

Teaching Design of Face to Face Online with Hypercontent in Education and Training Institutions (LKPD)

Andi Sukri Syamsuri and Ishaq

Abstract--- *The 21st century, which is known as the digital era, has had an impact on changes in all fields, including the world of education, which has come to be called education 4.0. Although it is already in the digital era, implementation in the world of education, especially in learning, has not yet had a significant impact and change, the achievement of 21st Century Skills is still a concept. One effort to achieve 21st Century Skills is through the implementation of innovative learning by integrating technological, pedagogical, content knowledge (TPACK) which refers to the blended learning model. Combining face-to-face learning in class (face to face) with online learning resources that are packaged through learning tools in the form of hyper content-based modules that are enriched with online learning resources. In this study, a questionnaire collection method was used about the teacher's perspective on the hyper content LKPD design that can be used in online face to face learning. The teacher's perspective shows that in general, the hyper content LKPD design can be one of the innovative learning solutions for students.*

Keywords--- *Hyper Content, Face to Face, Online, Learning.*

I. INTRODUCTION

The era of digital classes, robot assistants and online exams, is not impossible to realize and can be obtained in the current Education 4.0 era. With the help of education 4.0, students will be prepared to face digital challenges directly. The essence of this phenomenon is creativity which will certainly enable students to open a way out for them from various developmental challenges. The current phenomenon is a challenge that not only focuses on what is taught but also the way it is taught, and the educational model is entirely based on the need to meet the future needs of students.

According to UNESCO or the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2007) has created a framework of information and communication technology (ICT) competencies in the teaching and learning process. According to UNESCO considers that with ICT, the learning process will be easier and faster to develop.

Often, their thinking about pedagogy, content (the subject of teaching material), and technology has not been prioritized, whereas by Mishra and Koehler (2006). They articulate the relationship between content, pedagogy and technology both separately and in pairs from content knowledge (CK), pedagogical knowledge (PK) and technological knowledge (TK). In general, education is still in the process of how to manage learning (pedagogy). The reality in learning, most teachers still in the traditional learning zone (conventional models) with a teacher-

Andi Sukri Syamsuri, Universitas Islam Negeri Alauddin Makassar. E-mail: sukri.syamsuri@uin-alauddin.ac.id
Ishaq, Universitas Muhammadiyah Makassar. E-mail: ishaqmadeamin@unismuh.ac.id

centred learning approach. It needs to be an effort to shift the learning paradigm to the student-centred learning (SCL) approach by using various learning sources or technology-based learning media; this is in line with previous studies from studies by Pierson (2001) who "emphasize the importance of developing pedagogy related to technology and for actual integration in the classroom. The results show that there is a complex reciprocal relationship between users, tools and teaching practices.

However, the application of technology in education, especially into the learning system, has its problems. It requires time for the transformation process of the system that used to apply technology to the system that was more dominant in its application. These problems can be in the form of low competence of educators, especially teachers who lack professional skill in the field of ICT and added to the attitude of educators who are reluctant to follow changes and fear of new information technology. On the other hand, there is still a lack of experts (educational staff) who can operate ICT devices. Research conducted by Yusrizal, et al. (2017) shows the low ability of teachers to access internet media so that they need guidance, and the quiet ability is caused by age factors so that as a solution they still use traditional media in the environment around schools.

Online face to face learning is one solution to the problems of education in Indonesia, but this needs to be mastered by educators (teachers) and education staff, especially about technology that is compatible with education, as well as a better understanding of how to choose strategies or methods learning. Integrating technology into the learning process is one form of a technological, pedagogical, content-knowledge approach that is familiarly abbreviated to TPACK developed by Mishra and Koehler (2006). The TPACK framework is built on Shulman's (1986) concept of pedagogical content knowledge (PCK) with explicitly integrating the components of technological knowledge.

The relationship between several domains in TPACK shows there are at least 7 (seven) components (Mishra, 2006) First, knowledge of technology (technological knowledge, TK). Second, knowledge of how to educate or science education (pedagogical knowledge, PK). Third, knowledge of the substance (subject matter) that will be taught (content knowledge, CK). Fourth, knowledge about specific and appropriate technology is used in teaching certain material (technological content-knowledge, TCK). Fifth, specific pedagogical knowledge about technology (technological pedagogical-knowledge, TPK). Sixth, specific knowledge about specific teaching methods related to certain material (pedagogical content-knowledge, PCK). Seventh, knowledge of specific technologies and pedagogies that are appropriate to be used in teaching certain materials (technological, pedagogical content-knowledge, TPACK).

