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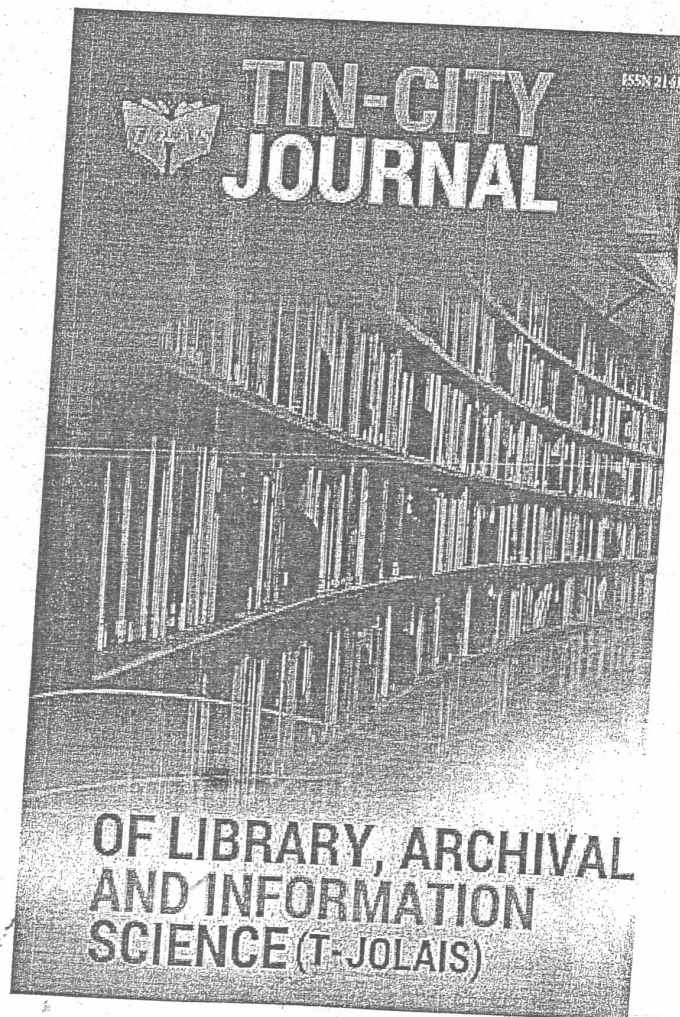
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INFLUENCE OF INFORMATION LITERACY SKILLS ON PETROLEUM TRAINING INSTITUTE (PTI) STUDENTS' USE OF ELECTRONIC RESOURCES: LIBRARY OVERVIEW

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Abstract

This study assessed the influence of information literacy skills on petroleum training institute (PTI) students' use of electronic resources: Library overview. The study sample population comprised 4,500 registered library users' registration statistics 2020/2021 academic session. The study adopted the survey design. The instrument used for data collection in this study was a questionnaire. The findings revealed that there was a strongly agreed/agreed by the respondents on the uses of the following for e-resources, Internet to sources materials and information, Online Public Catalogue (OPAC) for assignments, e-resources journals provided by the library for my research, online databases for searching information to augment my class note, CDROM for assignment and offline databases provided by the library for assignments and they use e-books provided in the library among others. The result further revealed that the majority of the respondents use the Internet daily and the level of information literacy skills the respondents is very high/high level. The

study concluded that the management of the petroleum training institute, Effurun should encourage a higher level of resource utilisation, and the teaching of information literacy skills to PTI students should be pushed and encouraged. In addition, the management of the Effurun Petroleum Training Institute should guarantee that electronic materials are continuously available, with suitable information communication technology tools to ease their use.

Keywords: *Information competency, Learning skills, Petroleum training institute students*
Introduction

In recent years, The American Library Association (2018) defined information literacy as a set of competencies that need individuals to identify when information is required and to assess and use that information effectively. As a result, an information literate individual should be able to determine information needs, and their scope, identify and obtain acceptable information sources, and assess and apply

them. Information literacy, according to the Chartered Institute of Library and Information Professionals (CILIP) (2018), is the capacity to think critically and make balanced decisions about whatever information we come across and utilize. According to Gbaje and Okojie (2011), information literacy facilitates access to knowledge, which is critical for supporting human rights, economic and cultural growth, innovation, individual liberty, and creativity. Students must receive both formal and informal education in information literacy skills to develop the abilities necessary to make effective and efficient use of information literacy material, particularly for research purposes. The necessity to teach and retrain library users, particularly petroleum training institute students, to be information literate is widely recognized since they would be unable to efficiently search for and use essential information without the appropriate abilities to navigate and operate information technologies. Students at the petroleum training institution are one-of-a-kind individuals with distinct roles to play.

