



International Journal Of Engineering & Technology

[ABOUT](#) [CURRENT](#) [ARCHIVES](#) [APC](#) [JOIN US](#) [CONFERENCES](#) [CONTACT](#)

[Q SEARCH](#)

[HOME](#)

[Contact](#)

Contact

Science Publishing Corporation

Jordan, Amman,

Queen Rania Street, The Union Building, Office 29

Principal Contact

Editorial Team

editor@sciencepubco.com

Support Contact

Support Team

support@sciencepubco.com

[ABOUT JOURNAL](#)

[Aims and Scopes](#)

[Indexing and Abstracting](#)

[Editorial Board](#)

[Author Guidelines](#)

[Submit a Manuscript](#)

Special Issue on **Advances in Applied Engineering Research (AAER)**

Chief Guest Editor:

Dr. Ranjan Mishra

University of Petroleum and Energy Studies, Dehradun (Uttarakhand)

Email: rmishra@ddn.upes.ac.in

Â

Guest Editor:Â

Mr. Raj Gaurav Mishra

University of Petroleum and Energy Studies, Dehradun (Uttarakhand)

Email: rgmishra@ddn.upes.ac.inÂ

Scientific Performance E-Rubric-Assisted Problem-Based Learning For Improving Learning Effectiveness

Muhammad Nur Hudha, Arief Rahman Hakim, Sudi Dul Aji, Maria Igrasia Tasi, Chandra Sundaygara, Eko Pramudya Laksan, Tri Andi, Andista Candra Yusro, Hartoto ., Uwes Anis Chaeruman 283-285



E-Module Based On Ncesoft Flip Book Maker For Primary School Students

Arnelia Dwi Yasa, Denna Delawanti Chrisyarani, Saâ€™dun Akbar, Alif Mudiono 286-289



Relationship Between Latex Production And Physiology Of Rubber Clone Pb 260

Yayuk Purwaningrum, Yenni Asbur 298-301



Optimization Of Piwulang Text Learning By Using Media Of Powerquiz Game

Vaundra Yudha Perdana, Raheni Suhita, Kundharu Saddhono, Rio Devilito, Yusuf Muflikh Raharjo, Bagus Wahyu Setyawan, Atikah Anindyarini, Sumarwati ., Damayanti Suhita, Firman Aziz, Erwan Kustriyono, Rostamaji Kornawan, Dian Syahfitri, Ngatmini ., Fajar Ari Widiyatmoko, Purwati Zisca Diana 302-305



The Effectiveness Of Applying E-Book In Teaching Indonesian To Speakers Of Other Languages (TISOL) In Supporting Foreign Studentsâ€™ Self-Learning In Indonesia

Sri Hastuti, Kundharu Saddhono, Sri Marmoah, Endang Rahmawati, Dian Uswatun Hasanah, Farida Yufarlina Rosita, Elen Inderasari, Irma Arifah, Fitri Puji Rahmawati, Nurhannah Widianti, Mohamad Jazeri, Siti Zumrotul Maulida, Sawitri ., Roni Sulistiyono, Nise Samudra Sasanti 277-279



Introduction Blended Learning Designs On Introduction To Linguistics At West Indonesian

Yendra ., Willy Satria, Wahyudi Rahmat, Edwar Kemal, Dewi Kusumaningsih, Benedictus Sudyana, Prembayun Miji Lestari, Ratna Susanti, Anak Agung Ayu Dian Andriyani, Eka SusyLOWATI, Agus Budi Santoso, Dwi Bambang Putut Setiyadi, Wiwik Yulianti, Arrie Widhayani, Nailly Nur Kholidah, Kundharu Saddhono, ., 310-313



Cybersastra Phenomenon As An Implementation Of Information And Communication Technology (ICT) In Literary Education

Ririn Setyorini, Edy Suryanto, Kundharu Saddhono, Yosi Wulandari, Wachid Eko Purwanto, Sugeng Riyanto, Rafika Fajrin, Luthfa Nugraheni, Anang Sudigdo, **Sujarwoko** ., Suprpto ., Ririen Wardiani, Siti Fatimah, Khabib Sholeh, Sukini . 314-317





