

Observed and Perceived Teaching Creativity of English Teachers

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Abstrak

Masih banyak guru yang menggunakan metode *teacher-centered* dalam proses pembelajaran sehingga membuat siswa pasif dalam belajar. Penelitian ini bertujuan untuk menganalisis kreativitas mengajar guru dan cara guru mengimplementasikan kreativitas di kelas. Penelitian ini menggunakan *Embedded mix method* yang mana data kualitatif akan lebih dominan sementara data kuantitatif sebagai pendukung. Teknik yang digunakan dalam mengumpulkan data yaitu observasi, wawancara, dan kuesioner. Instrumen yang digunakan dalam mengumpulkan data yaitu kuesioner. Hasil dari penelitian ini menunjukkan bahwa guru menganggap diri mereka kreatif dalam mengajar di kelas, guru dikategorikan sebagai sedikit kreatif dalam mengajar kreativitas di kelas, perbedaan terjadi antara persepsi guru dan implementasi yang diamati di kelas karena dalam satu cara, para guru menganggap bahwa mereka kreatif, di sisi lain, pengajaran mereka sebagian besar fokus pada penggunaan media konvensional, pembelajaran offline dan media yang monoton dan kegiatan pembelajaran.

Kata kunci: Kreativitas, Pembelajaran Abad 21

Abstract

Many teachers still use *teacher-centered* methods in the learning process to make students passive in learning. This study aimed to analyze the creativity of teachers' teaching and how teachers implement creativity in the classroom. This study used the *Embedded mix method* in which qualitative data will be more dominant while quantitative data will be used as support. The techniques used in collecting data were observation, interviews, and questionnaires. The instrument used in collecting data was a questionnaire. The results of this study indicate that teachers consider themselves creative in teaching in the classroom. Teachers were categorized as slightly creative in teaching creativity in the classroom. The differences that occur between teacher perceptions and implementation were observed in the classroom in one way. Teachers perceive that they were creative. On the other hand, their teaching mostly focuses on conventional media, offline learning, and monotonous media and learning activities.

Keywords: Creativity; 21st Century Learning

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Introduction

Education reform in Indonesia cannot be separated from the government's ongoing implementation of the 21st-century learning system. 21st-century learning requires students to have soft skills and collaborative skills with everyone or everything around them (Andrian & Rusman, 2019; Warsita, 2017). The 21st-century learning system underscores the use of technology in the teaching and learning process. 21st-century learning optimizes the process of globalization and internationalization and character development of students inside or outside the school environment (Alfi, Sumarmi, & Amirudin, 2016; Brown, 2017). The use of digital media such as projectors, LCDs, and online-based learning are some of the new methods that can be used in 21st-century learning. In 21st century learning, the use of projects and problem-based learning is indispensable in the classroom. Because in the learning process, the teacher must see how students have new knowledge by solving some problems and seeing how they make some project-based products.

However, today's problem is that many teachers still use the *teacher-centered* method in the learning process (Floryantini, Sudana, & Sumantri, 2019; Wulandari, Sudatha, & Simamora, 2020). Currently, teachers must shift the education system by changing learning

techniques from teacher-centered to student-centered. In teacher-centered learning, the teacher's role in the classroom is the main source of information. If the teacher applies teacher-centered, it will make students passive (Mediatati & Suryaningsih, 2017; Ratnawati, Handayani, & Hadi, 2020). Students only need to listen carefully to what their teacher says to them and write down important things in their notebooks so that students only receive delivery from the teacher (Todorescu, Popescu-mitroi, & Greculescu, 2015). It makes students "Good Listeners" because they will listen to the teacher carefully without hesitation, but at the same time, it will make students "Weak Thinkers" because they prefer to make what the teacher says in front of the class (Road, 2017; Sujana, Dharsana, & Jayanta, 2018). Teacher-centered learning has long been applied in Indonesia. Currently, the government, especially the Ministry of Education, is trying to fix the role of teachers as the main source of information. Indonesia needs a reform of the education system. It is related to the technological era that makes us have to be prepared for future possibilities (Haviluddin, 2010; Warsihna, 2016).

