IMPLEMENTING 21ST CENTURY SKILLS IN PROJECT BASED LEARNING TO DEVELOP YOUNG LEARNERS LITERACY

Wahyu Eka Prasetyaningtyas[1], Helda Jolanda Pentury[2], Anastasia Dewi Anggraeni[3]

[1]Bimbingan Konseling, Fakultas Ilmu Pendidikan Sosial, Universitas Indraprasta PGRI
[2,3]Pendidikan Bahasa Inggris, Fakultas Bahasa dan Seni, Universitas Indraprasta PGRI

Abstrak

Pembelajaran berbasis proyek memberi peserta didik usia dini kesempatan untuk menggabungkan literasi kata, tata bahasa, angka, ke dalam keterampilan berbicara dan menulis yang produktif. Penerapan keterampilan abad ke-21, guru mengembangkan literasi melalui pembelajaran berbasis proyek melalui beberapa set penciptaan yang diikuti oleh para peserta didik usia dini untuk dipraktikkan. Selain itu, kolaborasi, komunikatif dan berpikir kritis dengan berbagi pengalaman dan penemuan baru adalah keterampilan – keterampilan yang digunakan dalam pembelajaran melalui tugas proyek. Melalui Pembelajaran Berbasis Proyek, guru-guru peserta didik usia dini di TK Asa'adah Limo-Cinere dapat mengembangkan kemampuan mereka untuk menghasilkan dan mengekspresikan kompetensi literasi mereka. Para guru belajar untuk mendefinisikan dan mengatur ide-ide, menginspirasi topik-topik baru, membayangkan kisah-kisah untuk diceritakan, mampu mengelola masalah konseptual lebih baik daripada yang diajarkan dalam pembelajaran umum keaksaraan. Dengan demikian, mereka dapat menulis buku kerja atau buku pegangan untuk para peserta didik. Pelatihan guru dengan menerapkan 'keterampilan abad ke-21' ke dalam pelajaran literasi, gagasan, seperti kolaborasi, pemikiran kritis, kreativitas, dan komunikasi menjadi efektif dan tujuan luar biasa untuk pengembangan kemampuan literasi peserta didik usia dini.

Keywords: keterampilan abad 21, pembelajaran berbasis proyek, literasi, pembelajar muda

Abstract

Project-based learning gives young learners an opportunity to combine the literacy of words, grammar, numbers, into productive speech and writing. By implementing 21st century skills in learning literacy through setting up creative interesting projects. Besides that, collaborative, communicative, creativity and critical thinking are skills are implemented by them to share their experiences and innovative way based on projects. Teachers of young learners at Kindergarten of TK Asa'adah Limo-Cinere can develop their ability to produce and communicate their literacy competence. They learned to define and organize ideas, inspire new topics, imagine the stories to tell, they are able to manage conceptual-problems better than those taught in common learning of literacy as well. Finally, they can write workbook or handbook for their young learners. Teachers' training by implementing '21st century skills' into the lesson of literacy, ideas, such as collaboration, critical thinking, creativity and communication are becoming effective and extraordinary purpose for the young learner's literacy competences.

Keywords: 21st century skills, project based learning, literacy, young learner

Correspondence author: Anastasia Dewi Anggraeni, angelinanasta@gmail.com, Jakarta, and Indonesia

INTRODUCTION

PKM Implementing 21ˢᵗ Century Skills in Project Based Learning to Develop Young Learners Literacy. The partners who work with this program are teachers who are members of the IGTKI (Indonesian Kindergarten Teachers Association) Limo and Cinere sub-districts, Depok.

PAUD stands for Pendidikan Anak Usia Dini, or PAUD stands for Pendidikan Anak Usia Dini, or Early Childhood Education and Development (ECED), consists of two organization which is formal PAUD and non-formal organization of PAUD. The aims of the organization is for elevate the communication and to change the information among the members, also as the as the facility for the experts who have the same commitment for developing PAUD or Early Childhood Education and Development (ECED). PAUD also consists of two parts, they are: formal organization of PAUD through the formal line which members of experts and teachers or professionals who concerned circles alike to manage the early childhood education in formal ways. The organizations are IGTKI, GOP and TKI. In the other hand, the informal PAUD organizations whose members are experts and teachers or professionals who concerned circles alike to manage the early childhood education in in-formal ways. They are FORUM PAUD, KONSORSIUM PAUD, HIMPAUDI (Himpunan Pendidik dan Tenaga Kependidikan Anak Usia Dini Indonesia).

