



# Digital Citizenship Literacy and Democratic Competence in the Pandemic Covid-19 in Bandung Indonesia

Endang Danial<sup>(✉)</sup>, Dede Iswandi, and Hesty Khoirusnaini

Universitas Pendidikan Indonesia, Bandung, Indonesia  
endangdanial@upi.edu

**Abstract.** Students are young citizens who strategically determine their nation in the future. Their digital literacy degree is determine the degree of student democracy. Nevertheless actually student democracy is not only the duty and responsibility of the civic teacher in the school but is the responsibility of all components of education. The study seeks to provide therapy to help civic teachers collaborate with parents of students in building democratic students in schools. High school in Bandung, there is a significant influence on improving the democratic attitude of students in schools. The research method used action research, with steps (1) description of digital literacy levels and democratic attitudes of students and teachers in schools (2) reflection and analysis (3) proposed teacher and parent collaboration model and tried/action (4) evaluated/analyzed (5) modified. Location in high school in Bandung and its surroundings. The results show that the description of the digital literacy level of high school students in Bandung is quite high, teacher participation is quite high, There is significance and contribution between teacher and student literacy in schools through WFH Zoom meetings. During the COVID-19 pandemic. Through the learning action of the digital citizenship learning development model for high school teachers in Bandung, there is a significant influence on improving the democratic attitudes of students in schools.

**Keywords:** digital citizenship · digital literacy · democratic competence

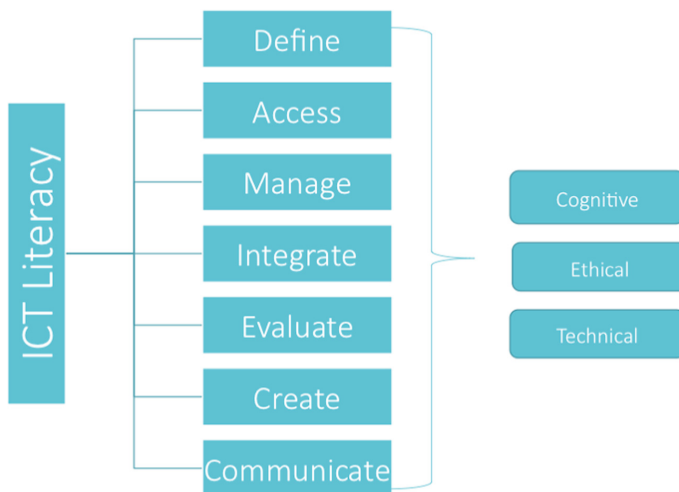
## 1 Introduction

The dependence of students using gadgets in learning and communicating during a pandemic for more than two years is very dominant. Likewise, the use of digital technology is very helpful for teachers to teach and parents to work at home. Digital literacy is the ability of a person who is very decisive to be able to interact well, in accessing, choosing, processing and making decisions of a person, both individually and in groups. Digital literacy is also considered as a vehicle for one's freedom to channel aspirations, for every citizen participate, collaborate openly, by not being tied to time and space. Open horizons by not being tied to time and space, free to communicate and collaborate with the citizens of the world wherever they are. Civic Education teachers in schools are trying to

nurture students to become smart and good citizens. The problem is how digital literacy owned by students can help develop students' democratic competencies so that they become provisions later in the life of the nation and state in society. Students' democratic competence is defined as freedom of thought, independent decision-making to solve problems, obedient, discipline and responsibility, communicative, collaborative, creative and innovative. Previous studies have found the condition of civic education teachers and students so far in Bandung, there is still low courage to speak, argue, collaborate, and slow decisions. The solution is invited with CE teachers by playing games as a stimulus so that they can dare to speak, argue and make decisions. The solution is invited with CE teachers by playing games as a stimulus so that they can dare to speak, argue and make decisions. This study aims to describe the degree of digital literacy of CE students and teachers and the democratic competence of students during the COVID-19 pandemic. Is there a significant relationship between digital literacy and students' democratic competence in schools. The solution is invited with CE teachers by playing games as a stimulus so that they can dare to speak, argue and make decisions. This study aims to describe the degree of digital literacy of KDP students and teachers and the democratic competence of students during the COVID-19 pandemic. Is there a significant relationship between digital literacy and students' democratic competence in schools. To improve students' democratic competence, a learning collaboration model between teachers and parents of students in CE learning in schools is proposed.

Experts describe concept maps with regard to digital literacy as shown in Fig. 1.

