



The integration of the self-concept-based Upanishad learning model in blended learning and its impact on character development and creative thinking skills

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Abstract

The aim of this research is to investigate the impact of a self-concept-based Upanisad learning model integrated in mixed learning on the building of character and creative thinking skills. This study adopted a quasi-experimental design with a posttest-only control design. The population of the study consisted of 90 students. A random sampling technique was used to take the samples which consist of 60 students. Tests and questionnaires were used as data collection methods. The test instruments used were a description test with 10 items and a questionnaire with a total of 30 items. The analysis technique employs MANOVA in SPSS. The results showed that learning with the self-concept based Upanisad learning model simultaneously or partially impacts character and creative thinking skills. The results show that students who are taught using the self-concept based Upanisad learning model gain mean scores in character and creative thinking skills. Moreover, other results show that learning with the self-concept based Upanisad learning model is more influential on students' character than their ability to think creatively. Based on these conclusions, the researcher recommended that a self-concept-based Upanishad learning model be able to be used as an innovative learning model for improving character and creative thinking skills.

Keywords: Character, Creative thinking skills, Self-concept based upanisad learning model.

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Contribution of this paper to the literature

The result of this study can be used as an innovative learning model integrated into blended learning that has an effect on character and creative thinking skills. Learning using the self-concept based Upanisad learning model simultaneously and partially impacts the character and creative thinking skills.

1. Introduction

Moral character is an important aspect of the educational process. The character of each student is built in the classroom which helps each learner be able to achieve the learning objectives themselves. Character development also aims to build dynamic thinking patterns in a unified learning environment. Students with character will be able to adapt to a dynamic era (Blotnicky, Franz-Odenaal, French, & Joy, 2018; Chang & Hall, 2022; Farrell & Brunton, 2020; Kurdi, Leo, Parsia, Sattler, & Emari, 2020; Pedro, Barbosa, & Santos, 2018; Tunkkari, Aunola, Hirvonen, Silinskas, & Kiuru, 2022). Good character does not develop naturally. It must be developed continuously through the teaching process, examples, continuous learning and practice in character education. Character development may be facilitated through continuous interaction within the family, community, school and environment through exchanging knowledge about the situation, socializing, and other interactions (Bustami, Corebima, & Suarsini, 2017; Groenewoudt, Rooks, & van Gool, 2019). The existence of character as a value also synchronizes between teachers and their students so that they can build sustainable development which is especially related to students' cognitive, psychomotor development and the development of an individual's competence in essence as a learner (Blayone, van Oostveen, Barber, DiGiuseppe, & Childs, 2017; Burford et al., 2013; Kintu, Zhu, & Kagambe, 2017; Shernoff, Sinha, Bressler, & Ginsburg, 2017). Character teaches students about the challenges they will face in the future as well as the proper attitude they should have. Therefore, in the digital transition age, it is considered crucial to collaborate between characters and insight into the future world's reality (Dumont & Ready, 2020; Hu, Ortagus, Voorhees, Rosinger, & Kelchen, 2022; Kraus et al., 2021). So, it can be explained that the character internalization of students becomes crucial. The character will enable students to develop a growth mindset, future-oriented and take certain proper actions in the age of digital transformation. In other words, students with strong values will be able to compete in the middle of the twenty-first century's challenges. The need for students to have creative thinking is one of the demands that should be achieved.