Along with the progress and use of digital technology among students today, especially those based on the internet, instructors are encouraged to increase understanding of the use and role of these technologies for the benefit of learning and to enrich the content or content of knowledge to be more interesting, more in line with the characteristics of students (digital natives) and the demands of education in the 21st Century as formulated by the Partnership for 21st Century Learning.

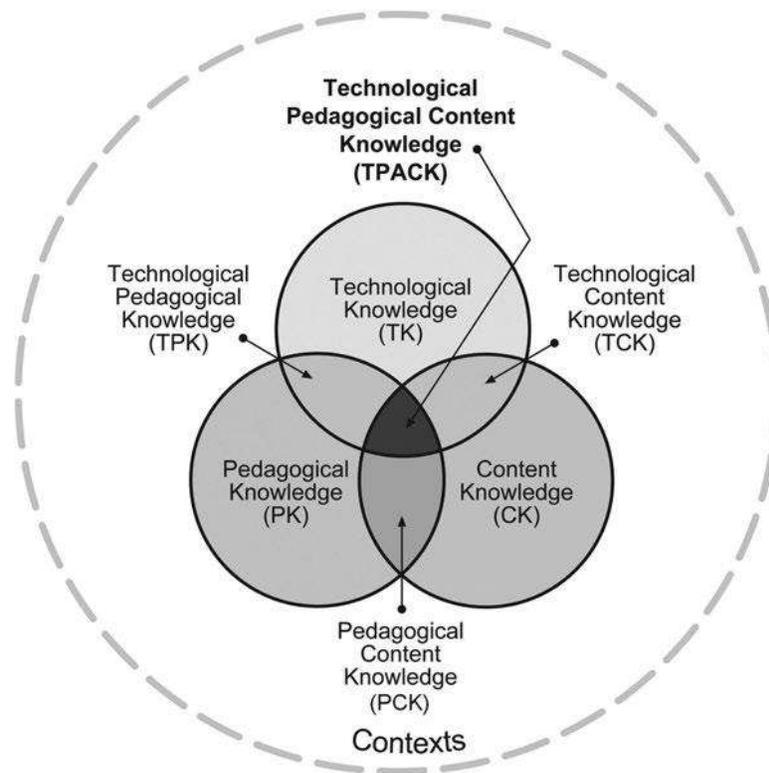


Figure 1: The TPACK framework and components of knowledge by Mishra and Koehler

One of the things that can be done is to design learning devices that are integrated with technological devices and can be connected with students' technological aids, and these learning devices can be applied in face-to-face learning in class. So students can access learning resources available in cyberspace through barcode codes available on hyper content LKPD. However, before it is used further in school, it is necessary to obtain a teacher's perspective on the accuracy of the technology used, the aspects of authenticity, aspects of interest, and aspects of the organization and the balance of hyper content LKPD that have been designed by the author.

II. FACE TO FACE ONLINE WITH HYPER CONTENT

Education and Training Institution (LKPD) Hyper Content

Student Worksheets, hereinafter abbreviated as LKPD, are sheets containing tasks that must be done by students. The activity sheet is usually in the form of instructions, steps to complete a task. (Ministry of National Education, 2008), whereas hyper content is composed of the word "hyper" meaning excessive or many, while "content" is defined as content, content. So that hyper content is interpreted as a lot of content. So, in general, the meaning of hyper content LKPD is student worksheets that contain a lot of learning resources and media.

There is a difference between traditional LKPD and hyper content-based LKPD, this traditional LKPD reading technique is usually orderly, coherent, i.e. following the path, such as unit 1 continues to unit 2, to unit 3, and so on, fragments of content are digested procedurally, completeness is obtained if the order of presentation is followed, while hyper content-based LKPD does not specify what unit to start or what unit to end, the reader can start from

anywhere as long as it is complete (Dewi, et al, (2017)). In addition, the traditional module with the hyper content module can also be distinguished by the number of pages used, the hyper content module uses fewer pages, but the number of sources of teaching material is far more numerous and diverse learning resources and types of media that are packaged through barcode images that can be opened by a scanning system and through the link that has been installed on the barcode.