Cybersastra Phenomenon as an Implementation of Information and Communication Technology (ICT) in Literary Education

¹Ririn Setyorini, ²Edy Suryanto, ³Kundharu Saddhono, ⁴Yosi Wulandari, ⁵Wachid Eko Purwanto, ⁶Sugeng Riyanto, ⁷Rafika Fajrin, ⁸Luthfa Nugraheni, ⁹Anang Sudigdo, ¹⁰Sujarwoko, ¹¹Suprpto, ¹²Ririen Wardiani, ¹³Siti Fatimah, ¹⁴Khabib Sholeh, ¹⁵Sukini

¹Universitas Peradaban Brebes

^{2,3}Universitas Sebelas Maret Surakarta

^{4,5,6}Universitas Ahmad Dahlan Yogyakarta

⁷IKIP Veteran Semarang

⁸Universitas Pancasila Makassar

⁹Universitas Sarjanawiyata Tamansiswa Yogyakarta

¹⁰Universitas Nusantara PGRI Kediri

^{11,12}STKIP PGRI Ponorogo

¹³Universitas PGRI Semarang

¹⁴Universitas Muhammadiyah Purworejo

¹⁵Universitas Widya Dharma Klaten

*Corresponding author E-mail: ririnsetyorini91@gmail.com

Abstract

ICT (*Information and Communication Technology*) is a facility in which its scope includes all technical devices to process and to deliver all various information. ICT in education is considered as learning based computer and multimedia. ICT utilization as literary work distribution media and its literary learning becomes phenomenal. This results in the easiness of distribution and publication of literary works written by litterateur and the easiness of learning literature wherever and whenever without requiring face-to-face learning. ICT is also very useful for students in searching learning sources related to literature, in terms of literary works like poetry, short story, novel and etc. The easiness of ICT in introducing and distributing literary works stimulates the existences of new litterateur in all range of age and gender. If litterateur previously was in old age, in this futuristic era the young litterateur can be easily found. This phenomenon, then, contributes in the existence of new term in literature of *Cybersastra* or literature in virtual world. In this study how ICT role in literature education and how ICT utilization in realizing *Cybersastra* phenomenon will be discussed.

Keywords: *cybersastra, ICT, literary learning, learning media*

1. Introduction

In this modern era with all futuristic aspects, using media which is easy to access whenever and wherever becomes necessary. The use of futuristic media is the impact of technology development. Technology develops along with the times [1]. Without information technology development, we will be left behind by developed country. Information and communication technology or ICT is a system or technology which can reduce space and time to take, to move, to analyze, to display, to save and to deliver data information. Information technology includes all aspects related to the process, information technology utilization as an aids, manipulation, and information management. Besides, communication technology refers to all aspects related to aids utilization for processing and transferring data from one device to the others. Thus, information technology and communication technology are considered as an unseparated concept.

The application of ICT in education has given contribution for learning technology development. Its application in learning process, there is a tendency to combine two or more technologies,

such as audio and data technologies, video and data technologies, audio-video technology and internet [2]. Internet is a means of communication easily accessed and giving a possibility for two or more people interaction. The benefit and characteristic of internet possibly makes distance teaching and learning process (e-learning) more effective and efficient and gives a better result. The existence of e-learning facilitates students to access learning materials provided by some sites. Moreover, students can interact with teachers or other students without coming to the class. Furthermore, online learning materials give everyone easiness in accessing materials without being measured up by space and time. This is in line with the study conducted by Firmansyah and Saidah about "Perancangan Web Based Learning sebagai Media Pembelajaran Berbasis ICT" (Designing Web Based Learning as Learning Media based ICT) [3]. This study showed that learning based web gave different learning environment and various learning source to student; eased teachers in giving learning material and source; eased teachers in giving test, checking test result and announcing students' achievement; and gave the easiness in conducting teaching and learning process without considering space and time as long as the internet connection is available.

