# Information Literacy in Indian Schools: Trends and Developments\*

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#### ABSTRACT

Information Literacy (IL) is considered as an important aspect of everybody's life. In today's information society possessing IL skills is more significant than ever as information is available in many forms and formats. Schools are the primary places where these skills are imbibed in students. Organizations like UNESCO, IFLA, ALA, AASL, & ACRL have formulated IL Standards and Guidelines/Models at the international arena. Though the Government of India is making efforts in providing information literacy skills yet there are no set of standards/guidelines devised by any agency/organization at the school level. This paper gives a brief account of IL initiatives and highlights the trends and developments of IL programmes in Indian School Libraries. It recommends the nation to form a national level advisory committee to develop IL framework for Indian school Libraries. Further, it suggests that librarians should work in close collaboration with teachers for better results. A moderate attempt has been made to provide feasible solutions for effective implementation of IL programmes in school libraries.

# 1. Introduction

In the last two decades Information Literacy has gained momentum all over the world. In the digital environment where information is produced abundantly in varied forms and formats, its access, analysis, evaluation and ethical use has become an issue. Library professional in developed countries such as USA, UK, Canada, and Australia have realized the need for information literacy and accordingly prepared Standards/Guidelines/Framework for Information Literacy. To make students succeed in their academic endeavor, as well as lifelong learners these Standards have to be made

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an integral part of the college/school curriculum. Thus it is imperative to make such provisions in school curriculum for information literacy to make learning process easier and to lay a stronger foundation for students' future life.

The ubiquity of technology has changed the way learners access information and interact with others (OECD, 2017). A study conducted by Gunn (2005) indicates that most students rely on Internet while completing homework assignments. Technology integration has made a swift take over the young readers (Kumbar & Pattanshetti, 2013). The abundant availability of information in many forms and formats has made the users' task difficult. Despite the argument that technological advancements have made access to information easier, there is an ongoing concern that students are still not becoming information literate, that they cannot retrieve and evaluate the information that will be required for problem-solving and decision-making in the workplace and in society generally (Moreira, 2010). Since there are no standards/guidelines for information literacy at national level, hence libraries follow different methods of providing information literacy skills to the students in India.

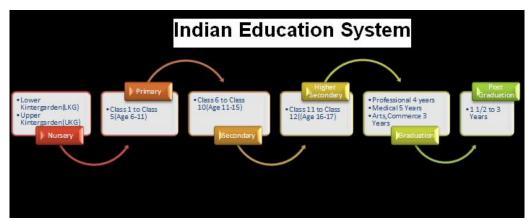
Too many digital natives do not apply checks on the information they access: around one in four 12-15 year olds make no checks at all when visiting a new website, and less than one in ten ask who made the site and why (Bartlett & Miller, 2011). In this changing information environment, skills and ability of locating, evaluating, analyzing the information and using it for making proper decision has become significant. Therefore, there is a need to train users in locating, evaluating and using the required information meaningfully. This paper specifically provides an overview of Information Literacy initiatives by the Indian school libraries.

# 2. Brief History of Indian Education System

The ancient Indian civilization, also known as 'Vedic Civilization', has carved a permanent niche in the history of India. Vedic literature such as 'Vedas', 'Upanishads', 'Samhitas' are praised and practiced even today. This 'Vedic literature' fortunately or unfortunately resulted in institutionalization of 'Varna System' (Caste based Society). There were four 'Varnas' Viz.; Brahmin, Kshatriya, Vaishya and Shoodra. At one point in the history of Indian education system, caste system was strong enough to decide the learner and learning facilities. Like; only Brahmins could study Vedas and Upanishads and other kind of literature which again is taught by Brahmin teacher only. Other three Varnas had the specified jobs and related trainings; Kshatriyas were trained warriors, Vaishyas were entrepreneurs and Shoodras were laborers.

The change in socio-economical-political history of India has witnessed the changes in its education system also. India was ruled by Persians, Mughals and British for over 700 years. India got independence from British rule on 15<sup>th</sup> August 1947. Since then it is an independent democratic Country. As the last rulers were British, the education system was highly influenced by them and India still follows the colonial education system.

At present, Indian education system follows KG (Kinder-garden) to PG (Post-graduation). It starts from Nursery, Primary, Secondary, Higher Secondary, Graduation and Post-Graduation. Technical/Professional courses like Medicine and Engineering start after 10+2 grade.