They play an important role in modern society, and they are primarily involved in research at any school of higher learning. Before gaining admission, the majority of them are often already employed in some capacity. It is critical to understand their degree of information literacy capability for them to successfully function well in their positions at their different firms while also making progress in their research. It was also necessary to determine if PTI students comprehended the information landscape, how to organize and conduct research, how to critically analyse information, and how to efficiently manage and convey research findings. This may be one of the reasons why librarians throughout the globe hold orientations, user education programs, workshops, and seminars to teach library patrons how to use information resources. Literacy skills help learners save time and develop lifetime research abilities. Because learning is a necessary aspect of life, the importance of information literacy

skills cannot be overstated. This study aims to assess the type of information literacy program that petroleum training institute students are familiar with, as well as the purposes for which they utilize e-resources and the regularity with which they do so and the level of information literacy skills of petroleum training institute students.

Petroleum Training Institute (P.T.I.) in Effurun, Delta State was established in 1973 by the federal government of Nigeria as a prerequisite for membership in the Organization of Petroleum Exporting Countries (OPEC) to train indigenous middle-level manpower to meet the labour force demands of the oil and gas industry. More so, the PTI Act: 1972 NO. 37 an act to establish the Petroleum Training Institute to provide courses of instruction, training, and research in petroleum technology and to produce technicians and other skilled personnel required to run the petroleum industry. The PTI library was also established in the same year to provide the relevant information resources in all formats to support the teaching-learning and research activities of the PTI. The PTI Library has the following departments: Readers services, Serials services, and technical and Media services. The total collection of the library as of the year 2020 was 554,033 volumes. The library staff strength is 17, which is made up of seven professional librarians, three library officers and seven junior staff members. (PTI library, record 2020). The library was computerized in the year 2002, using the X-Lib Library software. Meanwhile, the petroleum training institute awards certificate programmes, national/higher diploma programmes, post-HND programmes and specialized short courses. (Petroleum Training Institute Library Annual Report, 2019)

Statement of the Problem

Nigerian Institutional Libraries currently provide materials in electronic formats as a consequence of recent breakthroughs in information and communication technology (ICT). As a result, Effurun Petroleum

Petroleum Training Institute (PTI) students are not left out. Many libraries have made significant investments in electronic resources and other computer-based technologies to guarantee that students have access to materials that will aid them in their academic endeavours. Meanwhile, to make good use of electronic resources, students must understand how to access, search, identify, and use resources ethically, therefore information literacy is critical. Meanwhile, many university libraries have made momentous assets by providing services through electronic resources and other computer base technology so that students can effectively use the e-resources in the library. However, existing literature has specified low information literacy skills in most university libraries in Nigeria. This has lessened the capacities and reimbursement, considering the enormous investment in electronic resources. This is most likely due to a lack of information literacy abilities, which limits one's capacity to discover and responsibly use resources. This situation prompts the need for this study, with the view to assess the influence of information literacy skills on petroleum training Institute students' use of electronic resources.

Objective of the Study

The objective of this study is to assess the influence of information literacy skills on petroleum training institute (PTI) students. It also aimed to find out the purposes of use of e-resources by petroleum training institute students as well as to determine the frequency of use of e-resources and to ascertain the level of information literacy skills of petroleum training institute students.

Literature Review

Since the twenty-first century has seen an abundance of information in numerous formats, information literacy is critical for petroleum training institute students. According to Grgic, (2016), scholarly communication is impossible without the implementation of information literacy

skills—scholars from all disciplines must know how to find information, assess it, and develop and present new information in a correct, ethical manner. According to Kodani. (2012), students' attempts to finish course-related assignments that involve research are delayed and frustrating due to a lack of information search abilities. In the information age, students' academic performance and research productivity suffer from a lack of fundamental abilities in using accessible e-resources.