Figure 2: Barcodes Connected to www.kbbi.web.id

With a hyper content-based module it is possible that the whole learning tool used in learning can be packaged into one part into a hyper content module, some learning tools previously-stored online include: 1) curriculum and syllabus, 2) Teaching Program Plans (RPP), 3) media presentations, 4) subject of supporting teaching materials (wiki, website), 5) books, 6) learning videos (youtube), 7) articles, 8) LMS learning resources, and 9) evaluation questions (Ishaq, 2019).

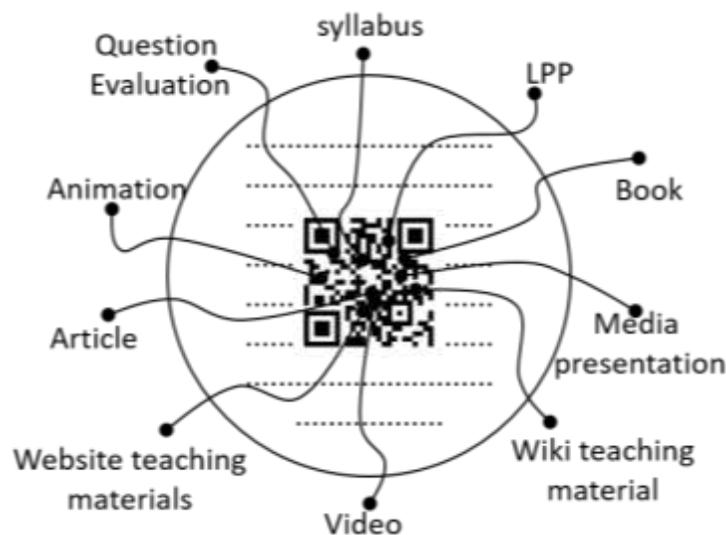


Figure 3: The Subject of Teaching Material in the Hyper Content Module

However, in the development of hyper content-based modules, a minimum uses a technological, pedagogical, content knowledge (TPACK) approach, meaning that in developing hyper content modules it meets the elements or 7 (seven) TPACK domains. Still, in general, these seven domains are interactions of 3 (three) main domains, namely technology, pedagogy, and subject matter (content).

Face to Face Online and LKPD Hyper Content

Face to face online aided by hyper content LKPD is one of the models of one blended learning model that can be implemented in education 4.0 is a face to face online strategy. Finn, A., & Bucci, M. (2004) define: blended learning integrates or blends learning programs in different formats to achieve a common goal, meaning that blended learning integrates or combines learning programs in different formats in achieving general goals. Heinze A and Procter C (2010) state that "blended learning is a mixture of various learning strategies and delivery methods that will optimize the learning experience of the user". It can be stated that blended learning is a mixture of various learning strategies and delivery methods which will optimize the learning experience for its users. Blended Learning Universe (BLU) (2019) states that there are 7 (seven) types that can be applied, namely station rotation, lab rotation individual rotation, flipped classroom, flex, A la carte, enriched virtual.

While by Teach Taught Team (2019) develops blended learning into 12 types that can be implemented namely: station rotation, lab rotation individual rotation, flipped classroom, flex, A la carte, enriched virtual, self-directed blended learning, inside-out blended learning, outside-in blended learning, supplemental blended learning, and mastery-based blended learning. The core of the types of blended learning that can be implemented is the availability of ICT-based learning resources, both connected to the internet, intranet, etc., as well as learning resources with the concept of learning management system (LMS) developed by institutions and individuals.

Face to face online hyper content-assisted LKPD can be interpreted as one of the learning models. It combines face-to-face in class with the use of gadgets in the form of smartphones or laptops connected to the internet during face-to-face learning in class, supported by hyper content-based teaching materials.

III. METHOD

This assessment method is in the form of a teacher's perspective on the results of the online face to face a combination of learning kit designs that are packaged through the Hyper content Student Worksheet. The teacher's perspective is packaged through a questionnaire distributed to 31 teachers in the education unit at the level of High Schools (SMA) in the municipality of Makassar, South Sulawesi. The questionnaire implementation technique is packaged through three stages, where at the end of each stage, the writer makes revisions based on the teacher's suggestions. The distribution of the Likert scale format questionnaire includes 5 main principles regarding hyper content LKPD tools adopted from Ronghuai Huang's thinking (2019), namely: 1) the principle of accuracy, 2) the principle of authenticity, 3) the principle of cost, 4) the principle of importance, and 5) the principle organization and balance. Each aspect examined consists of several study items, as shown in Table 1 below.