Source: http://www.fia.edu.in/gp/I%2015/GP%20web%20html/home.html

Fig 1. Indian Education System

Also, there is a Government recognized 'Open and Distance Learning' facility. 'Madrasa', the Arabic education system, is also in force and having many Boards in various States. The Government also runs 'special education schools' for differently abled children.

# 3. School Education System in India

After independence, school education became the responsibility of the States. Whereas, the Government of India is responsible for educational planning and policy, coordination, maintenance of standards, research and training and so on for higher and technical education. However, the Central Government has set up three national agencies to help school education - the Central Advisory Board of Education (CABE), the National Institute of Educational Planning and Administration (NEUPA) and the National Council of Educational Research and Training (NCERT). NCERT is the apex body for matters on school curriculum in India. In addition, National Education Planning and University Administration (NEUPA) and the National Council for Teacher Education are responsible for management of teacher education and accreditation system.

India, with more than one billion populations, is the second largest education system in the world. India has more languages than any other country. The literacy rate in India is 72.1% (Adult Literacy Rate) and 90.2% (Young Adult Literacy Rate). It varies from State to State; as each State is governed by an elected government system, however the Central Government monitors the progress. According to the 2011 Census, the State of Kerala achieved the highest literacy rate (93.91%). But in 2013, The Chief Minister of Tripura State announced that the State of Tripura has achieved the highest rate of literacy (94.65%). Bihar has lowest (63.8%). The national literacy rate as per the 2011 Census Report of Government of India is 74.04%. The world's second largest populated country needs a lot more efforts to reach 100% literacy.

The efforts of the Government of India particularly after Independence, in universalizing the education through programmes such as *Sarva Shiksha Abhiyan* (SSA), Mid-day meal, *Rashtriya* 

Madhyamik Shiksha Abhiyan (RMSA), ICT at School, National Literacy Mission etc., have contributed in increasing the rate of literacy. During the last decade and a half, the number of out-of-school children has fallen by almost half and a record number of girls and boys are now enrolled in school of Asia and Africa (Alexander, Kwauk, & Robinson, 2016). Though there is a progress in children enrollment, approximately 250 million children still fail to read and comprehend a simple text or perform basic mathematical calculations, despite the fact that 150 million of these children are in school for four years (UNESCO, 2017). There are two historical milestones in Indian school education system; National Policy on Education, 1988/92 and Article 21-A "Right of children to free and compulsory education" of Right to Education Act, 2009. The report of School Education in India 2015-16 states that there are total 1.52 million schools in India and more than 260 million students are enrolled in primary, upper primary, secondary and higher secondary schools (NUEPA, 2016).

The National Knowledge Commission (NKC) has been examining issues relating to school education across the country, with the aim of framing a set of national level recommendations for school education.

# 4. School Libraries in India

Libraries are an essential part of school education system. The students are receptive and attentive at that age. If trained and educated properly at that age, they are the assets for future nation building process. School libraries are places where students can be trained in understanding issues like author's right, intellectual property rights, open access, copy right and fair use etc. This type of basic information literacy will help students to become responsible citizens and develop respect for library system.

According to the National Curriculum Framework of the National Council of Educational Research and Training (NCERT), India, 'The School Library should be conceptualized as an intellectual space where teachers, children and members of the community can expect to find the means to deepen their knowledge and imagination'.

The library facility in Primary schools is in a doleful condition. In 1998 the Indian Library Association (ILA) surveyed the schools in Delhi and found that most of the government primary schools had no library at all and in secondary schools the libraries were substandard. Further, while highlighting the role of the school library as the heart of school, Dr. S R Ranganathan stated that the school libraries should act as laboratories for students and the librarians should function as guides to help the students in learning and using the books for improvement of knowledge and scholarship (Mahajan, 2010).

In 1948 at the 18th meeting of the CABE, the government of Bihar raised the question of relationships between the state governments and local bodies with respect to administration of elementary education. The ministry of education therefore appointed this committee in 1951. One of its significant recommendations regarding text books was that – the state governments should prescribe, on the advice of official and non-official experts in the subject, the books to be used in primary schools, and where more than one book happens to be prescribed in a subject, the local body should have the freedom to choose any one of the prescribed books in a subject for use in schools under its

control'. This is the beginning of having various types of knowledge resources in libraries in the form of textbooks.