A literate individual should be able to identify, find, retrieve, assess, synthesize, and convey newly acquired knowledge so that others may utilize it and apply these talents and concepts to new projects and disciplines, according to the Association of College and Research Libraries (2018). The library customer is expected to use the library's information resources with little assistance from the personnel. Because there is so much information accessible, information professionals should be able to discover and supply the appropriate source(s) of data when a user requests it. This supports the findings of Anyaoku, Ezeani, and Osuigwe (2015), who found that librarians in universities in southeast Nigeria had excellent search abilities, including the capacity to locate information using library catalogues, encyclopaedia, indexes and abstracts. This requires some knowledge or competence which must be used.

More specifically, the information literate student critically evaluates information and its sources and incorporates selected information into his or her knowledge base and value system; the information literate student, individually or as part of a group, effectively uses the information to accomplish a specific goal; the information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information According to Ojedokun (2007), the idea of information literacy assumes that a person can detect when information is needed, as well as the capacity to search, examine, use, and

ethically employ information to solve issues or make decisions. Students require information for a range of tasks in the institutions, and e-resources are an excellent source of this knowledge. Tan, Gorman, and Singh (2012) discovered that the respondents in their study of information literacy abilities among Malaysian school librarians were information literate. Students can profit from the large amounts of knowledge available electronically if they have the right information search abilities. Julien (2002) defined information literacy skills as the ability to make efficient and effective use of information resources and stated that today's information literate person should have specific online searching skills, such as the ability to choose appropriate search terminology, construct a logical search strategy, and appropriately evaluate information.

According to recent research by Suleiman (2012), 96% of respondents believed that taking a user education session helped them improve their searching abilities, while 100% stated that doing a user education program helped them better use the Library Online Public Access Catalog (OPAC). According to Ntui, Etuk, and Ofem (2011), knowing the frequency of attendance at library and literacy skills lectures is critical for an accurate evaluation of literacy skills improvement. In recent years, there have been requests to enhance educational curriculum and education quality to better prepare students for the workplace of the twenty-first century. Knowledge literacy aids in the definition of an issue and the discovery of information to address it. Issa and Daura (2009) investigated the impact of information literacy on library usage and discovered a favourable correlation. However, according to Walsh (2013), information literacy teaching did not result in increased library utilization. Information literacy has a considerable impact on library utilization among students, according to Portman and Rousch (2004). Information literacy has an influence on the usage of library resources and, in the long term,

higher education achievement, according to Streatfield and Markless (2008). In today's information technology era, students with good information search abilities are more likely to use e-resources to improve the quality of their academic work. In their study on the use of electronic information resources by students at Mbarara University Library, Odongo and Okello-Obura (2013) found that 63 per cent of respondents used Internet search engines, while only 13.5 percent used e-books, 11.6 percent used CD-ROM, 7.5 percent used e-books, and 5.6 percent used scholarly databases.

Although the majority of advanced students reported difficulty accessing and retrieving information from external databases, as well as using the online public access catalogue, Omeluzor, Bamidele, Onuoha et al (2013) concluded that advanced students have a moderate level of information literacy skills. The information literacy skills course provides students with the skills and knowledge they need to successfully, legally, and ethically use the library's information resources while also engaging in lifelong learning.

Methodology

The survey method is the most appropriate for the study which focused on the influence of information literacy skills on petroleum training institute students. A total of four hundred and fifty (450) respondents were randomly selected (10%) from a population of 4,500 registered library users' registration statistics 2020/2021 academic session in Petroleum Training Institute Library Effurun, Nigeria. Data were collected from the selected regular and part-time students using questionnaires as the main instrument for data collection. The questionnaire was used for collecting data for this research. The research administered and collected questionnaires across the main library section. The return rate was 421 questionnaires while 391 were valid representing an 86.8% rate of return distributed. The data for the study were

presented in a bar chart, table's frequency and percentages for easy interpretation.

Sample and sample procedure

A sample of 391 (86.8 %) of the study's population of 450 (100%) was drawn and used for the study.

Instrument for data collection

A questionnaire was designed and used for data collection. It was designed based on the objectives of this study. The questionnaire was in two parts, the first part was designed to gather personal and demographic information of the respondents while the second part of the questionnaire was designed to collect information on the purposes of which petroleum training Institute students utilize electronic resources, frequency of use and level of information literacy skills of petroleum training Institute students.