Table 1: Aspects of Teacher Perspective about LKPD Hyper Content

No	Aspects	Sum of Items
1	Principle of Appropriateness	3
2	Principle of Authenticity	1
3	Principle of Interest	2
4	Principle of Organization and Balance	3

IV. RESULT

Based on the descriptive analysis results obtained by the teacher's response, as shown in the following graph 1.

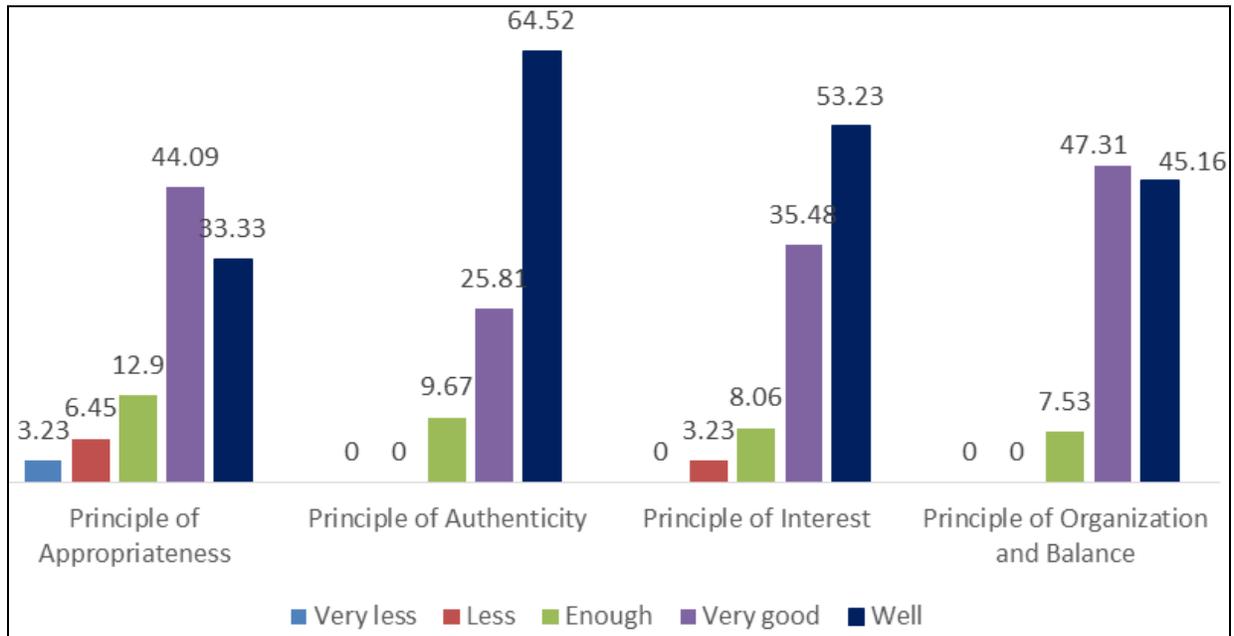


Figure 4: Graph of Hyper Content LKPD Response Results

Based on the results of the analysis above, it shows that in general the aspects of the accuracy of the technology used from the teacher's perspective of 33.33% stated very good, 44.09% stated good, 12.90% stated sufficient, 6.45% stated less well, and 3.23 which states very less. Whereas in the aspect of authenticity, the teacher's most dominant perspective stated 64.52% stated very good, 25.81% who stated good, and 9.67% stated that it was sufficient. In the aspect of importance, the teacher's perspective was obtained around 53.23%, which stated very good, 35.48% stated good, and the remaining 11.29 stated sufficient and less. Then in the last aspect about organization and balance obtained a teacher perspective which stated very good at 45.16, which stated good at 47.31, and about 7.53%, which stated sufficient.

Based on the teacher's suggestion, the authors made several revisions to improve the hyper content LKPD. Some of the revisions were generally in the form of 1) Hyper content LKPD has a working format in groups, with a form of hope independently so that students are facilitated to conduct discussions to obtain the final answer. 2) The hyper content LKPD from the source side, such as the website is more validated from the truth of the science delivered. 3) The hyper content LKPD provides more updated knowledge information, and 4) the hyper content LKPD is packed with an attractive appearance.