Kothari Commission on school libraries was established by the Government of India in 1962 to study the problems of school library system recommends that school curriculum as totality of learning experiences provided under supervised conditions. Libraries of higher education system in India are flourishing because of the efforts and constant monitoring of University Grants Commission (UGC). However, school libraries are still neglected and need quick attention, NUEPA report reveals that 82.84% of the schools have library facility whereas, only 20.70% of secondary and higher secondary schools have librarian (NUEPA, 2016).

# 5. Information Literacy: Trends and Developments

The term Information Literacy (IL) was first used in 1974 by Paul Zurkowski in a report to the National Commission on Library and Information Science (NCLIS). 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. The need for information literacy was felt as back as in 1980s, to deal with the exponential increase of information in variety of forms particularly digital information. Today, the volume and format of literature is available abundantly. Thus it has thrown major challenges to the seekers of information. Therefore, IL has become an increasingly necessary competency to navigate through the deluge of information to meet our information needs (Foo et al., 2014). This requires skills and techniques of searching, evaluating, synthesizing, analyzing and to use information effectively and efficiently. This explosion of information and its proper search strategies should be taught at a young age, i.e. from primary school level. As a result, school libraries need to train users in effective, efficient and ethical use of information. Most of the developed countries have formulated and implemented standards, guidelines and framework for information literacy; the reason being their resourcefulness.

UNESCO's famous Prague declaration 2004, "Towards an Information Literate Society", calls for immediate action for promotion of Information Literacy by all countries in the world (Karisiddappa, 2004). This recommendation has led to take major steps by various countries towards Information literacy promotion around the world. IFLA School Library Guidelines, 2015, clearly states that the school librarians should focus on the core pedagogical activities viz.; Literacy and reading promotion, Media and information literacy, Inquiry-based learning, Technology integration, Professional development for teachers, Appreciation of literature and culture.

### 5.1 Information Literacy Initiatives at Global level

Information Literacy has become a global issue which received greater attention in 1990s & 2000s. This led to framing of IL standards/guidelines/framework in many countries. The ALA, AASL, UNESCO, IFLA and several organizations worldwide developed IL programmes. A few of such initiatives are mentioned in the following paragraphs.

The American Library Association (ALA) formed a Presidential Committee on Information Literacy in 1989 which took the initiatives and devised IL standards and indicators. These standards and guidelines provide essential competencies required to information seekers. The American Association of School Librarians (AASL) released National School Library Standards for Learners, School Librarians, and School Libraries. It provides school librarians with a structure to develop curriculum tailored to their local priorities and accommodate learner growth through personalized experiences (American Library Association, 2018).

The SCONUL Working Group on Information Literacy published "Information Skills in higher education: a SCONUL position paper" in 1999, introducing the Seven Pillars of Information Skills model. This model was revised in 2011 and then reviewed in the year 2015. This model has been adopted by librarians and teachers around the world as a means of helping them to deliver information skills to their learners.

The Association of Colleges and Research Libraries (ACRL) formulated IL framework and competency standards. In 2011, ACRL formed the Task Force to revise existing information literacy standards. In 2016, the ACRL board adopted the 'Framework for Information Literacy in Higher Education' based on a cluster of interconnected core concepts, with flexible options for implementation, rather than on a set of standards or learning outcomes, or any prescriptive enumeration of skills.

The Council of Australian University Librarians (CAUL) approved the revision and adoption of ACRL standards and named the revised set of benchmarks as Information Literacy Standards. The second edition was renamed as the Australian and New Zealand Information Literacy Framework (ANZIL), providing four guiding principles and more comprehensive details for each of the six core standards. This framework has been extensively adopted by many educational institutions in the entire region (Bundy, 2004). At Victorian School, Australia, Nicholls (2015) developed a multi-stage literacy programme that consisted of five cycles; Diagnostic Assessment Cycle, Strategies Cycle, Mid-Cycle Assessment, Strategies Cycle and End of programme assessment supported with data tracking system. He designed the 'Literacy Continuum' to collate and track each student's literacy assessment data to assess each student's improvement.