Gender Distribution of Respondents

Table 1:

Genders	Frequency	Percentage
Male	206	53%
Female	185	47%
Total	391	100%

Table 1 above shows that the majority of the PTI students are male. This is an indication that there are more male students in PTI, it could be a result of the nature of the courses. The responses revealed that 206(53%) are males while 185(47%) are females.

Objective 1: The purposes of which petroleum training institute students utilize electronic resources.

Table 2:

Objective 1: Purpose of use of e-resources

S/N	Purposes of use of e-resources	Strongly agree	Agree	Disagree	Strongly disagree
1	I follow blog discussion on subject area of interest via the Internet access for information	192(49%)	153(39%)	29(7%)	17(4%)
2	I use the Internet in the library to sources materials and information	263(67%)	128(33%)	0	0
3	I use the e-resources	209(53%)	182(46%)	0	0

Validity and reliability of the instrument

The instrument was given to three experts whose research areas of interest include information literacy, Information dissemination and knowledge management for scrutiny and expert judgment. This was done to check the appropriateness of the instrument. A test retests method was used to measure the performance of the instrument and it provided a reliability coefficient of 0.85.

Data Analysis and Discussion

Out of 450 copies of the questionnaire that were administered to the petroleum training institute students, 391(86.8%) questionnaires were valid. The data collected in the study is presented according to the objectives of the study.

	journals provided by the library for my research				
4	I use OPAC for assignments	178(46%)	213(54%)	0	0
5	I use CDROM for assignments	121(31%)	198(51%)	29(7%)	43(11%)
6	I use online databases for searching information to augment my class notes	204(52%)	187(48%)	0	0
7	I use off line databases provided by the library for my assignments	194(50%)	197(50%)	0	0
10	I use e-books provided in the library	197(50%)	192(49%)	0	7(2%)

Source: Field Data

SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree.

The results presented in Table 2 show that the majority 263(67%) of the respondents strongly agreed that they use the Internet in the library to source materials and information. Similarly, 213(54%) of respondents agreed that they use OPAC for assignments. Likewise, 209(53%) of respondents strongly agreed that they use the e-resources journals provided by the library for my research. Meanwhile, 204(52%) of the respondents strongly agreed that they use online databases for searching information to augment their class notes whereas 198(51%) of the respondents agreed that they use CDROM for assignments while 197(50%) of

the respondents agreed and strongly agreed that they use offline databases provided by the library for assignments and they use e-books provided in the library. The result further reveals that 192(49%) of the respondents strongly agreed and agreed that they follow blog discussions on the subject area of interest via Internet access for information. The result indicated that PTI students are information literate as all the items got more than affirmative responses. This is very important especially for PTI students as the 21st century has witnessed too much information in multiple formats.

Objective 2: Frequency of use of e-resources by petroleum training institute students in Effurun, Nigeria

Table 3: Frequency of use of e-resources

S/N	E-resources	Daily	Twice a week	Once a week	Occasionally	Never
1	E-journals	73(19%)	101(26%)	115(29%)	95(24%)	7(2%)
2	E-books	46(12%)	98(25%)	130(33%)	117(30%)	0
3	Internet	261(67%)	86(22%)	35(9%)	9(2%)	0
4	OPAC	99(25%)	135(35%)	117(30%)	31(8%)	9(2%)
5	Online databases	125(32%)	112(31%)	101(26%)	43(11%)	10(3%)
6	CD-ROM	33(8%)	69(18%)	120(31%)	95(24%)	74(19%)

Source: Field Data

Table 3 reveal that majority of the respondents use the Internet daily 261(67%) while, 135(35%) of the respondent were use OPAC twice a week whereas 130(33%) of the respondents used e-books once a week. Similarly, 125(32%) of the respondents used online databases daily. This is indicated that the respondents utilized the library effectively.

Objective 3: What is the level of information literacy skills?