Technology is considered useful in helping the community, especially teachers. It is impossible not to include technology in the teaching and learning process (Mawarni & Muhtadi, 2017; Nurkholis, 2013). Because technology is a major element in people's lives today, both students and teachers can search for information from unlimited sources on the internet. Unfortunately, education reform in Indonesia is still not evenly distributed in all regions. These gaps are related to different facilities, and some areas are very difficult to reach. Human resources and infrastructure are the keys to the success of the technology learning process (Dharma, Wicaksana, & Febrianadewi, 2019). Technology can also facilitate students in learning so that students can solve the problems they face. Students need to find real-life problems and solve them to get to know their environment better (Darmani & Renaldi, 2018; Quint & Condliffe, 2018). Problem-based and project-based learning can help students interact more with their friends and community (Alfi et al., 2016; Kurniaman & Wuryandani, 2017). It is related to the main concept of 21st-century learning is group work. In group work, students can learn how to respect the opinions of others and how to be good leaders and good members. Previous research also found that students were highly motivated when they gave them a real-life problem and asked them to solve the problem (Lombardi & Oblinger, 2014). In other words, 21st-century learning can be defined as the best current education system to improve students' self-knowledge and work with their peers.

21st-century learning requires students to have 4C skills in education, namely critical thinking, communication, collaboration, and creativity (Meilani, Dantes, & Tika, 2020; Sviangga, Sunardi, & Trapsilasiwi, 2018). This 4C is the main concept and the main thing for students to be good students with complete skills. Critical thinking means that students need to think more than they should or think outside the box to find answers to complex problems. Communication means students must be able to communicate well with other people and must be able to present something in front of many people. Collaboration means that students need to work together with their friends to find answers and conclusions from the problems given by the teacher. Creativity means that students need to be creative in producing products that can be useful for themselves and others around them.

Creativity in 4C should not only be owned by students. Creativity also needs to be owned by the teacher. It is related to efforts to build a good classroom atmosphere to support student learning motivation actively. Teacher creativity is very important in the teaching and learning process. As one of the important creativity, teachers must have it by training and adapting to something new not as an obstacle, but as knowledge to increase their creativity in the teaching and learning process Suci & Lacatus (Kembara, Rozak, & Hadian, 2018; Suci & Lacatus, 2017). This kind of learning becomes very important because creativity is the basic skill of 4Cs skills. Creativity can create a good classroom atmosphere and engage

students to apply other skills. Creativity can be a bridge to create innovations that will make life better. However, creativity is becoming increasingly important in the implementation of 21st century learning Nakano (2018). Creativity can appear in a person due to several aspects, namely intellectual skills, knowledge, motivation, and environment (Izati, Wahyudi, & Sugiyarti, 2018; Sholikhah, Kartana, & Utami, 2018). Knowledge can affect one's creativity because one must know and master the field to advance and discover something new. A person's motivation to be different and be more than others around him will support him in being creative and producing something new to become what he wants (Sitompul, Setiawan, & Purba, 2017; Suardana & Purb. If the environment can support and reward one's creativity, people's opportunities to be creative will increase.

About creative teaching, various related studies have been carried out. Previous research stated that teachers' creativity to create media and create good activities is the most important thing that teachers must own (Avila, 2016). Other research findings also state that teachers' perceptions and implementations of teaching creativity are necessary for teaching to increase learning' residual spirit (Utami, Prestridge, Saukah, & Hamied, 2019). In Indonesia, especially in Bali, no research focuses on teacher creativity. This study aims to analyze the creativity of teachers' teaching and how teachers implement creativity in the classroom. Another novelty of this study is that there were no 21st-century skills included in previous studies

Methods

Mixed methods were used in this study. In this study, data were taken from subjects at SMK Negeri 3 Tabanan. The subjects were all English teachers at SMK Negeri 3 Tabanan. This study uses the Qual-Quan method to explain the data. The techniques used to collect data were observation, interviews, and questionnaires. Teachers perceive themselves as their creativity in doing English learning. The class observation sheet was used as an instrument to observe the teacher's performance on his creativity in the classroom. Then, in-depth interviews were used to find a discrepancy between the self-assessment data and class observation data. In-depth interviews were conducted in the form of semi-structured interviews to obtain natural data from the teacher. Data obtained from in-depth interviews will be analyzed by data reduction. Data from in-depth interviews were collected and transcribed as an important part that supports or was needed in this study. The instrument used to collect data is a questionnaire.

Embedded design is a research design where one type of data was used dominantly, and other data were used as supporting data. In this study, qualitative data is used more dominantly than quantitative data QUAL (quan). Quantitative data was used to support qualitative data. The data from the self-rated questionnaire was in the form of quantitative data and analyzed quantitatively and qualitatively. Data from class observation sheets were quantitative and qualitative data to add additional information while observing teachers implementing creativity in the classroom. Then the data from in-depth interviews in the form of an audio recorder. The data was used as a reduction to analyze the data. The average data was converted into creativity criteria according to the following table.