Based on the teacher's perspective above, It showed that in general, the design of hyper content LKPD that supports online face-to-face learning system. In other words, blended learning integrates learning in a face-to-face class with hyper content LKPD is expressed very well both in all aspects observed.

V. DISCUSSION

In the coming decades, leaders will face new challenges in integrating emerging technology learning tasks into daily teaching and learning practices (Halverson, 2018). It might be strange to label current students as learners, learners playing video games or hanging out in parks or coffee shops that do not resemble learning experiences that do not depict traditional learning models. Still, the context of such students is rich in information from their environment.

The concept of online face to face learning design is a form of type of blended learning that needs to be an alternative teaching and learning process in an innovative classroom, provided that it needs to provide a supportive learning tool in the form of hyper content LKPD. This hyper content LKPD broadens the scope of student learning and presents learning resources from any part of the world, along with various types of media that are packaged through barcode codes, as shown in the following figure.

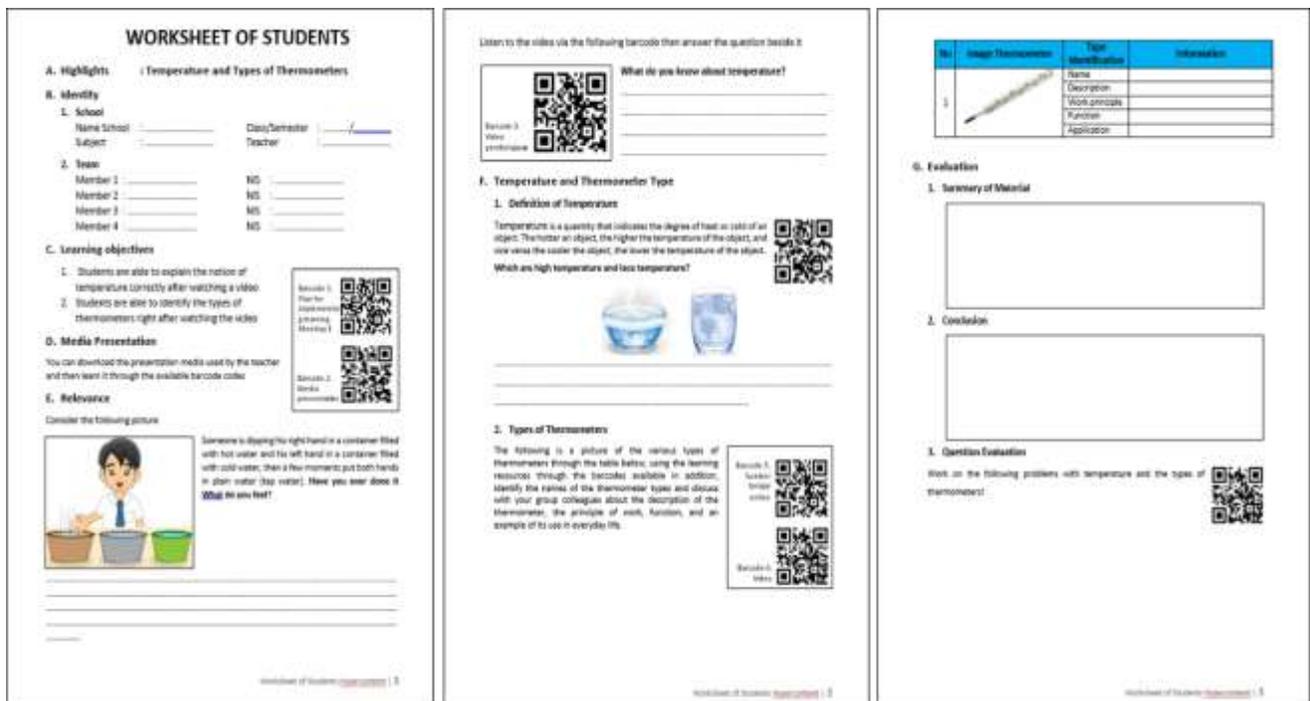


Figure 5: Barcode Code on LKPD Hyper Content

According to the teacher's perspective that learning that utilizes LKPD hyper content from the principle of the appropriateness of the technology used has given students the opportunity to improve 21st-century skills, precisely about information literacy and media literacy in which students choose and find reliable and credible sources of knowledge. Facilitated through barcode technology on hyper content LKPD. This is in line with the 21st Century Skills concept by Trilling and Fadel (2009), especially regarding technology literacy skills and information media, these skills are related to skills in using digital technology and understanding of information. The technology skills and information media, in the form of 1) information literacy, students are able to access information effectively (information sources) and efficiently (time), evaluate information to be used critically and competently, and use and manage information accurately and effectively for overcome problems. 2) media literacy, students are able to choose

and find reliable and credible sources of information. And 3) technological literacy, students are able to use and understand the use of gadgets effectively.

C. Learning objectives

1. Students are able to explain the notion of temperature correctly after watching a video
2. Students are able to identify the types of thermometers right after watching the video

D. Media Presentation