Table 3: Level of information literacy skills

S/N	Information literacy skills	Very high level	High level	Low level	Very low level
1	I can select the information that is most appropriate to my needs	162(41%)	187(48%)	27(7%)	15(4%)
2	I can introduce search strategies using Boolean logic and keywords	152(39%)	201(51%)	29(7%)	9(2%)
3	I can define the information I needs	158(40%)	179(46%)	41(10%)	13(3%)
4	I can determine the authoritativeness, correctness and reliability of the information sources	147(38%)	211(54%)	25(6%)	8(2%)
5	I have the ability to identify different sources of information	172(44%)	192(49%)	21(5%)	6(2%)
6	I have the capability to evaluate www sources	152(39%)	176(45%)	52(13%)	11(3%)
7	I have the ability to use information to answer questions and/or solve problems	160(41%)	181(46%)	47(12%)	3(1%)
8	I find it easy to locate information sources	149(38%)	231(59%)	11(3%)	0
9	I have the ability to select search strategies by data, subject and language	167(43%)	199(51%)	19(5%)	6(2%)
10	I can improve my information literacy skills by learning from my information problem solving experience	142(36%)	217(55%)	23(6%)	9(2%)
11	I can use many resources at the same time to make a research	139(36%)	196(50%)	42(11%)	14(4%)
12	The quality of my information-seeking process and its products can be criticized by me	149(38%)	216(55%)	20(5%)	6(2%)
13	I have the capability to organize, apply and communicate information	141(36%)	181(46%)	52(13%)	17(4%)

	to others				
14	I can initiate how and where to find the information I needs	167(43%)	204(52%)	20(5%)	0
15	I can synthesize newly gathered information with previous information	154(39%)	175(45%)	62(16%)	0

Source: Field Data

To ascertain the level of information literacy skills of the respondents, various options were provided and the respondents were requested to indicate the ones acceptable to them. As shown in Table 4 the information literacy skills level of the respondents is very high level and high level. 231(59%) of the respondents find it easy to locate information resources, and 217(55%) of the respondents claimed that the quality of their information-seeking process and its products can be criticized by them/ they can improve their information literacy skills by learning from their information problem-solving experience whereas 211(54%) of the respondents claimed that they can determine the authoritativeness, correctness and reliability of the information sources. Similarly, 204(52%) of the respondents claimed that they can initiate how and where to find the information with previous information. Also, 201(51%) of the respondents claimed that they could select search strategies by data subject language/ they can introduce search strategies using Boolean logic and keywords whereas 196(50%) of the respondents claimed that they could use many resources at the same time to make research among others.

Discussion of findings

The findings of this study discovered that petroleum training institute students strongly agreed that, they used the Internet in the library to source materials and information, Online Public Access Catalogue for assignments, e-resources journals provided by the library, and online databases for searching information and CDROM for assignments. This is in line with Suleiman (2012) that 100% of the respondents agreed

that the user education program helped them to better use the Library Online Public Access Catalog (OPAC). Buttressing the findings of this research, the Association of College and Research Libraries (2018) stated that a literate person should be able to identify, locate, retrieve, evaluate, synthesize and present the newly acquired knowledge so that others can use it and translate these abilities and concepts to new projects and disciplines. The findings also revealed that the Internet is used daily, OPAC twice a week, e-books once a week and online databases daily. This is supported by Odongo and Okello-Obura (2013) that 63% of the respondents used Internet search engines, while only 13.5% used e-books, 11.6% used CD-ROM, and 7.5% e-books and 5.6% used scholarly databases. Also, supported by Ntui, Etuk and Ofeni (2011) affirm that for effective assessment of literacy skills development, it is important to know the frequency of attendance of library and literacy skills lectures.

The findings also, indicated that the information literacy skills level of the respondents is very high level/ high. The respondents find it easy to locate information resources, quality of their information-seeking process and its products can be criticized them/ they can improve their information literacy skills by learning from their information problem-solving experience, and they can initiate how and where to find the information with previous information, they could select search strategies by data subject language/ they can introduced search strategies using Boolean logic and keywords and they could use many resources at the same time to make research among others. This assertion is in line with

Anyaoku, Ezeani and Osuigwe (2015) who scored the search skills of librarians in universities in southeast, Nigeria very high with the ability to locate information using library catalogues, encyclopaedia, indexes and abstracts. Also, supported by Tan, Gorman and Singh (2012) in their research on information literacy competencies among school librarians in Malaysia found out that the respondents were information literate.