ICT can also be presented and utilized in literature. ICT has an important role in literary learning, because it makes not only communication without space and time possible and but also learning more intensive and interactive. Besides, the easiness of ICT utilization gives a chance to anyone to be a litterateur easily [4]. Moreover, its existence in literary learning makes students easy to search learning source and definitely motivates them to learn literature. This is in line with the study conducted by Setyorini about “*Pemanfaatan Internet sebagai Implementasi ICT dan Sarana Memotivasi Belajar Sastra di Sekolah*” (Internet Utilization as an Implementation of ICT and a Means to Motivate Literary Learning in School). The result showed (1) the benefit of internet in education; (2) the benefit of internet in literary learning; (3) the influence of internet in students’ learning motivation; and that (4) internet utilization as an implementation of ICT and a means to motivate students in literary learning gives a huge impact in developing students’ potentials [5].

The development of ICT in literary learning gives many benefits. It gives a huge contribution toward the existence of new litterateur from all ranges of age and gender [6]. However, ICT in literature is known as literary cyber. Literary cyber refers to literature in virtual world or multimedia literature, including literary works presented in digital device or utilized multimedia as delivery device in terms of online or offline. This kind of literature eventually gets many critics related to its quality, area and kind of literary works. This is in line with study conducted by Supriatin [7] about “*Kritik Sastra Cyber*” (Cyber Literature Critics). The result showed that critic of Indonesian multimedia literature or critic of literature distributed in internet cannot be avoided. The exist litterateur are still young, about 14-30 years old. They wrote many problems of literature such as the different opinion about the existence of internet literature, literary work review and other information about literary books newly published, in which their critics is categorized as a general critic.

Based on the explanation above, the aim of this study is to describe how ICT role in education, ICT utilization in realizing *Cybersastra* phenomenon.

2. Methodology

This study is a qualitative descriptive research. The aims of this research are to describe and explain about *Cybersastra* phenomenon as an implementation of Information and Communication Technology (ICT) in literary education. Data collected technique using the literature study and interview with some expert informant. Data analysis using content analysis technique, with the phase are data reduction, data display, and conclusion drawing. For checking data validity in this research using data triangulation, that are triangulation source of data and theoretical triangulation.

3. Results and Discussion

3.1. The Role of ICT in Education

With the current development, paradigm about learning become shifted. This is proposed by Grafura dan Wijayanti that shift begins from learning paradigm, it shifts behaviorist into cognitivist, and then constructivist [8]. Cognitive-constructivist theory is learning theory prioritizing students to construct their knowledge in their own mind. This implies that learning process centers upon students (student centered). Student learning centered absolutely manages students to be more active in learning process. The meaning of active in this context is that teachers are only the facilitators. As facilitators, teachers provide everything needed by students. Teachers need a system in which their students can find everything without facing difficulties. Hence, ICT is a good offer for teachers to give facility in terms of learning media for students.

In relation to learning media, the requirement of good learning media as proposed by Simamora are that learning media should 1) increase students’ motivation 2) give students stimulus to remember what they has learnt as well as give a new stimulus, 3) give students stimulus to give comment, to give follow up, and encourage them to practice correctly [9]. Learning media is learning component which has an important role in teaching and learning process. The appropriateness of learning media utilization can influence the quality of learning process and learning result [10]. The variation of media utilized will extremely help teachers especially in choosing a right and an appropriate media used for some concepts and instructional purposes. In this study, ICT as a learning media expectedly can give the easiness for students to achieve learning goals.

Developed education is an education which eases students to get and to understand materials easily. The existence of ICT becomes a factor which makes education especially in Indonesia developed. ICT utilization in education makes learning and teaching process comfortable and effective. Students can be easier to get learning source.

ICT is a system with using computer and internet connection, has digital characteristic and bases on multimedia. Information and Communications Technologies (ICT) or known as *Teknologi Informasi dan Komunikasi* (TIK) in Indonesia is devices including radio, television, cellphone and computer. Besides, Arifin and Setiyawan states that ICT is a huge device including all technical devices for processing and delivering information related to two prominent aspects, they are information technology and communication technology [11].

Integrating ICT and education in learning indicates that teachers gradually maintains learning style used and then combines it with their teaching and learning philosophy into school philosophy and how they face students in class [12].