Table 1. Criteria of Creativity

Criteria of Creativity	Score
Lack of Creativity	$1 \leq x \leq 1.5$
Slightly Creative	$1 \leq x \leq 2.5$
Moderately Creative	$2,5 \leq x \leq 3.5$
Creative	$3,5 \leq x \leq 4.5$
Very Creative	$4,5 \leq x \leq 5$

Results and Discussion

This study aimed to look at the perception and application of teachers to their teaching creativity. In addition, the differences between perception and implementation were examined in this study. Table 2 below shows the results of teacher perceptions.

Table 2. Teachers' Perception on Their Creativity

No	Types of Creativity	Teachers' Perception	Criteria
1	Exploratory	3.52	Creative
2	Transformational	3.41	Moderate Creative
3	Combinational	3.75	Creative
Average		3.56	Creative

Based on the analysis results presented in table 2, teachers rated themselves as moderately creative in exploratory creativity and creative in transformational and combinational creativity. The average value of the three activities is categorized as a creative teacher. Thus, it can be concluded that they perceive themselves in creative criteria in creating various activities in the classroom, learning based on lesson plans, dividing the class as groups, using inductive learning, integrating technology in delivering material, using contextual problems, creating students to solve their problems using their prior knowledge, making different media in each meeting, using conventional media if needed, utilizing existing media in the classroom, designing old media to be unique, making interesting activities and combining online and offline platforms in delivering material. For comparison, the results of the observations are shown in Table 3 below.

Table 3. Teachers' Observed Creativity

No	Types of Creativity	Fact as Observed	Criteria
1	Exploratory	1.41	Lack of Creativity
2	Transformational	1.20	Lack of Creativity
3	Combinational	1.16	Lack of Creativity
Average		1.25	Lack of Creativity

Tables 2 and 3 show a discrepancy between the teacher's perception and the observed facts. Teachers mostly rate themselves on creative criteria in each type of creativity. In contrast, the teacher's perception column shows 3.56, which is included in the creative criteria. The teachers rated themselves as creative based on their assessment. The teacher concluded that they were creative in creating various activities in the classroom, teaching based on lesson plans, designing classes in groups, using inductive learning, integrating technology in delivering material, using problems and challenges as material in the learning process, making students use their prior knowledge, creating media. Different in each meeting, utilizing conventional teaching when needed, using real problems, combining offline platforms, online platforms, and print media in delivering material, creating interesting activities and combining various technologies. They also consistently assess themselves in carrying out creative activities in the learning process.

In-depth interviews were conducted to clarify the discrepancies that arise. The interview results showed that teachers sometimes and inconsistently teach students using technology media because of limited facilities in schools, and they were too old to use technology media. They cannot use online platforms to deliver materials. They prefer to teach directly and conventionally. In delivering material, teachers rarely teach students inductively

and often teach deductively. It showed that teachers use inductive teaching inconsistently. Teachers also rarely create various activities. They did not follow the lesson plans but only focused on delivering the material to students and students. They make RPP for administration only. They rarely use problematic and challenging materials in the learning process. Teachers also stated that they rarely designed students for their prior knowledge. They also rarely insert real problems in delivering the material.

It can be concluded that the teacher is included in the criteria for being less creative. These differences arise because the subjects judge themselves subjectively based on their perceptions, opinions, and judgments without considering how they implement creativity in teaching in the learning process. Activities carried out in the learning process based on observed facts were inconsistently reflected as creative activities. It showed that the implementation of teacher creativity in teaching is not as optimal. Three aspects can be used in observing teacher creativity: creative abilities, skills, and motivation, where motivation is the most important aspect (Ahmad, 2017; Kasmaienezhadfad, 2015; Suprihatin, 2015). Teachers who have a high level of effort and motivation will have high creativity, and vice versa. In addition, teachers who have a high level of effort and motivation at least try to plan and design all learning activities as creatively as possible (Ningrat, Agung, & Yudana, 2020; Surahman & Mukminan, 2017). High motivation was also another reason that English teachers at SMK N 3 Tabanan were categorized as less creative besides limited facilities, subjective assessment, and their creativity in teaching is not optimal.