The chairman of IGTKI is the United of Teachers of Indonesia (Persatuan Guru Republik Indonesia) or (PGRI). IGTKI' vision into have and form the quality of teachers. Their mission of this organization are to provide access to early childhood education schools through the Early Childhood Education and Development Project, which provides training for teams of master trainers and facilitators and grants for communities to set up their schools. Besides that, they provide the various activities like training of train for teachers and educational staffs, seminars and discussions to support the teachers, educational staffs, and professionals who concerned circles alike to have best quality of early childhood education. All IGTKI's program and activities aim to elevate the best quality of human resources, especially for early childhood children.

There are 2.032 teachers in IGTKI Kota Depok who comes from 425 TK or kindergarten schools. For the students of early childhood and kindergartens under the IGTKI Kota Depok are 18.103 students. IGTKI Limo and IGTKI Cinere also join in IGTKI Depok. There are 72 Kindergarten schools (TK) and PAUD in Limo district and 44 Kindergarten schools (TK) and Early Childhood Education and Development (PAUD) in Cinere district.

The institution of IGTKI- PGRI or Ikatan Guru Taman Kanak-Kanak Indonesia – Persatuan Guru Republik Indonesia (IGTKI – PGRI) Kota Depok always hold on the educational activities, such as seminars, workshops, and also some competitions among the teachers or the students of TK/PAUD in Depok. Besides that, IGTKI Depok also give awards for teachers who have good achievements in their work.

Mrs. Ai Miswatias the chairman of IGTKI Depok, Mrs. Andayani Ratnaningrum, S.Pd, M.M as the chief of IGTKI the district of Cinere and Mrs. Lasmawati Tampubolon, S.Pd as the chairman of IGTKI Limo. IGTKI Depok have some competitions such as, making some education media or tools which is called 'Alat Peraga Edukatif' (APE) singing Mars songs, and some art and sports competitions which is called 'Porseni'. As a teacher of Early Childhood Education and Development (PAUD) or kindergarten (TK) teacher, being creative educative and excellent characters

are needed to teach the children in early childhood. The teachers have to proactive to join all the activities to develop, add, and improve their pedagogical work to run their profession. The educational activities provided aimed to nourish, sharpen and elevate their pedagogical skills, their creativity, innovation, communication among professionals, and to collaborate to discuss educational issues. The institution of IGTKI Depok also has their social activities in their schools or in the Depok region.

The unity of organization is one of the strength of this organization to run and stand for the institution. IGTKI Depok always commits to support, encourage, and provide positive educational things for their members. IGTKI which is located in the region is also including IGTKI Limo and Cinere. Technology is a media that plays important and essential thing to support all the communication among the chairmen, principals, and the teachers in IGTKI Depok, even they have Whatsapp group to connect their organization' communication.

Twenty-first century skills refer to a broad set of knowledge, skills, work habits and character traits that are believed to be critically important to success in today's world. Currently, the worldwide teachers, parents and society are looking for young professionals, who show abilities to 'create the projects', 'good communicator', 'engage in communication and discussion', 'collaborate well with others' and 'excellent in her/his fields'. However, the fact is that young learners need to gain several survival skills to thrive in this dynamic world; the same skills that will enable them to become productive in the 21st century. 21st century skills are a set of abilities that students need to develop in order to succeed in the information age (Saeed, 2014). These 21st Century Skills include creativity and innovation skills within a comprehensive skills framework, as suggested by one of the 21st Century Skills think tanks (Piirto, 2011).

Scott (Pentury & Anggraeni, 2019) explains that twenty-first century instruction is based on three pedagogical principles – personalization, participation and productivity. This framework allows learning through authentic real-world contexts, carrying out projects from beginning to end, and solving problems as they arise, all of which constitute powerful learning strategies. The artful competence must be applied well in their professional teaching.