In 2003 IFLA and UNESCO jointly organized a workshop for Southeast Asian countries to improve Information Literacy education in schools (Singh et al., 2005). In 2010 a group of researchers from Nanyang Technological University, Singapore proposed 6+3 model to help develop Information Literacy standards in Singapore schools (Mokhtar et al., 2009). A New Curriculum for Information Literacy (ANCIL) framework was developed following the findings of the Arcadia project at Cambridge University. It aims to empower undergraduates for handling new information situations (Coonan & Secker, 2011). School librarians recognize the importance of having a systematic framework for the teaching of media and information skills, and they contribute to the enhancement of students' skills through collaborative work with teachers (IFLA, 2015).

# 5.2 Information Literacy Initiatives in India

According to UNESCO's All Global Monitoring Report 2013-14, India is one of the 21countries facing an extensive learning crisis. Even with increased access to school, millions of children aren't

learning the basics while in primary schools due to various challenges. The librarians and teachers shall work together to enhance the literacy rate among school children's in India.

The promotion of Information Literacy programmes in India has gained momentum recently. The Government of India has set up a National Knowledge Commission (NKC) in 2005 to prepare a blueprint to tap the enormous reservoir of knowledge base and with a mandate to transform India into knowledge based society. In pursuance of NKC 2009's recommendations for sustained attention for development of libraries and information sector, the Ministry of Culture, Government of India in 2012 set up a National Mission on Libraries (NML) a High Level Committee. The Capacity Building is one of the core components of NML which would undertake to enhance the professional competency of library staff. This has enhanced the knowledge and skills of library staff to take initiatives in conducting information Literacy training for children particularly at school level.

# 5.2.1 Information Literacy Programmes in Indian Schools

In India, very few schools have a course-related/course-integrated information literacy programme. Most of the Indian schools will have weekly/fortnightly library periods wherein students are issued general reading books. Kumbar states that every class gets two library periods in a week, first period of the week is allotted for issue/return period and the second period of the week is library activity period. Further, the author reported that this period is structured as Loud/oral reading, Individual silent reading, Cooperative or Participative reading and written assignment based on reading (Kumbar, 2009). Initiations like this will help;

- students to learn to use all types of resources at an early age
- in the academic performance of students due to their ability to research and gather information from various sources and
- increase general awareness and performance in non-academic activities (Kumbar, 2008)

In total, it helps in overall development of children. But the structured IL programmes would be even more effective in a holistic development of children. The Kendriya Vidyalaya Sangathan (KVS) has developed eight Standards for IL viz.; define an information task, develop information seeking strategies, locate and access information, use information, synthesize information, participate in collaborative activities, evaluate the process and the product, and appreciate literature (KVS, 2012). In her research paper, Kumbar (2008) has discussed some of the successful strategies adopted in promotion of users skills at Zydus School for Excellence, Ahmedabad viz; Structured Library Periods, Adopt a Book Project, Five Best Friends in the Library and Application of Multiple Intelligence Theory for the effective use of library resources by K-2 students.

The Navodaya Vidyalaya, a network of residential schools for rural Indian children covering 6<sup>th</sup> - 12<sup>th</sup> class, have designed syllabus to provide opportunities to use information and IT to facilitate learning process. It is further reported that the National Institute of Science Communication and Information Resources (NISCAIR), erstwhile INSDOC, has developed an audio-visual programme for junior school children about how to find information from various sources. And many schools have a library hour as a part of the curricula, for project work/assignments (Barul & Naskar, 2016).

In S.D.V. Government School, Neerakunnam (Kerala), a child will handle issue/return work in every classroom. Students are using text books, reference books, newspapers and other resources in the classrooms itself. The circulation records are maintained by one student called child librarian. With this practice, more resources are used by the children in every class and it is also systematically maintained. The need for individual project works has led to greater use of libraries. As a result, there is a growing need for promotion of information literacy across the curriculum, with school librarians being actively involved in promoting these skills.

# 5.2.2 Role of Library Associations/ Educational Institutes/Non-Government Organizations (NGO) in Promotion of Information Literacy in India

A number of seminars/conferences/workshops are being organized in India by national LIS associations, educational institutes/universities and creating awareness for information literacy skills. Few such initiatives are mentioned in the following paragraphs.