Media literacy according to Livingstone... to ability to access, analyse, evaluate and create message across a variety of contexts [1] Another conceptual picture of building democratic competence in students in schools according to experts demands all parties 'building democratic school environments is the responsibility of all stakeholders' [2]. Because the democratic competence that is possessed as a result of student learning, is the result of collaboration from various parties. Parents of students, playmates,



**Fig. 1.** ICT Literacy NovaDaryanti's (2018)

teachers at school, principals, social environments, government agencies, other business and social institutions. Based on the analysis of political and public policy and education experts, it is stated that there are several indicators that in everyday life can be detected..... a review of employers' 21st century expectations of school leavers, we find that: cooperation, complex problem solving, critical thinking, autonomy, creativity, empathy, accountability, emotional intelligence, multiperspectivity, cognitive flexibility, entrepreneurship, ICT literacy and readiness for life-long learning are all vitally important skills. Complex competence, which concerns the knowledge, attitudes and behavior of a person's interaction in everyday life.

It is strategic in fostering the character and democratic disposition of the nation through education in schools. CE teachers can develop understanding, attitudes and skills of democracy through online learning during the Covid-19 pandemic, it requires the cooperation of all parties, especially parents at home. Democratic family conditions, the freedom of the child to interact with his friends, the child is invited to dialogue, between the child and the child, the child with the mother, and the father in everyday life. Prioritizing there is deliberation in making decisions in the family, the child is more valued, his aspirations are more determinant than the decrees of his father or mother.

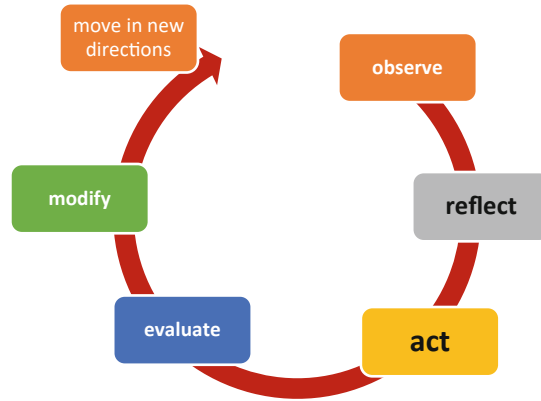
According to Ribble and Bailey [3] digital citizenship can be described as the norms of appropriate, responsible behavior with regard to technology use. ... Those nine elements are as follows;

1. Digital Access; full electronic participation in society
2. Digital Commerce; the buying and selling of goods online
3. Digital Communication; the electronic exchange of information
4. Digital Literacy; the capability to use digital technology and knowing when and how to use it
5. Digital Etiquette; the standards of conduct expected by other digital technology users
6. Digital Law; the legal rights and restrictions governing technology use
7. Digital Rights and Responsibilities; the privileges and freedoms extended to all digital technology user, and the behavioral expectations that come with them
8. Digital Health and Wellness; the elements of physical and psychological well-being related to digital technology use
- 9 Digital Security; the precautions that all technology users must take to guarantee their personal safety and the security of their network

So students learn at home during the covid-19 pandemic in full together with teachers through online learning, assisted and facilitated by their parents. Students learn to develop their knowledge competencies, skills, and ethics, disciplines, responsibilities, as citizens based on digital technology.

## **2 Research Methodology**

The research is action research method, based on version of the plan in McNiff et an action-reflection cycle [4];



Action research aim to be a disciplined, systematic process. A notional action plan is;

- Take stock of what is going on
- Think of a possible way forward
- Try it out
- Monitor the action by gathering data to show what is happening
- Evaluate progress by establishing procedures for making judgements about what is happening

Begin with research and evaluation of the digital abilities of teachers and students in schools in their learning process. The objects are learning civics in schools, especially regarding knowledge, attitudes, and communication skills with friends, parents, teachers, community members, and the state. such as accessing, processing, and communicating properly, ethically and social responsibly. The respondents of this study were purposive, namely 20 high school teachers and 200 high school students (Bandung City, Bandung Regency and West Bandung). After knowing the description of the respondent's digital learning literacy, the democratic competence model was tried to help their awareness in entering a new era of life. The trials were carried out in two schools, one in Kota and one in the Bandung district. After the trial was carried out, it was evaluated and revised jointly by researchers, experts and teachers.