As we know that literacy is indispensable for all young learners, however, interestingly enough comes almost no concern for teaching quality. Teachers need to master 21st century skills first to provide quality teaching-learning process. The results of research conducted by Woods-Groves & Choi (2017) supported the efficacy of the HBRS: Brief as a promising tool to measure teachers' perception of their students' 21st century skills. Young learners enter the kindergarten classroom with a diverse landscape of learning experiences and skills within the areas of motivation, social–emotional development, and cognitive development. Support is emerging for the view that teachers' perceptions of students' engagement (persistence) and exploration (curiosity) behaviors are interrelated to their perceptions of students' academic and behavioral skills.

We need to practice 21st century skills in the classroom – in particular, the 4Cs. Those skills can enable us to work effectively with others on group projects – at school, in the workplace, and throughout life. We can't get through life just by knowing a bunch of facts. Nevertheless, the 4Cs do help us to remember the facts that we learn, by linking our learning to experiences shared with others. At the same time, we also recognize the limitations of the 4Cs. We will accomplish little through interacting with others, unless we first understand course content. We need to learn the content, and then

put it straight to use. Content needs to pair with application. That is how the 4Cs can and do supplement traditional teaching methods. We want teachers who not only understand how to explain content, but also know how to guide our growth as social learners (Hayse, 2018).

Project-based learning (PBL) has a lot of potential to enhance 21ˢᵗ century skills and engage students in real-world tasks. There is evidence that PBL is beneficial both by teachers and students. Earlier research shows that teachers' understanding of the criteria for effective PBL plays an essential role in how teachers implement PBL, thereby also affecting students' content understanding and developing skills (Maija & Haatainen, 2019). Project-based learning creates real chances for young learners to produce and competent in literacy. Young learners do the projects process by exploring 'an interesting creative project'. The projects should come from literacy which is consist of reading, writing and counting subjects, each with new vocabulary, grammar and counting development. But, in the classroom here, young learners have limited vocabularies to label the picture, write short phrases and short sentences to communicate what they have learnt. So that teachers provide twenty-first century skills through project-based learning as integrated methods of education to develop their literacy competence. Today, the growing popularity of social networking tools has motivated socialization, critical thinking, and global knowledge sharing and collaborative learning.

Accordingly, many researchers have discussed the broad learning benefits of using these technologies in informal learning contexts (Ibrahim, 2019).Young learners are encouraged to wonder about the world around them, which motivates and inspires them to explore, discover and learn. Teachers supposed to introduce and provide interesting daily topics in their teaching-learning process for developing productive speaking and writing as well as listening and reading as receptive skills. Moreover, the approach that the teachers provide to the young learners with the opportunity to practice 21st century skills, such as communication, collaboration, creativity, critical thinking, problem solving, initiative, curiosity, imagination and innovation. As a result, they develop assertiveness to continuously develop projects, language and good characters all at once.

In a 21ˢᵗ century setting it's not only the sheer quantity of information or young learner's class projects that represent a challenge, but also how the learning process and the impact are changing. Young learners today have to think creatively, critically, and be able to apply a variety of things to solve the problems. In addition, implementing and developing in projects related settings throughout the subjects of literacy within the school's program of this kindergarten school teaches young learners to implement modern-day skills such as communication, collaboration, creativity, critical thinking, problem solving, initiative, curiosity, imagination and innovation and effective literacy.

In teaching-learning for young learners, the teacher should give real things in the class for the children are more comfortable recognizing the vocabulary presented. Thus, young learners need real stuff as the media in the learning process. According to Myrtis & Philomena (Pertiwi, Salabiyati, Damara, Pratolo, & Dahlan, 2020), young learners tend to have short attention spans and much physical energy. Also, children are very much linked to their surroundings and are more interested in physical and tangible.

Later, young learners have to be taught to gain literacy competence in creative and innovative way; to discover new knowledge and build understanding in literacy by implementing twenty-first century skills through creative interesting daily projects.

Project-based learning gives young learners an opportunity to combine the literacy of words, grammar, numbers, into productive speech and writing.

Finally, as the young learners discovered more about the topics, they discussed what they have learned, using literacy in meaningful and productive ways by implementing twenty-first century skills through the project-based learning.

PROCEDURE

The community service is provided by giving teachers training on train that they will be train to implement 21 century skills through the projects to develop young learners' literacy competence. The teachers training on train will be given to the teachers who join in IGTKI of Cinere and Limo.