To promote information literacy in South and Southeast Asia, a one week IFLA-ALP International Workshop on Information Literacy was held in 2005 at Punjabi University, Patiala with the objectives of generating appropriate information literacy standards and guidelines in the respective countries within the region. This workshop gave an opportunity for Indian delegates to know and understand the IL efforts being done in India and other South and Southeast Asian countries. The Indian Library Association (ILA), a member of IFLA and Commonwealth Library Association, is working for the development of library profession in India. In 2005, ILA organized the 51<sup>st</sup> annual conference on "Libraries, Information Literacy and Lifelong Learning" to create awareness and the importance of promotion of information literacy. The University of Madras, Chennai, organized a national seminar on "Information Literacy and higher education" in 2007. The 59<sup>th</sup> ILA annual conference held at the Indian Institute of Technology, Roorkee in 2014, recommended that, Information Literacy and Lifelong Learning are key elements for the development of generic capabilities of individuals and need to be included in the core and continuing education of information professional, educators, policymakers, administrators etc.

There are also some NGO's working on improving the literacy and reading skills of children in India. "Improved reading skills for 100 million children in primary grades" is one of the three major goals of USAID. It partners with Tata Trusts and the Center for Micro-Finance under 'Nurture Early Literacy Project', and aims to provide equitable access to libraries for children both in schools and communities and to improve the reading skills of primary school children in the states of Rajasthan, Maharashtra and Karnataka (USAID, 2018). Room to Read, an NGO, pushed policymakers in India to increase students' time in school to read and explore the library, influencing legislation in 2014 that mandated library time in every public school and for reading instruction to begin in a lower grade (Alexander, Kwauk, & Robinson, 2016).

Some efforts have been made at various possible levels to provide IL skills at school level but it is like a drop of water in the ocean. The IL concept is very recent in India and much work

needs to be done to improve the literacy skills of school children in India. Therefore, there is a need for information literacy guideline/framework at national level.

# 6. Suggestions and Recommendations

Based on the literature surveyed, it is recommended that the Government of India should take the following measures while preparing IL framework/guidelines for Indian Schools.

- It should form a National Advisory Committee (NAC) to develop a framework/guidelines for Information Literacy for lifelong learning at school level.
- The NAC should consist of a representative from the Ministry of Education, senior school librarians, principals of schools, teachers of schools, senior educationists and legal advisors.
- The NAC should seek help from international organizations/associations like UNESCO, IFLA, IASL, AASL etc., while framing IL guidelines/framework.
- The NAC must coordinate with all the stake holders; NKC, NML, NCERT, NEUPA, CABE, and professional associations like ILA, IASLIC, IATLIS, ISLA and seek inputs from them to develop the IL framework/guidelines.
- · Without affecting an individual State's interest, the policies should be framed; as India is a multicultural and multilingual country.
- Each State should form a Task Force, which should work under the National Advisory Committee.
- The task force must ensure that all schools have a well-equipped library and a qualified librarian.
- It is the responsibility of the Task force to bridge the communication gap between policy makers and the implementation team (librarians).
- Finally, the librarians and teachers should collaborate and implement course related/integrated IL curriculum.

# 7. Conclusion

The LIS associations and stake holders around the world have realized and recognized the importance of IL skills and prepared Standards/Guidelines/Framework for IL; as only educated, skilled and informed citizens can contribute more for development of the nation. However, the IL initiations in India are at a nascent stage. The syllabi of most of the schools do not mandate for high use of library except for assignments and project works. A negligible numbers of schools run and managed by the private management and government schools such as KVS & Navodaya have library oriented syllabus and have good library services and facilities too. Therefore, the syllabus of the schools should be prepared with more emphasis on the use of library.

Presently, Indian school libraries practice Information Literacy programme in the form of bibliographic instruction, library instruction, library orientation and user education. It is observed that integrating information literacy into school curriculum enhances the students' knowledge and their research skills and also creates awareness about ethical use of information among them. Therefore, librarians and teachers must collaborate and work in partnership to enhance IL skills of the school students and to make them lifelong learners. In this burgeoning information era, a model Framework/Guidelines for IL at national level in India is the need of the hour. Professionals associations and stake holders must formulate such guidelines/framework as per the local need.