Creative thinking can be understood as a way of thinking that can result in various potential solutions (Febrianti, Djahir, & Fatimah, 2016; Sekar, Pudjawan, & Margunayasa, 2015). It is also seen as the process used by someone to develop or formulate new ideas (Cintia, Kristin, & Anugraheni, 2018; Tendrita, Mahanal, & Zubaidah, 2016). The creative thinking process includes higher-order thinking processes such as analysis, testing, communication, problem-solving and scientific process (Redifer, Bae, & Zhao, 2021; Yildiz & Yildiz, 2021; Zhang, Guo, & Xiao, 2021). Flexible and fluent thinking is necessary for creativity (Huang, Chang, & Chou, 2020; Kassim, Nicholas, & Ng, 2014), novelty and elaboration (Hardy, Ness, & Mecca, 2017; Montag-Smit & Maertz Jr, 2017). Students with strong creative thinking skills may develop a variety of ideas and thoughts, ask questions, recognize the validity of other people's viewpoints and become open-minded and receptive to other viewpoints (Akpur, 2020; Redifer et al., 2021). Nowadays, learning must enhance the importance of creative thinking skills. Students' ability to think creatively while studying may have an influence on learning outcomes. Achieving learning objectives will mostly depend on one's capacity for original thought. Well-developed creative thinking abilities will influence the results of learning (Fatmawati, Zubaidah, & Mahanal, 2019; Hidayatulloh, Muslim, Rahmadyanti, Ismayati, & Kusumawati, 2020). Academic achievement will be attained by students who have highly creative skills. (Resien, Sitompul, & Situmorang, 2020). Teachers must modify the learning process to reflect the importance of creative thinking skills. The importance of character and the ability to think creatively requires teacher to develop a learning process that can develop these two qualities. Thus, character education is urgently needed. Character education becomes a priority because it raises social awareness of the realities of civilization and can create an effective action in the social environment's cycle (Fisher, 2021; Hudde, 2022; Jacobson, Levin, & Kapur, 2019; Kahne & Bowyer, 2017; May & Elder, 2018; Pham, Limbu, Bui, Nguyen, & Pham, 2019; Roopesh, 2021; Wamsler, 2020). In another context, character education produces an environment that offers guidelines for thinking and acting in order to prevent the restriction of the students' ideas and creativity. By having exercises on creativity, a learner will be able to behave properly. It has become a strong point in focusing on character education (Cheung & Xie, 2021; Fenwick & Edwards, 2016; Head, 2020; Kalogeropoulos, Russo, & Clarkson, 2021; Peng, Benner, Nikolova, Ivanov, & Peng, 2021; Tsang, 2020; Yin, 2022). It can be explained that the existence of character education helps students in developing ethics, morals, skills and concentration of action in order to make a decision as a result of self-improvement.

Technological advances had a negative impact on all social classes, causing widespread brawls and other forms of violence. The presence of various racial, religious and intergroup conflicts indicates that the Indonesian people's character is still weak and incapable of dealing with racial, religious, ethnic and intergroup conflict. It easily creates suspicions which lead to hostility and conflict. Character flaws will facilitate the formation of social conflicts (Nagovitsyn, Bartosh, Ratsimor, & Maksimov, 2018). The current globalization which has become a reality today has various implications that affect the formation of student character. The availability of various contents as well as students' exposures to the digital world have the potential to degrade students' morality. Moral degradation creates students' character deficits. It means that the learning ethic, sense of responsibility, tolerance and other related aspects have also been eroded. Nowadays, the major and frequent problem on the internet is a lack of media and digital literacy which makes it difficult to filter out and spread fake news. In addition, one character problem in this century is the phenomenon of xenophobia. Xenophobia is a suspicion or social sentiment toward those who are different or who are considered "foreigners". Weak character is a result of current learning practices that have not maximally linked intercultural competence to the needs of students (Schlein, Taft, & Ramsay, 2016). Through learning, students are supposed to get the understanding and internalization through practical social experience that will increase their awareness of social values, individual values and national unity. They should also develop

their mental processes (knowledge and understanding), including social skills and competence (Alabas, 2018; Smith & Crowley, 2018).

To address these issues, it is necessary to develop a local wisdom-based learning model. Local culture is a factor that significantly affects community perceptions of human dignity. Fundamentally, a society's values are determined by local wisdom (Geertz, 1992). Local wisdom is a local way of thinking or an idea transferred from generation to generation and involves values including wisdom, creativity and kindness (Kriyantono, 2014; Parmiti, Rediani, Antara, & Jayadiningrat, 2021). The values of Balinese local wisdom are believed to contain the truth which is followed by community members. This local wisdom which can be called the community's noble values serves as the basis for the philosophy of good behaviour toward harmonization (Suwastini, Dantes, Jayanta, & Suprihatin, 2020). The presence of local content-based learning will benefit the learning process. The application of a learning model containing Balinese local wisdom can fill the gap between scientific literacy and student character in the process of learning. The application of local wisdom-based learning can also construct student behaviour and character. The Balinese local wisdom-based physics learning model is effective in developing creative thinking and national character (Suastra, 2017). With all of the gained experience, the principles of the developed social-constructivist learning model provide great opportunities for lifelong learning (Bosica, Pyper, & MacGregor, 2021). A Hindu text called *Upanisad* is one example of local wisdom that might be applied. In modern education, the Upanishad is regarded as one of Hinduism's teachings of Hinduism containing educational values such as performing a comprehensive visualization of a specific object of study as well as values that requires problems based- instruction and research-based instruction (Suadnyana, Bagus, & Yogiswari, 2019). Upanisad becomes "instructions" for traditional cultural values to overcome the existing impacts. The incorporation of fusion of the Upanisads into the aspect of character formation aims to reshape the basic ideas in building individual civilizations as learners. This aspect is also a symbolic aspect of creating learners who are always learning in the process of self formation (Bralić & Divjak, 2018; Heiberger, Munoz-Najar Galvez, & McFarland, 2021; Shadle, Marker, & Earl, 2017; Väliverronen & Saikkonen, 2021). Therefore, the fusion of the Upanisad's existence and pedagogy to form character is an action to create superior values in a disruptive era.