The procedure will be given by doing:
1. Design the form of training on train for the teachers.
2. Design and set literacy projects.
3. Prepare the instrument and administration.
4. Training the teachers by implementing the skills, strategies, techniques and method.
5. Evaluate the activities in feedback and projects results.

Activities carried out in the midst of the Covid-19 pandemic. We use technology media, the Zoom, Whatsapp and Google Form applications in the implementation of this activity. The following Zoom link has been used:

Join Zoom Meeting:

https://us04web.zoom.us/j/79687713652?pwd=KzQ4aFBEYitxdXk4Z2dtNGl5d WhWQT09

Meeting ID: 796 8771 3652

Password: 2gj39Q

RESULT AND DISCUSSION

The results of the questionnaires that applying the use of toolbox in e-learning and teachers' motivation in teaching young generation are shown below:

Table1. Questions about applying the use of toolbox in e-learning and teachers' motivation in teaching young generation

DESKRIPSI PERTANYAAN	SETUJU (ORG)	%	TDK SETUJU (ORG)	%
Apakah penggunaan digital media sebagai proyek pembelajaran Abad 21 memotivasi Anda sebagai guru?	49	98%	1	2%
Apakah teknologi sebagai salah satu penerapan ketrampilan Abad 21 harus dilakukan di setiap pelajaran literasi?	39	78%	11	22%
Apakah materi pembelajaran yang diunggah dari internet dan digunakan dapat membantu proses pembelajaran lebih aktif?	41	82%	9	18%

Apakah kegiatan literasi menggunakan digital media membuat pelajaran lebih menyenangkan?	41	82%	9	18%
Apakah menurut Anda digital media harus digunakan untuk mengajar literasi dengan tugas proyek dapat meningkatkan keterampilan literasi siswa?	42	84%	8	16%
Apakah penerapan keterampilan Abad 21 dalam digital media, dapat menstimulasi keterampilan literasi siswa?	46	92%	4	8%
Apakah penerapan keterampilan Abad 21 dalam bentuk digital media membuat proses pembelajaran lebih menarik, kolaboratif, kreatif dan komunikatif?	44	88%	6	12%
Apakah tutorial video, film, Youtube, dan MP3 dapat membantu Anda mengembangkan literasi siswa?	48	96%	2	4%
Menurut Anda, bentuk proyek dalam kegiatan pembelajaran sebagai salah satu penerapan keterampilan Abad 21 lebih kreatif, inovatif dan berpikir kritis?	44	88%	6	12%
Apakah menurut Anda pembelajaran menggunakan digital media melalui kegiatan dalam bentuk proyek lebih efektif daripada pembelajaran secara tradisional?	25	50%	25	50%

Based on the results of 50 respondents can be seen teachers of PAUD responses to each question item:

1. Teachers as much as 98% or 49 agree that they were motivated with 21st skills projects and media of e-learning which is held at the moment in the midst of the pandemic Covid-19, which requires people to be social distancing. Only one teacher was disagreed with the learning media.
2. As many as 11% of teachers said they did not agree that distance learning (e-learning) applied in students' literacy development using 21st skills. In other hand, 78% agreed and enjoyed the digital media of 21st skills.
3. Using digital media in literacy by downloaded the learning media were more practical, so the learning process was more active with a percentage of 82%.
4. Expressing fun through online using tools/technology rather than face to face. The statement was responded by 82% of teachers who agreed and 9 % who disagreed.
5. Students' literacy skills increased by applying digital media. The statement responded by 82% of teachers agreed, 16% disagreed.
6. Students literacy can be stimulated well said the teachers. They prefer the e-learning process of literacy applied in 21st skills. The statement was responded by 46 teachers 92% agreed and 9 % of others disagree.
7. Applying 21 skills in learning online are more interesting, collaborative, creative, and communicative. The statement was responded by 6% doubtful teachers. The 88 % teachers agreed enthusiastically.
8. Overall, distance learning makes teachers use more digital media than face to face, by using varied digital media as Youtube, Video, MP 3. The statement was responded to by 96 % of teachers who agreed.