Conclusion and Recommendations

The use of electronic resources in today's world of exponentially growing knowledge has been greatly aided by recent advances in information and communication technology. Students' academic performance increases when they use electronic resources because they have access to updated knowledge. According to the conclusions of this study, an individual's level of information literacy abilities has a crucial effect on influencing the degree to which PTI students use electronic resources. The findings suggest that people's capacity to recognize a need for information, as well as their search abilities, are predictive of their usage of electronic resources in the classroom. To achieve a higher level of resource utilisation, the teaching of information literacy skills to PTI students should be pushed and encouraged. In addition, the management of the Effurun Petroleum Training Institute should guarantee that electronic materials are continuously available, with suitable information communication technology tools to ease their use.

References

- Anyaoku, E. N., Ezeani, C. N. & Osuigwe, N. E. (2015). Information literacy practices of librarians in universities in South-East Nigeria. *International Journal of Library and Information Science*.7(5), 96-102, DOI: 10.5897/IJLIS2014.048, <https://www.academicjournals.org/IJLIS> Association of College and Research Libraries Information Competency for Higher Education (2018). www.wesleyan.edu.
- Chartered Institute of Library and Information professional (2018). Information Literacy. www.cilip.org.uk. (Retrieved 30/01/2021)
- Gbaje & Okojie V. (2011) User-oriented access to knowledge initiatives in Nigerian University Libraries. *Nigerian Libraries*, 44(1). 3-56
- Grgic, I.H. (2016) Information literacy and Open Access in Croatian Academic Libraries. *Library Review*, 65, 255-266. <https://doi.org/10.1108/LR-01-2016-0009>
- Issa, A.O., Amusa, B. & Daura, U.D. (2009). Effects of information literacy skills on the use of e-learning resources among students of Ilorin, Kwara State, Nigeria. *Library Philosophy and Practice*.
- Julien, H. (2002) "Use of Information". In: Schement, J.R., Ed., *Encyclopaedia of Communication and Information*, Macmillan Reference, New York, 1051-1056.
- Kodani, L. (2012) Information literacy for electronic resources. PowerPoint Presented at the 17th Annual Technology Colleges and Community Worldwide Conference November 2012, <http://creativecommons.org/licenses/by-nc-nd/3.0/us/e>

- Ntui, A., Etuk, M. & Ofem, C. (2011). Literacy skills development for Tertiary Institutions: A case study of the University of Calabar. *Information Technologist (The)*, 8(1), 73-181. DOI: [10.4314/ICT.v8i1.72423](https://doi.org/10.4314/ICT.v8i1.72423)
- Odongo & Okello Odongo (2013). Students' perception, use and challenges of electronic information resources in Federal University of Petroleum Resources Effurun Library. <https://www.researchgate.net/publication/309719871>. Accessed Jan 30 2022
- Ojedokun, A.A. (2007). *Information literacy for Tertiary Education Students in Africa*. Third World Information Services Ltd., Ibadan.
- Omeluzor, S.U., Bamidele, I.A., Onuoha, U.D. & Alarape, A.A. (2013). Information literacy skills among postgraduate students of Babcock University, Nigeria. *International Journal of Innovative Research in Management*, 2, 1-18.
- Petroleum Training Institute Library (2019) Annual Report.
- Portman, C. & Rousch, A. (2004). Assessing the effects of library instruction. *Journal of Academic Librarianship*, 30, 461-465 <https://doi.org/10.1016/j.acalib.2004.07.004>
- Streatfield, D. & Markless, S. (2008). Evaluating the impact of information literacy in higher education: Progress and prospects. *Libri*, 58, 102-109. <https://doi.org/10.1515/libr.2008.012>
- Suleiman, S. A. (2012). User education programs in academic libraries: the experience of the International Islamic University Malaysia students. *Library Philosophy and Practice*. Retrieved from <http://unllib.unl.edu/LPP/ali.pdf>
- Tan, S., Gorman, G. & Singh, D. (2012). Information literacy /competencies among school librarians in Malaysia. *LIBRI: International Journal of Library and Information Services*. 62 (1). 98-107
- Walsh, J. (2013). The effects of Targeted, connectivism-based information literacy instruction on Latino students' information literacy skills and library usage behaviour <http://hdl.handle.net/10150/312502>