In addition, based on teacher responses obtained through interviews, it was found that teachers rarely used the media due to several factors. Teachers did not use media in every meeting because they always pay attention to the topics to be taught. Even though media use can make it easier for students to understand the subject matter (Aditya, 2017; Mediatati & Suryaningsih, 2017; Sari, 2019). In addition, technology media can be used as needed in creativity due to the lack of facilities in the classroom (Fitriyadi, 2013; Kuswanto & Walusfa, 2017). In short, the teacher's perception looks different from its implementation in the classroom. On the one hand, interviews showed that teachers' perceptions depend on the teacher's expectations as stated in their lesson plans. Meanwhile, on the other hand, it showed that the implementation was still below the expectations of creativity. Thus, it can be emphasized that there was a difference between the teacher's perception and the observed facts. The teacher perceived his creativity at the creative level and observed at the slightly creative level.

Conclusion

Based on the results of data analysis, it can be concluded that the English teacher at SMK Negeri 3 Tabanan considers himself creative in teaching. Teachers were consistently categorized in the low level in the three learning steps. The self-rated questionnaires and observation sheets show a difference between how teachers perceive their creativity and execute creativity in actual teaching.

References

- Aditya, A. (2017). Penggunaan Media Pembelajaran Audio Visual Untuk Meningkatkan Hasil Belajar IPS Pada Siswa Kelas IV SD. *Mimbar Sekolah Dasar*, 4(1). <https://doi.org/https://doi.org/10.23819/mimbar-sd.v4i1.5227>.
- Ahmad. (2017). Konsep Penilaian Kinerja Guru Dan Faktor Yang Mempengaruhinya. *Jurnal Manajemen Pendidikan*, 1(1). <https://doi.org/https://doi.org/10.24252/idaarah.v1i1.4133>.
- Alfi, C., Sumarmi, S., & Amirudin, A. (2016). Pengaruh Pembelajaran Geografi Berbasis

- Masalah Dengan Blended Learning Terhadap Kemampuan Berpikir Kritis Siswa SMA. *Jurnal Pendidikan Teori, Penelitian, Dan Pengembangan*, 4(1). <https://doi.org/http://dx.doi.org/10.17977/jp.v1i4.6203>.
- Andrian, & Rusman. (2019). Implementasi Pembelajaran Abad 21 Dalam Kurikulum 2013. *Jurnal Penelitian Ilmu Pendidikan*, 12(1). <https://doi.org/https://doi.org/10.21831/jpipfip.v12i1.20116>. 14-23.
- Avila, H. A. (2016). Creativity in the English Class : Activities to Promote EFL Learning
Creatividad en la clase de inglés : actividades que promueven el. *HOW Journal*, 22(2), 91–103. <https://doi.org/http://dx.doi.org/10.19183/how.22.2.141>.
- Brown, J. S. (2017). Smart Social Networking : 21 Century Teaching. *Research in Pedagogy*, 7(1) Brown, J. S. (2017). Smart Social Networking : 21 Century Teaching. *Research in Pedagogy*, 7(1), 21–29. <https://doi.org/10.17810/2015.45>, 21–29. <https://doi.org/10.17810/2015.45>.
- Darmani, J. W., & Renaldi, A. (2018). Analisis Kemampuan Pemecahan Masalah Matematis : Dampak Model Pembelajaran Reciprocal Teaching Dengan Fieldtrip. *Desimal: Jurnal Matematika*, 1(3). <https://doi.org/https://doi.org/10.24042/djm.v1i3.3108>.
- Dharma, G., Wicaksana, A., & Febrianadewi, N. P. (2019). E-Learning Accessibility In State-Owned Schools In North Bali. *Journal of Foreign Language Teaching and Learning*, 26(1), 8–13.
- Fitriyadi, H. (2013). Integrasi Teknologi Informasi Komunikasi Dalam Pendidikan: Potensi Manfaat, Masyarakat Berbasis Pengetahuan, Pendidikan Nilai, Strategi Implementasi Dan Pengembangan Professional. *Jurnal Pendidikan Teknologi Dan Kejuruan*, 21(3). <https://doi.org/https://doi.org/10.21831/jptk.v21i3.3255>.
- Floryantini, K. N., Sudana, D. N., & Sumantri, M. (2019). Pengaruh Model Sfae Berbasis Penilaian Kinerja Terhadap Keterampilan Berbicara Bahasa Indonesia Siswa Kelas V. *Mimbar Ilmu*, 24(1), 114–123. <https://doi.org/10.23887/mi.v24i1.17468>.
- Haviluddin. (2010). Active Learning berbasis Teknologi Informasi (ICT). *Jurnal Ilmiah Ilmu Komputer*, 5(3). <https://doi.org/http://dx.doi.org/10.30872/jim.v5i3.64>.
- Izati, S. N., Wahyudi, & Sugiyarti, M. (2018). Project Based Learning Berbasis Literasi untuk Meningkatkan Hasil Belajar Tematik. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, 3(9), 1122—1127-1127. <https://doi.org/10.17977/jptpp.v3i9.11508>.
- Kasmaienezhadford, S. (2015). *Students ' Learning Through Teaching Creativity : Teachers ' Perception*. 4(1), 1–13.
- Kembara, Rozak, & Hadian. (2018). Research-based Lectures to Improve Students' 4C (Communication, Collaboration, Critical Thinking, and Creativity) Skills. *Proceedings of the Second Conference on Language, Literature, Education, and Culture (ICOLLITE)*, 1(1). <https://doi.org/https://dx.doi.org/10.2991/icollite-18.2019.50>, . 20019.11.
- Kurniaman, & Wuryandani. (2017). Pengaruh Model Pembelajaran Berbasis Masalah terhadap Motivasi Belajar dan Hasil Belajar PPKn. *Jurnal Civics*, 14(1). <https://doi.org/https://doi.org/10.21831/civics.v14i1.14558>.
- Kuswanto, J., & Walusfa, Y. (2017). Pengembangan Multimedia Pembelajaran pada Mata Pelajaran Teknologi Informasi dan Komunikasi Kelas VIII. *Innovative Journal of Curriculum and Educational Technology IJCET*, 6(2), 58–64. <https://doi.org/https://doi.org/10.15294/ijcet.v6i2.19335>.
- Lombardi, M. M., & Oblinger, D. G. (2014). *Authentic Learning for the 21st Century : An Overview*. (January 2007).
- Mawarni, & Muhtadi. (2017). Pengembangan Buku Digital Interaktif Mata kuliah