## 2.1 Observe/Take Stock of What is Going On

The first step to find out the digital literacy of students and teachers is carried out by surveying, namely distributing questionnaires for teachers and students around the city of Bandung, Bandung Regency and West Bandung. The questionnaire will be distributed on 15–23 May 2021 via google list: [https://docs.google.com/forms/d/1cggUinX\\_m8yfyumLpNwje4TMOSoqKmm1lVeldZ\\_220viewanalytics](https://docs.google.com/forms/d/1cggUinX_m8yfyumLpNwje4TMOSoqKmm1lVeldZ_220viewanalytics). Data collected on 16 CE teachers, and 121 students.

## 2.2 Reflect/Think of a Possible Way Forward

Based on the results of a survey from CE students and teachers in schools, it can be identified that the digital literacy of students and teachers in Bandung is quite high.

But in democratized life there are still many less conducive, freedom, aspiration and discipline and responsibility in using cellphones and computers, in learning and communicating. Based on these problems, it is proposed to CE teachers in schools to provide more opportunities to ask questions to students, dialogue between students in groups, train to solve popular problems based on concepts/rules and actual data in society. This is considered to help teachers as a therapy to improve the democratic competence of students in schools by involving students to be more courageous in asking questions on various occasions through online, or in-person, student group dialogues in solving problems.

### 2.3 Try it Out

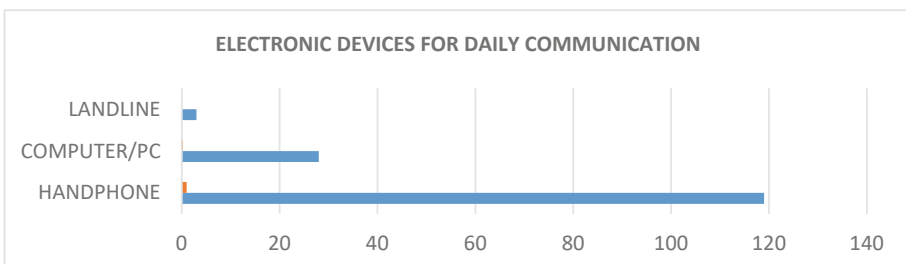
Based on the agreement between researchers and teachers, it was proposed by teachers of SMA N Pasir Ciwidey, Bandung Regency, and SMAN I Cimahi as a pilot project, to try a digital literacy model to increase students' democratic competence in learning CE in schools. The results are really encouraging. Teachers provide more opportunities for students to ask questions, through online learning (zoom meetings). More students ask questions, express opinions, which are different when they are in class face-to-face. More than one year (2020–2021) during the COVID-19 pandemic, learning at home is used to learning with teachers online, dialogue in groups, with teacher monitors. There is freedom of expression when given the issue of legal compliance in society (Ban on Eid homecoming 2020/2021).

### 2.4 Evaluate Progress by Establishing Procedures for Making Judgements About What is Happening

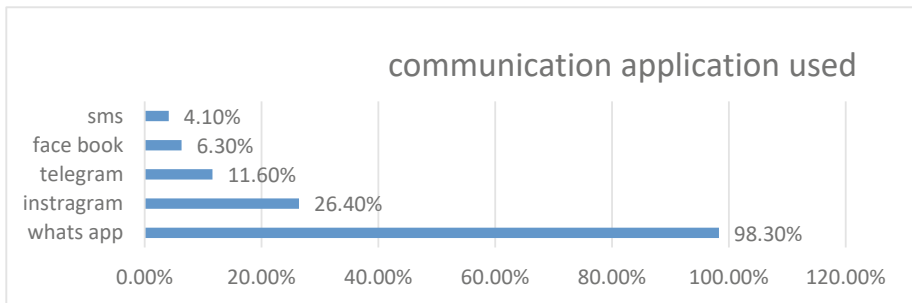
From the results of the digital literary model trial, there are several indicators as a therapy that can improve students' democratic competence in learning KDP in schools. It can even be modified and directed at a more significant degree of questioning and focus of the question with the CE learning material.