There are some requirement required to fulfill in applying learning based ICT, as follows:

1. Students and teachers must have access toward digital technology and internet in the class, school, and education institution. This implies that school must have a sufficient facility related to information and communication technology, like providing computer/laptop, computer network, internet, computer laboratory, multimedia devices in terms of CD, DVD, camera web, etc.
2. School must provide quality, meaningful materials as well as cultural support for students and teachers. Materials can be an interactive learning material with utilizing computer like CD and DVD of Learning Interactive.
3. Teachers must have knowledge and skill in utilizing digital devices and sources to help students achieve academic standard.
4. The budget or funding must be available and sufficient to present, to develop and to maintain facilities ICT.
5. There are willingness from all participants, teachers and students, to apply learning supported by ICT.

3.2. ICT Utilization in Realizing Cybersastra

The increase of technology development especially ICT can be considered as a revolution which give a great influence to all aspects of human life [13]. One of major influence is aimed to literature. As we know, literature is part of country’s culture. Country’s culture absolutely will be easy to develop along with technology development, and so does literature. The existence of internet or ICT can at least be utilized to increase literature development. Along with the times, ICT will give a new space for someone to create a work like *Cybersastra*.

Cyber is considered as ‘virtual’ or virtual world. *Cybersastra* is literature born as the impact of technology development. While literature previously uses book, newspaper or magazine as a media, *Cybersastra* uses media in terms of electronic or digital distributed online. Compared to newspaper or magazine literature, in *Cyber-*

sastra, writer can be easier to distribute their work to readers. This is resulted from no selection toward literary works published. Besides, this is also affected by the increase of technology development which become more sophisticated.

Cybersastra will definitely have a great prospect not only in Indonesia but also in other countries. *Cybersastra* gives a huge chance, not only for litterateur who write literary works but also for readers who appreciate literary work. However, the existence of *Cybersastra* becomes a big polemic. A major reason of this is that there is some people who still differentiate literature related to media. Magazine and newspaper literature are considered to have a better and higher quality than *Cybersastra*. This is resulted from that literary work published in both magazine and newspaper requiring a firmly selection. This situation is different from *Cybersastra*, which has no selection like both media. Beside media, there is an opinion about hegemony from senior who don't want their existences blocked by junior litterateur. Hence, the following will show polemic related to the existence of *Cybersastra*.

The development of Indonesian literature with using cyber media or multimedia technique arguably increases significantly. Supriatin assumes that the development happens slowly, stably, steadily [7]. A major reason this is that ICT utilization in Indonesia is still not dominant compared to internet utilization in the world which gets significantly increased. Based on Loekito's note [7], in 3 years of 1997-2000, it is estimated that there are more than fifty million internet users. Moreover, this amount gets increased to be four hundred million in 2000.

Supriatin proposes that the positive development of literature contributed by technology can be seen from some indication, as follows.

- a. Quality: the increase of digital literary works quality can be clearly seen from the amount of works from days to days. Besides, since conventional printed media like newspaper and magazine are still considered as the only consideration for measuring the quality of literary works, the increase of digital literary works quality can be seen from the significant increase of the amount of digital literary works passing editorial board of newspaper and magazine literature. They are Rukmi Wisnu Wardani, Anggoro Saronto, Herri Latief, dan T.S. Pinang who success in publishing their works in newspaper and book. Those admit that they were born, grow and developed as the result of digital media.
- b. Quantity: the development of Indonesian digital literature is indicated from the increase of literary work amount in cyber world and the amount of litterateur which is highly increased. This calculation doesn't included literature observers and passive litterateur.
- c. Scope: the increase of area can be considered as reference. This area refers to geographical position and private area. Geographical area can reached any corner of the world fast. However, private area ease individual from some private area to join.
- d. Type: although digital literature cannot be considered as a new genre, it has given other alternative in literature distributor, such as poetry tree, collaboration, multimedia and *computer geeks* literature [7].