- Pengembangan Multimedia Pembelajaran Interaktif Untuk Mahasiswa Teknologi Pendidikan. *Jurnal Inovasi Teknologi Pendidikan*, 4(1). <https://doi.org/https://doi.org/10.21831/jitp.v4i1.10114>.
- Mediatati, N., & Suryaningsih, I. (2017). Penggunaan Model Pembelajaran Course Review Horay Dengan Media Flipchart Sebagai Upaya Meningkatkan Hasil Belajar PKn. *Jurnal Ilmiah Sekolah Dasar*, 1(2). <https://doi.org/http://dx.doi.org/10.23887/jisd.v1i2.10146>.
- Meilani, D., Dantes, N., & Tika, I. N. (2020). Pengaruh Implementasi Pembelajaran Saintifik Berbasis Keterampilan Belajar dan Berinovasi 4C terhadap Hasil Belajar IPA dengan Kovariabel Sikap Ilmiah pada Peserta Didik Kelas V SD Gugus 15 Kecamatan Buleleng. *Jurnal Elementary: Kajian Teori Dan Hasil Penelitian Pendidikan Sekolah Dasar*, 3(1), 1–5. <https://doi.org/https://doi.org/10.31764/elementary.v3i1.1412>.
- Nakano, T. D. C. (2018). *Creativity and innovation : Skills for the 21 st Century Criatividade e inovação : competências para o século XXI*. 35(3), 237–246.
- Ningrat, S. P., Agung, A. A. G., & Yudana, I. M. (2020). Kontribusi Etos Kerja, Motivasi Kerja, Disiplin Kerja dan Supervisi Akademik Terhadap Kinerja Guru Sd Gugus VII Kecamatan Mengwi. *Jurnal Administrasi Pendidikan Indonesia*, 3(1), 54–63. <https://doi.org/https://doi.org/10.23887/japi.v11i1.3169>.
- Nurkholis. (2013). Pendidikan dalam Upaya Memajukan Teknologi. *Jurnal Kependidikan*, 1(24). <https://doi.org/https://doi.org/10.24090/jk.v1i1.530>.
- Quint, J., & Condliffe, B. (2018). *Project-Based Learning*. (January).
- Ratnawati, Handayani, & Hadi. (2020). Pengaruh Model Pembelajaran PBL Berbantu Question Card terhadap Kemampuan Berpikir Kritis Matematis Siswa SMP. *Edumatica: Jurnal Pendidikan Matematika*, 10(1). <https://doi.org/https://doi.org/10.22437/edumatica.v10i01.7683>.
- Road, G. P. (2017). *University Of The Cordilleras Changing Roles Of A Teacher 21 St Century Education*. 1–7.
- Sari, S. (2019). Literasi Media Pada Generasi Milenial Di Era Digital. *Jurnal Komunikasi Dan Administrasi Publik*, 6(2). <https://doi.org/https://doi.org/10.37676/professional.v6i2.943>.
- Sholikhah, Z., Kartana, T. J., & Utami, W. B. (2018). Efektifitas Model Pembelajaran Open-Ended Terhadap Prestasi Belajar Matematika Ditinjau Dari Kreativitas Siswa. *JES-MAT (Jurnal Edukasi Dan Sains Matematika)*, 4(1), 35. <https://doi.org/10.25134/jes-mat.v4i1.908>.
- Sitompul, Setiawan, & Purba. (2017). Pengaruh Media Pembelajaran Dan Motivasi Belajar Terhadap Hasil Belajar Desain Sistem Instruksional Pendekatan Tpack. *Jurnal Teknologi Informasi Dan Komunikasi Dalam Pendidikan*, 4(2), 141–146. <https://doi.org/https://doi.org/10.24114/jtikp.v4i2.8761>.
- Suardana, & Simarmata. (2013). Hubungan Antara Motivasi Belajar dan Kecemasan pada Siswa Kelas Vi Sekolah Dasar di Denpasar Menjelang Ujian Nasional. *Jurnal Psikologi Udayana*, 1(1). <https://doi.org/https://doi.org/10.24843/JPU.2013.v01.i01.p20>.
- Suciu, M., & Lacatus, M. L. (2017). *Soft skills and economic education*. (January 2014).
- Sujana, D. M. A., Dharsana, I. K., & Jayanta, I. N. L. (2018). Pengaruh Model Pembelajaran Kooperatif Tipe Two Stay Two Stray melalui Lesson Study terhadap Hasil Belajar IPA. *MIMBAR PGSD Undiksha*, 6(2). <https://doi.org/http://dx.doi.org/10.23887/jjsgsd.v6i2.19462>.
- Suprihatin, S. (2015). Upaya guru dalam meningkatkan motivasi belajar siswa. *Jurnal Pendidikan Ekonomi UM Metro*, 3(1), 72–82. <https://doi.org/http://dx.doi.org/10.24127/ja.v3i1.144>.