# References

- Alexander, J., Kwauk, C., & Robinson, J. P. (2016). Room to Read: Scaling up literacy through localized solutions across Asia and Africa. Washington, DC: The Brookings Institution.
- Bartlett, J., & Miller, C. (2011). *Truth, lies and the internet a report into young people's digital fluency*. Retrieved from https://www.demos.co.uk/files/Truth\_-\_web.pdf
- Barul, T., & Naskar, S. (2016, September 8). Information literacy and librarian-faculty collaboration in academic library for sustainable teaching learning environment: an integrated approach.
   Paper presented at the National Seminar on Exertion to Establish Knowledge Society: Responsibility of Academic Libraries, West Bengal, India.
- Bundy, A. (2004). Australian and New Zealand Information Literacy Framework: Principles, standards and practice (2nd Ed.). Retrieved from http://archive.caul.edu.au/info-literacy/InfoLiteracyFramework.pdf
- Coonan, E., & Secker, J. (2011). A New Curriculum for Information Literacy (ANCIL)-Curriculum and supporting documents. Retrieved from https://www.repository.cam.ac.uk/bitstream/handle/1810/244638/ANCIL\_final.pdf?sequence =1&isAllowed=y
- Foo, S., Majid, S., Mokhtar, I. A., Zhang, X., Chang, Y. K., Luyt, B., & Theng, Y. L. (2014). Information literacy skills of secondary school students in Singapore. *Aslib journal of information management*, 66(1), 54-76.
- Gunn, H. (2005). Become a Google Power user. Teacher Librarian, 32(5), 14-21.
- International Association of School Librarianship (IASL). (1993, September). *Policy statement on school libraries* [Information on a page]. Retrieved from https://iasl-online.org/about/organization/sl policy.html
- International Federation of Library Associations and Institutions (IFLA). (2015). *IFLA School Library Guidelines* (2nd Ed.). Retrieved from https://www.ifla.org/files/assets/school-libraries-resource-centers/publications/ifla-school-library-guidelines.pdf
- Karisiddappa, C. R. (2004). Literacy concepts in the LIS: information literacy and capability building. In *International workshop on Democratization of Information*: Focus on Libraries.
- American Library Association (ALA). (2018, March 30). *State of America's libraries 2018* [Information on a page]. Retrieved from http://www.ala.org/news/state-americas-libraries-report-2018
- Kendriya Vidyalaya Sangathana (KVS). (2012). *Library Policy 2012: Equipping the Learners for 21<sup>st</sup> Century*. Retrieved from http://www.kv3bathinda.com/public/unipage/16011.pdf

- Kumbar, R., & Pattanshetti, D. (2013). Essential competencies of Indian school librarians in the digital age: A study. Paper presented at the 79th IFLA WLIC 2013, Singapore.
- Kumbar, R. (2008). School libraries as foundation for world class learning: Experiences of an Indian librarian. Paper presented at the 37th Annual conference of the International Association of School Librarianship, Berkeley, USA.
- Kumbar, R. (2009). Developing reading as a virtue in Indian school libraries. Paper presented at the National Seminar on Role of School Libraries in Quality Education conducted by National Council of Educational Research and Training (NCERT), New Delhi, India.
- Mahajan, P. (2010). School libraries in India: Present-day scenario. Library Philosophy and Practice (e-journal), 371. Retrieved from http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1384&context=libphilprac
- Mokhtar, I. A., Foo, S., Majid, S., Theng, Y. L., Luyt, B., & Chang, Y. K. (2009). Proposing a 6+ 3 model for developing information literacy standards for schools: A case for Singapore. Education for Information, 27(2-3), 81-101.
- Moreira, I. V. (2010). Information literacy in elementary schools. Retrieved from http://pure.iva.dink/files/30875376/Information Literacy in elementary schools 3 .pdf
- National University of Educational Planning and Administration (NUEPA). (2016). School education in India: U-DISE 2015-16. New Delhi: NEUPA.
- Nicholls, A. (2015, November 10). Designing a whole-school literacy program. ACER. Retrieved from https://www.teachermagazine.com.au/articles/designing-a-whole-school-literacy-program
- Organization for Economic Co-operation and Development (OECD). (2017). Education at a Glance 2017: OECD indicators. http://dx.doi.org/10.1787/eag-2017-en
- Singh, D., David, L., Cheunwattana, A., Guaysuwan, P., & Choovong, L. (2005). Development of information literacy through school libraries in Southeast Asian countries. Bangkok: UNESCO. Retrieved from https://files.eric.ed.gov/fulltext/ED496352.pdf
- U.S. Agency for International Development. (USAID). (2018, April 13). Education [Information on a page]. Retrieved from https://www.usaid.gov/india/education
- UNESCO. (2014). Teaching and learning: Achieving quality for all-EFA Global Monitoring Report 2013/14. Paris: UNESCO.

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