Additionally, Maman S. Mahayana [14] states that quality of cyber litterateur is still questionable because some of them are good writer, but they are not a litterateur. Besides, Juniarto Ridwan, a litterateur from Bandung [14] commented that the complexities existing in *Cybersastra* like background, back sound and variation of words. He told about the meaning of word jumping, except to show the sophistication of digital technology. What the influence of music is, essentially having no relation to text showed, except to be received by ears which make historically and biologically meaning correspondence difficult to do. Moreover, Edi Loekito, a litterateur as well as a president of Yayasan Multimedia Sastra (Literature Multimedia Institute) [15] argues that the situation about newspaper literature arguing cyber literature is unimportant. He told how newspaper literature is considered or posi-

tioned as God of literature, and how *Cybersastra* is considered as a trash. According to him, that is an irrational discussion, except the discussion more focuses on research, comparative study, and analysis to search a way for more maximal achievement.

Besides, Asep Sambodja [15] also argues that although *Cybersastra* as love child or trash bin in Indonesian literature, it constantly has the same right as other literature. Moreover, the life of Indonesian literature is still fettered in canonization, still dependent on the authority. The first authority of Indonesian literature is Netherland colonial government which firstly constructs Komisi Bacaan Rakyat (Folk Reading Commission) which changes into Balai Pustaka (Literature Office). Balai Pustaka is owned by Netherland and Netherland hold the authority in almost one century since 1900.

Apart from litterateur's thoughts, as the teachers, we have to see *Cybersastra* as a positive thing. Along with the times, ICT is very necessary to improve literature education in teenagers' scope. Literary learning is considered successful learning if students have the works to proud of. The existence of ICT in publishing students' works contributes their improvement in learning literature. There are some ICT utilization used as learning material or literary work publication of *Cybersastra*, as follows.

1. E-Book: E-book is an abbreviation of electronic book. It is a guide book in digital version which accessed in electronic device. It has many types, including textbook, practice book, dictionary, etc. Besides, book for learning, e-book also provides novel, poetry, short story, children short story, etc. Those can be downloaded in virtual world whenever and wherever as long as the internet connection is available. The easiness results in the huge amount of litterateur who publish their works freely without selection. However, there are strengths of electronic book compared to printed book, including 1) being accessed easily, 2) being easily written without a great funding, 3) being saved easily and brought anywhere without wasting space, and 4) not requiring any treatment.

2. E-Learning: E-learning is a learning organized with utilizing electronic system or ICT, so it can support and ease learning process [16]. It is also called as distance learning process with combining some principle of learning process and ICT. This learning system is utilized as a facility for teaching and learning process conducting without requiring face-to-face interaction between teachers and students.

Characteristics of e-learning are 1) utilizing electronic technology service 2) utilizing computer special quality (digital media and computer network), 3) using individual learning material (self-learning material) then saved in computer, to be accessed by lecturer and students whenever and wherever, 4) utilizing learning schedule, curriculum, students' achievement and all aspects related to education administration which can be seen every time in computer. E-learning has some benefits including 1) giving flexibility in determining time and place to access learning process, 2) giving chance to students to independently control over the success of learning, 3) giving funding efficiency for management administration, efficiency for physical facilities provision in learning, funding efficiency for students in terms of transportation and accommodation funding.

Besides, learning through e-learning is expectedly able to give contribution to the existence of new litterateur. E-learning can give the easiness to students in obtaining credible learning sources and facilitate them to communicate directly with litterateur.

3. Social media and social networking: Social media is an online media in which the users can easily participate, share, and create contents including blog, social network (like facebook, twitter, path, line, instagram, etc), wiki, forum and virtual world. Blog, social network and wiki are kind of social media which generally used by society in all areas of the world. Besides, social networking is an internet service for online community who have similar activities, interests on certain field, and backgrounds. Social networking is usually called as friend networking.

4. Chatting: Chatting is an instant messaging in ICT to send information to other user, connected by internet. It becomes one feature of sophisticated information technology [17]. People, from children to adult, have been familiar with the term of chatting. It eases communication done by two person or more with utilizing online conversation application and internet connection. It can not only send text message, but also send emoticon, voice message even video.

5. E-Mail: Electronic mail or e-mail is a facility for sending letter through computer network or ICT. The use of e-mail doesn't cost funding and only utilizes internet connection. There are some types of email including pop mail, web mail and forward mail. Some email provider sites mostly used include Gmail, Yahoo, Hotmail, etc. Email service can be accessed through web or browser by firstly registering user's personal identity and then user will receive email address which is appropriate with the data filled.