You can download the presentation media used by the teacher and then learn it through the available barcode codes

E. Relevance

Barcode 1.
Plan for
implementin
g learning
Meeting 1



Barcode 2.
Media
presentation



Figure 6: Barcode Learning Objectives in LKPD Hyper Content

The design of online face to face learning tools with hyper content LKPD developed by the author. It is compiled and presented from various accurate learning sources such as Wikipedia and some of the latest trusted journals, while also provided learning media in the form of videos from www.youtube.com. Learning resources and supporting media, in general, can present accurate, current and reliable information by teachers and students in the face to face learning process online. The design of this simple blended learning model is able to increase the involvement of students in learning activities. This is in accordance with the ideas raised by Riggs and Gholar (2009) which states the need for strategies to promote the involvement of students from a variety of innovative learning sources. Of course, for students who are just experiencing innovative learning, such as online learning resources and media from YouTube, one of the new strategies is to attract students' interest and motivation to learn.

Hyper content LKPD design according to the author can be implemented extensively in educational units both elementary to top-level through a learning model called face to face online because of the support of learning resources and learning media on hyper content LKPD able to attract students, stimulate curiosity, or meet the needs of students about knowledge. In addition, hyper content LKPD has the power to engage students, motivate, encourage creativity, and imaginative responses among students so as to create unlimited learning habits. This is consistent with what Paul Snape and Wendi FT (2011) have done that technology education provides the perfect context for engaging students, and building habits for lifelong learning and that, other learning areas can use similar practices to enhance learning activities.

By using many types of learning resources or learning media used in the learning system have an impact on the learning process and learning outcomes of students, such as research conducted by Reynaldo Akbarjaya J (2018) shows that with learning media in the form of videos can increase students' interest and learning outcomes. Whereas research conducted by Hanif (2010) shows that the use of Blog media on IPS-History learning achievements has a significant effect. This shows that by utilizing online learning resources that are scattered on the internet can be

more empowered in the world of education, especially in the learning process but packaged in a structured way to create interactive learning.

