills whereas the IMT model is especially trying to improve the information ethics of pupils.

We will begin our discussion by considering the Videotex system before the spread of Internet. In 1980's the interactive network system called the Videotex was introduced in major industrialised countries. Manipulating the network system, people could search information, take theatre tickets and book airplane boarding passes. Some examples were the Teltel in France, the Prestel in UK,

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the Telidon in Canada, the Bildschirmtext in Germany, the Captain in Japan, and the Videotel in Italy. When the Internet was commercially released in each country in 1990s, many of them faded in a short period of time, but only the Teltel in France had survived until 2012. Because the French telephone office provided the terminals called Minitel to each home and each business office free of charge. In France, an advanced information society had been accomplished by the dissemination of Minitel. The Minitel was so much loved that the spread of the Internet was late in France. It was thought that the introduction of the B2i is caused by the delay of the spread of Internet in France.

In November 2000, the Ministry of National Education in France announced the introducing of B2i for pupils in each level; Level 1 for elementary school (école élémentaire) and Level 2 for junior high school (collège). In 2006, Level 1 and Level 2 were reformed and the Ministry announced the introducing of Level 3 for all kinds of senior high school (lycée) at the same time. As the revision proposals of Level 1 and Level 2 were indicated in December 2011, they were implemented in September 2012. Furthermore, as the revision proposal of Level 3 was indicated in December 2012, that was implemented in September 2013.

The B2i is a kind of certificates and the method is used by checklists for all the pupils who learn information literacy/skills. We can find the signs of B2i in textbooks. In a textbook of French reading, for example, pupils would search the biography of a novelist on website before they read a part of his work. In all of subjects, teachers are obligated to teach information literacy to their pupils following to the system of B2i. School teachers enter check mark on the checklist as they admit their pupils' skills related to information literacy. Documentaliste professors who manage their school library (CDI: Centre de Documentation et d'information) often enter check marks on the checklist in middle schools and senior high schools. When teachers fill in the checklists, the principal submit the checklists to the Ministry of National Education. Thus, the certificates would be provided to the pupils.

In Japan, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) brought a research committee to create the IMT model as an entrusted project in March 2007. The IMT model has been recommended to be practiced at each school. The moral education was adopted in the current Course of Study (2008a, 2008b), namely the curriculum guideline for defining basic standard for education in 2008. Accompanying by the information moral teaching, the moral education will be treated as a subject in the next Course of Study which will execute in elementary schools from 2020, in junior high schools from 2021 and in senior high schools from 2022. The moral education will include information morals.

2. Similarities between the B2i and the IMT model

Table 1 shows that the B2i and the IMT model, each of them consists of five domains.

B2i	IMT	
Recognizing the information environment	An ethnic of information society	
Adopting a responsible attitude	Understanding and complying with the laws on information system	
Creating, producing, treating and exploring of data	A wisdom for safety about information system	
Reading, searching and discovering	Information security	
Exchanging and communicating	Establishing of public information society	

Table 1 B2i and IMT model

One of five domains in the B2i, "Adopting a responsible attitude" includes knowing that pupils have their rights and observing the laws and regulations when using information systems. The similar point applies to the IMT model. "Understanding and complying with the laws on information system" also refers to the laws and regulations on information system. Giving a detailed explanation, the laws and regulations are concerning copyrights, preserving private information and prohibition of the access to inappropriate information.

According to a section of "Adopting a responsible attitude" in the B2i for collège, namely middle school, pupils need to research information as considering the laws and regulations in digital environment. The same thing may be saying to the IMT model. A section of "Understanding and complying with the laws on information system" in IMT model says that pupils need to learn that society holds by keeping laws and rules, to know about illegal behavior and not to do illegal actions.

Both in a section of "Adopting a responsible attitude" in the B2i and in a section of "A wisdom for safety about information system" in the IMT model state that pupils respect the rights of others and protect the personal privacy. The IMT model includes the right of publicity.

3. Differences between the B2i and the IMT model

Teachers would verify pupils' essential knowledge on information system in "Recognizing the information environment" of the B2i. It includes the way to input, to access into network and to employ peripheral devices. On the other hand, to verify pupils' fundamental knowledge is scarcely seen in the IMT model.

A feature of instruction in the B2i is to encourage pupils to utilise digital text. The tendency is seen in "Creating, producing, treating and exploring of data" of the B2i. In the B2i not only the manipulation of computer but also the utilisation of information is treated. But in the IMT model we seldom find an item to urge pupils' manipulating computer and Internet. Rather, we have an impression that teachers keep pupils from the utilisation of computer, especially contents and services on web which adversely affect children. The IMT model emphasizes the danger of pupils using computer and Internet.

Pupils are required to asses and evaluate information in the B2i and the IMT model. Pupils should critically estimate the reliability and validity of the information and pupils should verify the producer and the date of information using the criteria. Whereas pupils should identify a correct information and avoid un inappropriate information in the IMT model.

There is references to school libraries and the cataloguing system in the B2i. In regard of creating, producing, treating and exploring of data, in the level 1 (elementary school) of the B2i, teachers encourage pupils to compare the contents of digital text and information paper-based resources to be explored in school libraries called the BCD when evaluating the information. In the level 2 (middle school) of the B2i teachers encourage pupils to use the OPAC of school libraries called the CDI and public libraries when effectively searching text resources. In France, most elementary schools as well as preschools have school libraries named BCD (Bibliothèque Centre Documentaire). Each secondary school has a school library called CDI (Centre de Documentation et d'Information). In France, the first half of secondary education is four-years collège and the latter half is three-years lycée. Teacher librarians called Documentaliste work in the CDI. To the contrary, when pupils evaluate information media and resources, there is no reference to school library in the IMT model in Japan. The IMT model intrinsically considers the improvement of pupils' behaviours and attitude when using information network. Furthermore, among the educators in Japan there is a little interest to school libraries though all schools have necessarily school libraries.