4. Conclusion

From the explanation above, it can be concluded that the role of ICT in literary education is very important. ICT eases students in getting learning sources of literature in terms of literary works like poetry, short story, novel etc. ICT is a great influence in the existence of *Cybersastra*. The phenomenon of new litterateur and literary works existences is a phenomenon which has to be considered and seen positively. ICT utilizes in uploading and downloading literary works and becomes the media or literary learning source including e-book, e-learning, social media, chatting and email

References

- [1] N Palavitsinis, N Manouselis, & S Sánchez-Alonso "Metadata and quality in digital repositories and libraries from 1995 to 2015: A literature analysis and classification", *International Information & Library Review*, vol. 49, no. 3, pp. 176-186, 2017.
- [2] K Saddhono, & D Sulaksono. "Indoglish as adaptation of english to Indonesian: change of society in big cities of Indonesia", *IOP Conference Series: Earth and Environmental Science*, Vol. 126, No. 1, pp. 012092, 2018.
- [3] R Firmansyah & I Saidah. "Perancangan Web Based Learning Sebagai Media Pembelajaran Berbasis ICT" *Jurnal Informatika*, Vol.3 September 2016, pp. 176~182, 2016.
- [4] K Saddhono, H J Waluyo, & Y M Raharjo. "Kajian Sosiologi Sastra Dan Pendidikan Karakter Dalam Novel Nun Pada Sebuah Cermine Karya Afifah Afra Serta Relevansinya Dengan Materi Ajar di SMA", *JPI (Jurnal Pendidikan Indonesia)*, Vol. 6, No. 1, pp.16-27, 2017.
- [5] R Setyorini "Pemanfaatan Internet Sebagai Implementasi ICT dan Sarana Memotivasi Belajar Sastra di Sekolah" *Prosiding Pengembangan ICT dalam Pembelajaran. Program Studi Teknologi Pendidikan UNS. Surakarta*. pp. 50-63, 2015.
- [6] B W Setyawan, K Saddhono, & A. Rakhmawati "Sociological Aspects and Local Specificity in the Classical Ketoprak Script of Surakarta Style" *Journal of Language and Literature*, vol. 17, no. 2, pp. 144-151, 2017.
- [7] Y M Supriatin. "Kritik Sastra Cyber" *Jurnal Sosioteknologi*, Edisi 25, April 2012.
- [8] L Grafura, & A Wijayanti, *Metode & Strategi Pembelajaran yang Unik*, Yogyakarta: Ar-ruzz Media, 2012.
- [9] N R Simamora. *Buku Ajar Pendidikan dalam Keperawatan*, Jakarta: Penerbit Buku Kedokteran EGC, 2008.
- [10] A Arsyad. *Media pembelajaran*, Jakarta: Raja Grafindo Persada, 2002.
- [11] Z Arifin & A Setiyawan, *Pengembangan Pembelajaran Aktif dengan ICT*, Yogyakarta: Skripta, 2012.
- [12] F Nurdiansyah & F Eni, *Inovasi Model Pembelajar Sesuai dengan Kurikulum 2013*, Sidoarjo: Nizamia Learning Center, 2017.
- [13] K Saddhono, & M Rohmadi, "A sociolinguistics study on the use of the Javanese language in the learning process in primary schools in Surakarta, Central Java, Indonesia" *on International Education Studies*, vol. 7, no. 6, pp. 25, 2014.
- [14] Situmorang, Saut. *Cyber Graffiti: Polemik Sastra Cyberpunk*. Bandung: Angkasa, 2004.
- [15] Efendi, *Bahasa dan Sastra dalam Berbagai Perspektif*. Yogyakarta: Tiara wacana, 2008.
- [16] R E Mayer, "Using multimedia for e-learning" on *Journal of Computer Assisted Learning*, vol. 33, no. 5, pp. 403-423, 2017.
- [17] M A A Alryalat, et al, "Use of social Media in Citizen-Centric Electronic Government Services: A literature analysis" on *International Journal of Electronic Government Research (IJEGR)*, Vol. 13, no. 3, pp. 55-79, 2017.