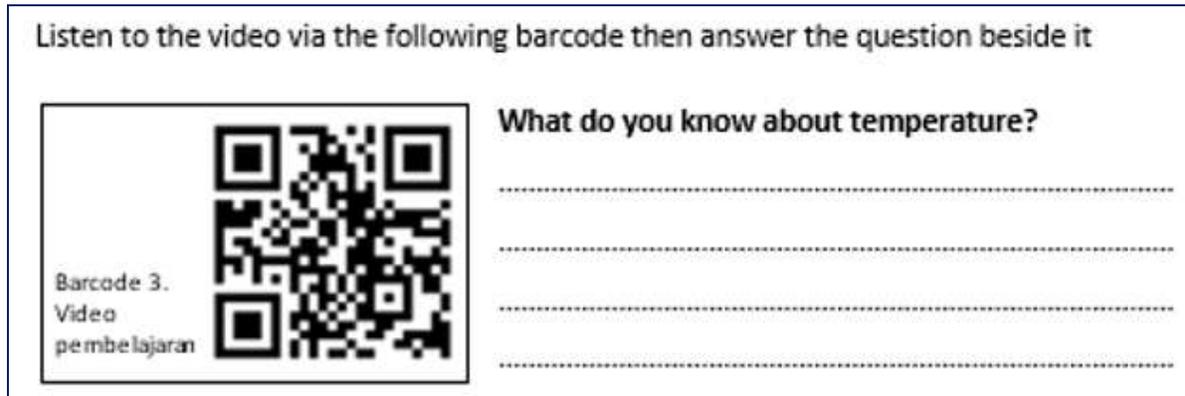


Figure 7: Youtube Learning Video Barcode

Online face to face learning with hyper content LKPD, the hyper content LKPD design developed by the writer needs to be well organized in terms of appearance (layout) and balanced content. Learning objectives must be clearly stated, as well as a logical organization and with learning principles such as strengthening, transferring, and application in teaching materials. This was also done in the development of hyper content-based modules conducted by Dewi, et al. (2017). She stated it must meet the characteristics, namely: First, each unit in the hyper content module is designed to stand alone, each has a complete or self-contained component of the independent learning system so that readers can review randomly, start and end from any unit. Second, the content structure is packaged with the message design principle, that is 'broken down' into parts, each section has units, each unit is equipped with a specific purpose, the benefits of sub-units, illustrations, studies and sub-studies. Third, the boundaries between sub-studies can use sub-study summaries, objective tests as reminders, or enriched with material from cyberspace with hyperlinks to certain online learning resources.

In addition, the hyper content LKPD design has used a technological, pedagogical, content knowledge (TPACK) approach proposed by Mishra Koehler (2006), meaning that in the development of the hyper content module it fulfils the elements or 7 (seven) TPACK domains, but in general, The seven domains are basically the interactions of the 3 (three) main domains, namely technology, pedagogy, and subject matter (content).

In the online face to face learning design with hyper content LKPD developed by the author, in general, follows the learning flow adopted by the world of education in Indonesia both in primary, secondary to upper-level education units, starting with preliminary activities, core activities, to closing activities. The initial activity was facilitated by outlining information on teaching material, objectives, and relevance.

At the core activity contains learning activities that are guided by the teacher, at this activity creates learning centred on students, and the activity closes with evaluation. The teacher has the main role in controlling the class flow as done by Onrubia and Engel (2012), the teacher is responsible for the class flow, according to and consistent with the scripts designed in the learning plan, the main difference between these traditional classrooms is in the use

of technology. The following is the online face to face learning pattern with hyper content LKPD, as shown in the table below.

Table 2: Structure and Activities of Teachers and Students in LKPD Hyper Content

Structure	Activities	Output Barcode
Identity	Teacher	-
Purpose	Teacher	Document of Lesson plan (Google Drive)
Relevance	Teacher	E-book (PDF Google Drive)
Material Object	Teacher & learner	Web, Wiki, Journal, Video, Document online, Media presentation online, Animations
Assignment	Learners	Google Doc, One drive
Discussion & Presentation	Learners	LKPD <i>Hyper content</i>
Conclusion	Teacher & learner	Media of Presentation
Evaluation	Learners	Quiz

Face to face online learning procedures with hyper content LKPD are basically the same as conventional learning through face-to-face learning, the biggest difference lies in the utilization of online-based learning resources available via barcodes or hypertext in modules owned by students. In order to create learning with student-centred learning (SCL) approach, students need to use gadget technology in the form of a laptop or smartphone to access hypertext or barcode available on the module.

Furthermore, students do collaborative activities between students, information literacy activities and media from various available online learning resources, communicating what has been found, and conducting evaluation activities. With this learning model, the teacher's role in learning is more as a curator of online learning resources and learning facilitators as the demands of 21st-century learning.

VI. CONCLUSION

Learning activities of students can achieve the targets set by the curriculum with the support of a variety of learning tools in the form of curriculum, teaching plans, subject of teaching materials, learning media, and evaluation tools, and of course the professional management of learning by the teacher. In the future, teachers are expected to use these various learning tools in one learning device, which also facilitates learning activities through learning tools in the form of a hyper content Student Worksheet (LKPD).

The application of learning with face to face online strategy by using hyper content-based learning tools facilitates learning activities. It is not fixated on a single learning source (such as a book) but can obtain unlimited learning resources even though the learning activities of students are limited in space and time.

The combination of face-to-face online learning referred to as blended learning typeface to face online. It is learning that offers personalized learning while still being accompanied by collaboration between students, creating learning enriched with learning resources from anywhere and at any time, learning that is more flexible and timely feedback. So that it can be called online face to face combination learning as one of the hyper content learning methods.