9. Distance learning makes students learn literacy more creative, innovative and critical thinking to understand the material. This statement was responded by 88 % of teachers agreed and 12% teachers hesitated.

Learning online using digital media become effective because of e-learning projects rather than traditional learning. This statement was responded to by teachers equally, as many as 25% agreed and disagreed as well.
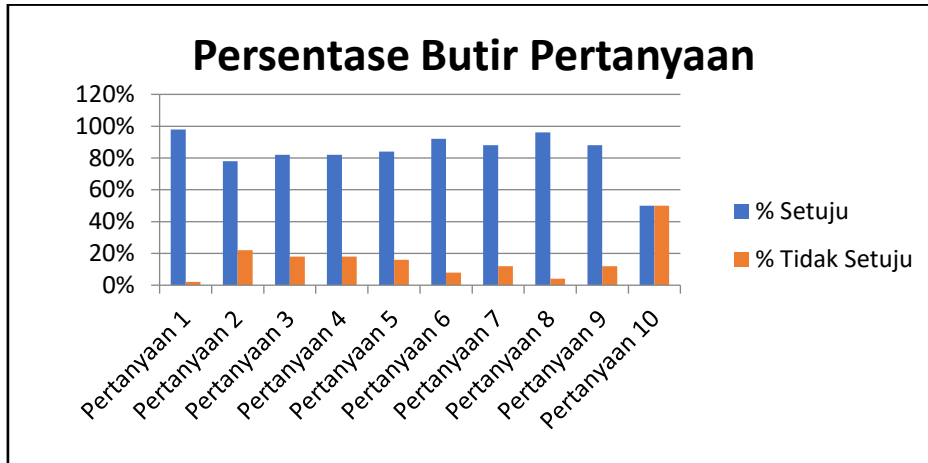

Figure1. Percentage of Questions

According to the findings, teachers believe that the use of digital media in literacy like (WAG, PPT, Google classroom, Zoom, Teams, etc.) motivate them to teach reading, writing and counting. A large percentage of 98% were the opinion that applying 21st skills through digital toolbox in literacy e-learning increase their motivation in teaching (question 1). Again a high percentage of the 48 teachers (96%) indicated that digital media should be used in literacy lesson (question 8). Answering question 7, 88% of the teachers believe that materials downloaded from the internet and used by the teachers make the literacy e-learning process more active, interesting, collaborative and creative. In question 9 most of the teachers (88%) reported e-learning teaching activities make literacy learning more increase students' high order thinking skills (HOTS). They agree that digital toolbox in e-learning never makes the lessons tedious or unnecessary.

The result of most questions showed that the teachers agreed that digital media should always be used in literacy lesson to increase their motivation. They wanted to see different technological devices used as motivational tools. The teachers agreed that the literacy process seem more interesting and communicative when the teacher uses digital media in applying 21 century skills in e-learning process. In addition, the students agreed that teach literacy using digital media can be helpful to develop their students' reading, writing and counting skills. Surprisingly, the 25% of teachers' response agreed and 25% disagreed in the last question, number 10 that e-learning-based lessons are equally more effective with traditional lessons.

21st Century Skills in Project Based Learning digitally offers many benefits for the enhancement of teachers' motivation and this study has demonstrated that using it in the literacy lesson as e-learning can be highly motivating for their students as well. In fact, this is in mark contrast to the trend towards poor attendance which characterizes

traditional literacy learning classroom environment, where these are perceived to be boring and the teachers lack the necessary skills to achieve.

Moreover, Students today are already familiar with gadget and digital devices, and these give them the confidence to believe in their ability to accomplish learning tasks that involve its use. As young generation, they enjoy making presentations in e-learning using creative apps such as Youtube, Power Point and other presentation software and using videos downloaded from the internet applied by the teachers. In our study, we found that the teachers were excited about having some new apps to apply their skills and viewed the tasks as challenging and engaging. As the results of previous studies that the application of contemporary digital technologies allows attaining the following results in the education process: (1) Interactivity; (2) Quality of education; (3) Motivation; (4) Possibility of self-dependent work; (5) Improving of communicative competency; (6) Self-evaluation of the achieved level (Nedeva & Dimova, 2010).