- Surahman, E., & Mukminan. (2017). Peran guru IPS sebagai pendidik dan pengajar dalam meningkatkan sikap sosial dan tanggung jawab sosial siswa SMP. *Harmoni Sosial: Jurnal Pendidikan IPS*, 4(1), 1–13. <https://doi.org/https://doi.org/10.21831/hsjpi.v4i1.8660>.
- Sviangga, Sunardi, & Trapsilasiwi. (2018). Analisis Kemampuan 4C' Siswa Dalam Menyelesaikan Soal Matematika Berpikir Tingkat Tinggi. *Jurnal Kadikma*, 9(1), 17–23. Retrieved from <https://jurnal.unej.ac.id/index.php/kadikma/article/view/8017/5651>.
- Todorescu, L., Popescu-mitroi, M., & Greculescu, A. (2015). Students ' Views on the Teacher as An Information Provider Students ' Views on the Teacher as An Information Provider. *Procedia - Social and Behavioral Sciences*, 197(November), 184–189. <https://doi.org/10.1016/j.sbspro.2015.07.121>.
- Utami, I. G. A. L. P., Prestridge, S., Saukah, A., & Hamied, F. A. (2019). *Continuing Professional Development and teachers ' perceptions and practices - A tenable relationship*. 9(1), 108–118. <https://doi.org/10.17509/ijal.v9i1.12463>.
- Warsihna, J. (2016). Meningkatkan Literasi Membaca Dan Menulis Dengan Teknologi Informasi Dan Komunikasi (TIK). *Kwangsan*, 4(2), 67–80. <https://doi.org/https://doi.org/10.31800/jtp.kw.v4n2.p67--80>.
- Warsita, B. (2017). Peran dan Tantangan Profesi Pengembang Teknologi Pembelajaran Pada Pembelajaran Abad 21. *Kwangsan: Jurnal Teknologi Pendidikan*, 5(2). <https://doi.org/https://doi.org/10.31800/jtp.kw.v5n2.p77--90>.
- Wulandari, Sudatha, & Simamora. (2020). Pengembangan Pembelajaran Blended Pada Mata Kuliah Ahara Yoga Semester II di IHDN Denpasar. *Jurnal Edutech Undiksha*, 8(1), 1–15. <https://doi.org/http://dx.doi.org/10.23887/jeu.v8i1.26459>.