## 3 Result and Discuss

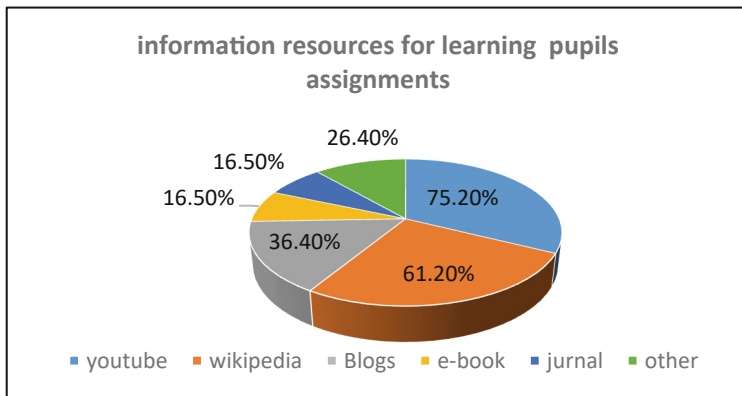
### 3.1 The Description of the Results of the Survey on Digital Literacy of SMA in Bandung Students in 2021 from 121 Students and 16 CE Teachers is as Follows: The Gadget that is Often Used by Students Daily Students is Cellphones (98.3%), Laptops/PCs (23.1%) Landlines (2.6%)



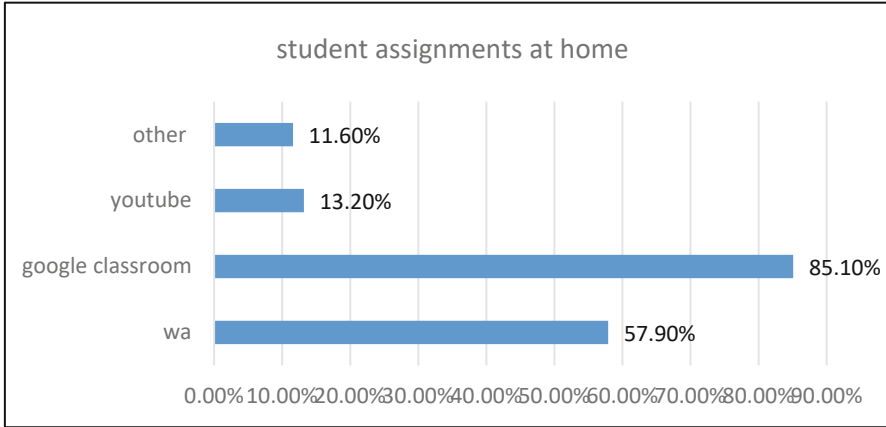
Student communication tools are owned, handphone (98,3%) laptop/personal computer (23,1%) and landline (2,5%). When students receive information from family, school, teachers, friends, ordinary relatives. In daily life the students use communication applications on computers and HP's.



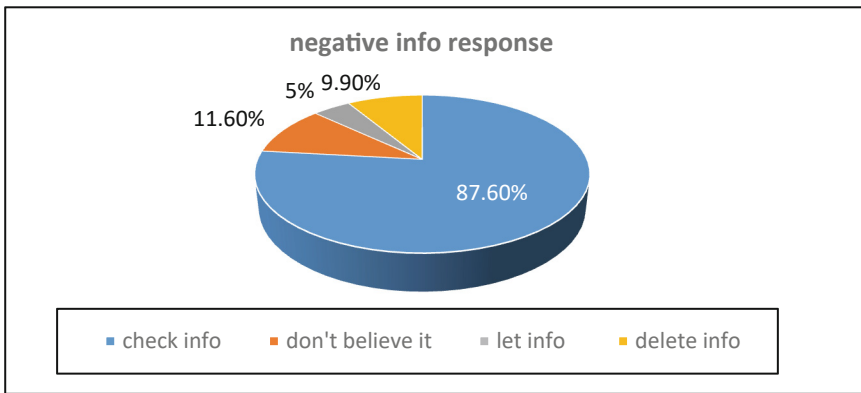
The applications and social media used by the students are chosen mainly to learn and assignment from their teachers. The sources of information they chose were the most prominent from youtube (75.20%) wikipedia ((61.20%) blogs (36.40%) e-books (16.50%) journals (16.50%) and other 26.40%), as seen in the diagram below:



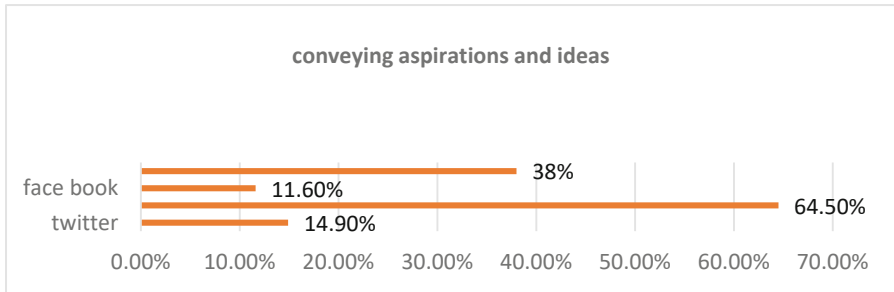
Likewise, the completion of tasks they do both individually and in groups is conveyed to their teachers through applications according to their respective abilities, as presented in class through online google classroom (85.10%) wa (57.90%) youtube (13.20%) and others (11.60%), as seen in the graph below;



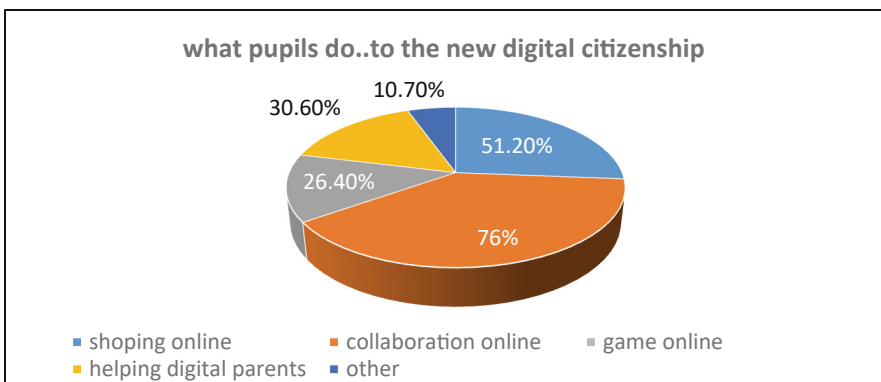
Another description is the selection of information they do, especially things related to study assignments and negative information, generally students check first (87.60%) they feel distrustful (11.60%) even deleted (9.90%) or they let that info (5%).



Media and applications to convey information to friends, family and others according to their abilities and literacy, for example, which is more prominent through Instagram (64.50%) their reasons are quite varied, including this media is used to convey illustrations of images, photos, selfie etc. Twitter (14.90) according to they are chosen for information faster, freer, and from all walks of life. Likewise, the face book (11.60%) that these media students think is for those who enjoy writing, and is more in-depth argumentative of something social problem that is happening. Likewise, other media are very many among the students (38%). As the diagram below illustrates:



Entering a new order of order in digital life that many students do most prominently is online communication and collaboration in various aspects of their lives (76%) something natural life in the city that demands faster, more precise interaction and is considered cheaper. Shop/snack shop online (51.20%) according to students are more comfortable, safe, less complicated, even cheaper. It can be done by anyone as long as they can use the application, anywhere, anytime, it can be done. The interesting thing is that this media is also according to students very helpful for parents (30.60%) to complete digital transactions, such as electricity account payments, tuition payments, taxes, ticketing, banking transactions, and others (10.70%). As the diagram below illustrates:

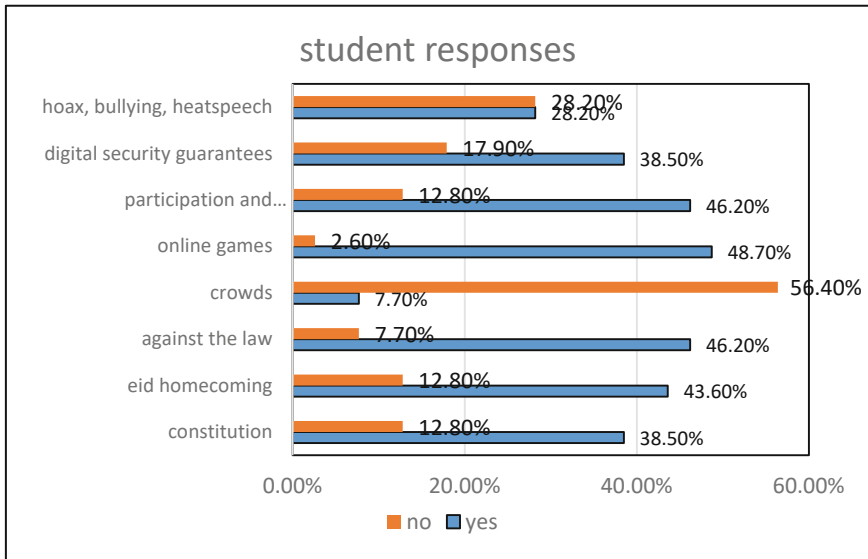


### 3.2 Reflect/Think of a Possible Way Forward

Based on the description of the findings, which were then discussed with the teacher, students' digital literacy was quite good, more than 60% knew and interacted well with digital. Furthermore, how this digital literacy can contribute to the maturity of student democracy. Learning conditions during the pandemic were carried out using (60.25%) Whatsapp and YouTube (62.53) Zoom meetings (43%), and giving assignments (50%) learning evaluations were carried out online. Communication with parents of students is done online via WhatsApp (87.60%) and another (31.3%). CE teacher learning resources to enrich the sought-after materials of journals, articles and youtube (100%) books (50%) e-books (25%). Communication in learning by teachers and students is limited and



rigid depending on Wa. Lack of freedom of opinion, courage to express opinions, solve problems on their own and not be afraid of being wrong. Learning activities are very dominantly carried out by CE teachers through Google Classroom. Based on discussions and agreements with teachers, a legal compliance problem solving model was chosen to develop courage and freedom of opinion in order to improve students' democratic competence. Tried at SMAN, Ciwidey Bandung Regency, and SMAN I Cimahi Bandung. Legal compliance; (1) the constitution, (2) the 2020/2021 homecoming ban case, (3) legal certainty, (4) against the law, (5) crowds during a pandemic, (6) online games, (7) legal participation and collaboration, (8) security guarantees, (9) bullying, hoaxes, heatspeech. The results provide the following description: student response from (61) students (39 + 22) students involved from both schools. Students reject the amended constitution, comply with the ban on going home, refuse crowds during a pandemic, better participation and collaboration, refuse to violate the law, have legal guarantees for netizens who use digital technology and hate hoaxes, hate speech, and bullying. It looks like the diagram below:



### 3.3 Evaluate Progress by Establishing Procedures for Making Judgements About What is Happening

In terms of civic knowledge, it can be seen that there is a significant difference between the pre-test and post-test, meaning that there is an increase in students' knowledge abilities in democracy. As shown in this table.

student	pre test	post test
1	13030	16510
2	12670	17260
3	11980	14620
4	11910	16730
5	11400	17250
6	11380	16460
7	11150	17410
8	10920	13090
9	10600	16330
10	10050	14680
11	9990	15050
12	9510	16280
13	8940	14390
14	8750	16610
15	8670	13590
16	8230	10880
17	7960	13380
18	7900	11820
19	7400	14340
20	7290	13370
21	7180	13380
22	7110	11120
	9728,182	14752,27
	0,7216	

It can be seen that there has been a significant change as a result of the students' response to their increasing knowledge, on the civic knowledge side as well as on the response side about their democracy. The average test score acquisition, and high correlation (0.7216). In the future, it is ensured that the development of a democracy learning model, which is based on solving problems in legal cases that are more concrete and up to date in CE learning, can be modified frequently. So that it can improve the democratic competence of students in schools.

## 4 Conclusion

Based on the description of the findings regarding digital literacy, students are quite good at being strong provisions to be more courageous in responding; argue, ask questions, are not afraid of being wrong, about existing problems. Digital literacy gives the

freedom to choose, sort, various information that students want, as well as giving the freedom to express opinions and aspirations. Students who have high mastery of digital communication tend to have broad insight and high imagination, a clear vision and mission in life. Therefore, it is necessary to have a clear legal order. There is legal certainty to guard all parties so they don't go too far so as to reduce inflammatory information, provocations, hoaxes, heatspeech, bullying among students, or other members of the community. Likewise, there are legal guarantees from the government to all citizens to maintain comfort and safety using social media and applications in digital technology. Digital literacy is not only for student learning at school but concerns the interactions of everyday life in life.

## References

1. Suryadi, Israwati, (2013) Kajian Perilaku Menonton Tayangan Televisidan Pendidikan Literasi Media pada Remaja. *JURNAL AKADEMIKA*, Fisif Untad, 5(1) hlm. 973–986
2. Bäckman & Trafford, Silverblatt (2007) *Media Literacy, Key to Intrepreting Media Message* Westport: Praeger
3. Ribble Mike, Bailey Gerald (2007) *Digital Citizenship in Schools*, Eugene, Oregon, Washington DC., ISTE
4. McNiff Jean, Whitehead, (2006) *Action Research, an Introduction*, London, Thousand Oaks, New Delhi, Sage Publications

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