Furthermore, changing teaching methods and using of digital media in e-learning such as effective tutorial media, and audio files to present the lessons and its content, we believe their students can be stimulated and increased their high motivation in literacy or other lessons. This is in line with previous research which said that using tool opens doors to interact with the world. Literacy creates the chance to learn and improve their literacy skills and 21 century skills all at once. Computer- assisted reading programs offer learners the opportunity that we as educationalists should embrace(Van Wyk & Louw, 2008). In addition, our team attributed this finding to encourage and help the young learners' teachers in technological environment such as applying 21st century skills in digital learning projects which enables them to feel more motivated, inspired, creative, communicative, more collaborative and interested in using varied digital media to enrich their learning experiences.

Our team activities were distributed the questionnaires through Google form to fill in by 50 teachers of Kindergarten and PAUD teachers in Limo and Cinere areas. Besides the questionnaires, we also distributed the apps as digital media as part of 21st century skills to apply in their e-learning and teaching process.

By the arrangement of the schedules, the team and the teachers were assisted by the sixth and fourth term-students of English Education Department of University of Indraprasta. The students hosted the meeting by using Zoom to hold the activities of our community service program.

Lastly, prominence of applying 21st century skills in practicing and developing teachers of young learners in learning literacy provides teachers with the opportunity to practice 21st century skills, such as creativity, communication, collaboration, imagination and critical thinking. Through these community service activities, young learners' teachers of Limo and Cinere develop skills such as agility and adaptability through e-learning how to access and design their learning materials, especially in the Covid-19 pandemic situations.

CONCLUSION

The teachers realize that the relationship between the skills of 21st century in literacy learning process and the use of digital media are important for their pedagogical of teaching. The results of the activities lead us to make some new perspectives that (1) applying 21st century skills in digital media should be an integral part of the literacy learning, particularly for the young learners literacy development; (2) teachers can be

encouraged to use varied digital media in e-learning and teaching as a way of making their teaching-learning process more effective; (3) the proper technological media or support available will be increased and stimulated by applying 21st century skills projects learning to elevate young learners' teachers in literacy.

However, the fact that the teachers who did not agree with the question reflects the fact that digital media in e-learning wasn't used well in the literacy learning process. We highly suggest that the way 21st century skills apply in digital media should be reviewed. Besides, teachers should be made aware of the importance of 21st century skills and the skills of using digital media in different methods. Professional young learners' teachers should be creative to design teaching-learning process and be supported in to supply their students with added interest in the content, activities and media of learning.

REFERENCES

Hayse, M. (2018). Tabletop games and 21st century skill practice in the undergraduate classroom. *Teaching Theology and Religion*, *21*(4), 288–302. https://doi.org/10.1111/teth.12456

Ibrahim, C. W. I. R. bt. C. W. (2019). Tools for Empowering Young Learners: Language Learner Autonomy. *Asian Social Science*, *15*(2), 1. https://doi.org/10.5539/ass.v15n2p1

Maija, A., & Haatainen, O. (2019). Project-Based Learning (PBL) in Practise Active Teachers' Views of Its' Advantages And Challenges. *Integrated Education for the Real World*, (June), 9–16. https://doi.org/10.1201/b11330-2

Pentury, H. J., & Anggraeni, A. D. (2019). Enriching Teacher's Pedagogical Strategy Using the Role of Global Competence Learning Model. *Jurnal Pendidikan Progresif*, *9*(1), 29–39. https://doi.org/10.23960/jpp.v

Pertiwi, R. S., Salabiyati, I., Damara, D., Pratolo, B., & Dahlan, U. A. (2020). The Teacher's Perspectives About Challenges of Teaching English for Young Learners : A Case Study at English Course for Young Learners, *397*(Icliqe 2019), 65–74.

Piirto, J. (2011). *Creativity for 21st. Sense Publishers*. Retrieved from https://link.springer.com/chapter/10.1007/978-94-6091-463-8_1

Saeed, B. S. (2014). *21 st Century Skills Promoting Creativity and Innovation in The Classroom Transversal Skills / 21 st Century Skills*.

Woods-Groves, S., & Choi, T. (2017). Relationship of teachers' ratings of kindergarteners' 21st century skills and student performance. *Psychology in the Schools*, *54*(9), 1034–1048. https://doi.org/10.1002/pits.22052