UNESCO published and suggested "Five laws of Media Information Literacy" in 2016. The law one of five laws offer the key of the understanding of the importance on traditional resources within library. The law one states;

Information, communication, libraries, media, technology, the Internet as well as other forms of information providers are for use in critical civic engagement and sustainable development. They are equal in stature and none is more relevant than the other or should be ever treated as such.

We should notice that both libraries and the Internet are "equal in stature...should be ever treated as such". The paper-based resources such as books, journals and newspapers are equivalent to messages and information on web for the development of the Media Information Literacy. There might be

some prejudice in any media. Even if it is a careful edited book, it might be not necessarily impartial. We should critically treat each media.

In the item "Exchanging and communicating" of the B2i it assumes that pupils will use the SNS (social networking service) and they will state their opinions on web. They would have to cope with difficult situations when using the SNS even if any problems occur. When they receive an unexpected and unidentified message through the SNS, they need to show a cautious attitude toward the message. Pupils should critically reconsider the role of themselves in the middle and the employment of the SNS, which includes the Wikipedia, the online bulletin site, blogs, twitters and the Facebook. To the contrary, the IMT model does not specifically mention the SNS. Instead of it, pupils would be encouraged to understand the public nature of network and independently employ it.

In the IMT model they emphasise pupils' physical problem and health care when using a computer and Internet. In the domain of "A wisdom for safety about information system" in the IMT model, for example, "When you use the Internet or computer, keep the fixed time" for elementary pupils, and "Pupils can act with awareness of relationship of information media, with consideration of the health issues" for middle school and senior high school pupils. With using computer, it is known that the blue light emitted by display affects the brain and that it caused the sleep disorders (Viola 2008). Your posture become the forward bending when you use the computer for a long time and you would have a stiff neck and feel the pain in your upper arms and back. There may be problems in term of health with using a computer, but is there any significance of emphasis on the ill effects to the pupils' health? I claim that we should recommend employing computers actively rather than pointing out health problems more than required.

4. Teachers' competence

Based by the B2i, teachers are necessarily required the competence to instruct information skills for pupils. To grantee and maintain the standard of teachers' competence, the C2i (Certificat informatique et internet) was established in 2004. The C2i consists of several parts for not only teachers but also professions such as legal and medical personnel.

In France from 1990 the teachers training course equivalent to graduate level was beginning to implement in IUFM (Institut Universitaire de Formation Maîtres) and since 2013 has been continued in ESPE (École Supérieure du professorat et de l'Éducation). The trainees in ESPE need to take the examination and receive the certificate called the C2i2e: the second level of C2i. Not only teacher librarians called Documentalistes in French but also other subject teachers are required to obtain the certificate. All of teachers instruct information skills and competency to their pupils. For each semester, they can take the examination of the C2i.

In Japan, the teacher training course generally implements as undergraduate level. The trainees need to take the discipline of the operation of information equipment and they would learn the way to use computer and fundamental knowledges of networking. With becoming a teacher librarian, trainees would take the teacher librarian course and learn the utilisation of information media. Trainees do not necessarily take the teacher librarian course.

5. Conclusions

Both the B2i in France and the IMT model in Japan have five domains of information skills.

	B2i	IMT
Observing laws and regulations	X	X
Protecting privacy and respecting rights	X	X
Essential knowledge	X	
Manipulating of computer	X	
School libraries and OPAC	X	
Using social network services (Blogs ets.)	X	
Effects to pupils' health		X

The observing laws and regulations on information system is seen in the B2i and the IMT model. And protecting privacy and respecting rights are treated in the B2i and the IMT model. When pupils use information network system, they would stress on the security of digital information in the IMT model.

The essential knowledge on information system, the manipulating of computer, school libraries and OPAC, the employment of the SNS (social network service) are treated in the B2i. These items are barely seen in the IMT model. We claim that pupils should compare the traditional paper-based resources in libraries and the digital resources on web. Because books, journals and newspapers are equal to information obtaining by the Internet according to UNESCO's five laws of Media Information Literacy[MIL].

The IMT model places stress on the ill effects to pupils' health when pupils use computer and information networking for a long time. It is essential to encourage positively to employ computer and the Internet while we will consider pupils' health care. We need to encourage pupils to create and transmit digital contents without overemphasizing on the adverse health effect.

In Japan, we will recreate the instructive model of information literacy/skills with following the B2i though Shinzo Abe, Japanese Prime Minister insists the reinforcement of moral education.

In November 2016, Najat Vallaud-Belkasem, French's ex-education minister announced that she would introduce the new system of authorization of information literacy for pupils from a new school term of September 2017 in place of B2i and C2i. The new system is the Pix which not only pupils but also school teachers would inspect their information literacy by the application system of Internet. However, an educational policy changes by change of government, and B2i is officially still utilized in French schools. The substantial introduction of Pix is anticipated from a new school term of September 2018.

I suggest that pupils are encouraged to be wise an information consumer, customer or client who would treat issues of security, ethics, moral, privacy, rights and their health in the digital and online environment. They expected to be an innovative information creator who would employ software applications, do programming and organize information. Furthermore, they are empowered to be a sociable information communicator who would use e-mail, blogs, YouTube, Wikipedia and other SNS.

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