REFERENCES

- [1] (BLU), B.L. (2019, Agustus 11). *Blended Learning Universe*. Retrieved from Blended Learning Universe: <https://www.blendedlearning.org/basics/>
- [2] BLU, B.L. (2019, Mei, 12). *Blended Learning Universe (BLU)*. Retrieved from What is Blended Learning?: <https://www.blendedlearning.org/basics/>
- [3] Depdiknas. (2008). *Lampiran Permen Diknas NO 2006 tentang SI*. Jakarta: Depdiknas.
- [4] Dewi Salma Prawiradilaga, R.W. (2017). Prinsip-Prinsip Dasar Pengembangan Modul Berpendekatan *Hypercontent*. *Indonesian Journal of Curriculum and Educational Technology Studies*, 61-62.
- [5] Dyer, J.H., & Gregersen, H.B. (2009). The Innovator's DNA,. In *The Innovator's DNA*,. Harvard Bussines Review.
- [6] Finn, A. &. (2004). A Case Study Approach to Blended Learning.
- [7] Halverson, R. (2018). A Distributed Leadership Perspective on Information Technologies for Teaching and Learning. In *Second Handbook of Information Technology in Primary and Secondary Education* (p. 508). Springer International Handbooks of Education. doi:https://doi.org/10.1007/978-3-319-71054-9_34
- [8] Hanif, P. R. (2010). *Pengaruh Penggunaan Media Blog Terhadap Prestasi Belajar*. Madiun: Program Studi Pendidikan Sejarah IKIP PGRI MADIUN.
- [9] Ishaq. (2019, Agustus 7). *Pengembangan Bahan Ajar Berbasis Hypercontent Implementasi Pembelajaran ABAD 21*. Makassar: Unismuh Makassar. Retrieved from Ishaq Madeamin | Blog: www.ishaqmadeamin.com
- [10] J, R.A. (2018). Pengaruh Media Video Terhadap Hasil Belajar Siswa Dalam Pembelajaran IPA Tema Lingkungan Sahabatku Siswa Kelas V Sdn Tanjungsari 97 Surabaya. *Jurnal Penelitian Pendidikan Guru Sekolah Dasar*, 21.
- [11] Mishra, P. &. (2006). In *Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge*. (pp. 108(6): 1017-1054.). Teacher Colleges.
- [12] Onrubia, J. &. (2012). The role of teacher assistance on the effects of a macro-script in collaborative. *International Journal of Computer-Supported Collaborative Learning*, 161–186.
- [13] Paul Snape, W. F.-T. (2011). Perspectives of authenticity: implementation. *Int J Technol Des Educ*, 67. DOI: DOI 10.1007/s10798-011-9168-2
- [14] Procter, H.A. (2010). The Significance of the Reflective Practitioner in. *International Journal of Mobile and Blended Learning*, 2(2), 18-29.
- [15] Riggs, E.G. (2009). *Strategies that promote student engagement (2nd ed.)*. California:: Corwin Press.
- [16] Ronghuai Huang, J.M. (2019). *Educational Technology A Primer for the 21st Century*. Springer. doi:<https://doi.org/10.1007/978-981-13-6643-7>
- [17] Shulman, L. (1986). *Those who understand: Knowledge growth in teaching*. *Educational Researcher*.
- [18] Tim, T. (2019, Juli, 7). *12 The Most Common Types Of Blended Learning*. Retrieved from TeachThought We Grow Teachers: <https://www.teachthought.com/learning/12-types-of-blended-learning/T>
- [19] Trilling, B. &. (2009). *1st-century skills: Learning for life in our times*. San Francisco, CA, US: Jossey-Bass.
- [20] UNESCO. (2007). ICT Competency Framework For Teachers. In *ICT Competency Framework For Teachers*. PARIS: United Nations Educational, Scientific and Cultural Organization 7.
- [21] Wiggins, G. a. (2011). *The Understanding by Design Guide to creating high-quality units*. Alexandria, VA: ASCD.
- [22] Yusrizal, Intan Safiah, Nurhaidah. (2017). Kompetensi Guru Dalam Memanfaatkan Media Pembelajaran Berbasis Teknologi Informasi Dan Komunikasi (TIK) Di Sd Negeri 16 Banda Aceh. *Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 131-132.