Strengthening cultural values in the Upanisad will ultimately help students shape pedagogical practices, enhance their learning experiences according to the social context, find aspects of preference in learning and create an effective learning environment (Dichev & Dicheva, 2017; Dyson, Shen, Xiong, & Dang, 2022; Geng, Law, & Niu, 2019; Holmlund, Lesseig, & Slavik, 2018; Ivemark & Ambrose, 2021; Roy & Brown, 2022). The existence of the Upanisad is an important aspect of character education because the Upanisad can create a motivational climate that is able to create "energy" to define a problem or a particular issue and encourage solving the problem. It is important to use it at all times because it can help to build a conceptualization of continuous learning actions. Another important thing is that the Upanisad is able to create various perspectives that make students have many conceptions and can be used to build their character as learners (Benner, 2021; Castaneda & Selwyn, 2018; Hansson & Öhman, 2022; Jones, Miyazaki, Li, & Biscotte, 2022; Sleeter, 2018). In other words, it can be explained that the application of the Upanisads as an element of learning is an important factor in building student character. Because its existence can create fundamental values in shaping students' mentalities, especially in building their learning ethos. This description is the background of the research that aims to analyze the impact of the Upanisad learning model based on self-concept which is integrated with blended learning on character development and creative thinking skills. The self-concept-based Upanisad model used has been developed and is feasible to use. This can be seen from the values of validity, practicality and effectiveness in the very good category. This learning model focuses more on Upanishad values in collaboration with self-concept. The availability of this learning model should be able to contribute to character education to overcome character weaknesses and improve creative thinking skills.

2. Methods

This study employed a quasi-experimental research design with a posttest control group (Rogers & Revesz, 2019). The research implementation process is divided into two classes: experimental and control both of which use blended learning settings. The self-concept-based Upanisad learning model was used to treat the experimental group. Meanwhile, the control group was taught without the self-concept-based Upanisad learning model. The steps in learning with the self-concept-based Upanisad learning model include initiation (Upanayana) by Hindu priests and meditation experts for students pursuing the spiritual path, pre-test of students' self-concept and character qualities through questionnaires, interviews and observations, cultivation of self-concept and character education through meditation learning materials, both theory and practice that prioritizes exercises, Implementation of the learning strategy of sitting close to a spiritual teacher (meditation teacher), a sacred learning condition, to receive the secrets of religious-philosophical meditation, Post-test using authentic assessment: diary, observation, interview and performance test, final initiation (Samawartana) is the final process of learning that signifies the perfection of knowledge, attitudes and skills in the field of meditation.

A post-test will be administered to both groups to specify the differences in character and ability to think creatively between the control and experimental groups. The data collected in this study are: the character (Y1) of the experiment class; character (Y1) control class; and the abilities to think creatively (Y2) in the experiment class abilities to think creatively (Y2) in the control class. The trial was conducted in the Hindu Religious Education Study Program (S1), involving 90 fifth semester students. Before selecting the two classes, an equivalence test was conducted using one-way analysis of variance using the Statistical Program for Social Science 26.0 for Windows application. After the population equivalence test of 90 people was carried out. The sample class was determined using a random sampling technique. The control and experimental classes each had 30 people in them. The data collection methods used in this study were a test and a questionnaire.

The test was designed to assess students' creative thinking abilities. This test was developed according to the material given. The developed test is an essay test with ten questions at the C4-C6 level. The steps are as follows: 1) make a grid of test instruments, 2) write questions in the descriptive form 3) consult with experts. The developed grid follows the indicators' abilities to think creatively. The creative thinking skills instrument grid is shown in Table 1. It is necessary to test the instrument items' validity, the instrument content' validity, the test

reliability, the test items and equipment's level of difficulty in determining the validity of the creative thinking ability test instrument. The conversion rate formula was used to test the validity of the items on the creative thinking ability test instrument. The conversion rate results from each instrument item's calculation are 1 and the total conversion rate of all the creative thinking ability test instrument items is 10 which can be declared valid based on the validation provisions of each instrument item in the conversion rate formula. The content validity test of the creative thinking ability test instrument was performed using the conversion rate formula, resulting in a content validity index value of 1 and the creative thinking ability test instrument being declared very good based on the content validity index formula's content validation provisions for the entire instrument. The reliability test of the creative thinking ability test with polytomies result is 0.87 and is in the range of $0.60 < r_{11} < 0.87$. As a result, the reliability of the creative thinking ability test is very high. The difficulty level of the test items for the ability to think creatively yielded the results that of the ten questions, four were on the medium criteria and six were on the high criteria. In comparison, the difficulty level of a test device falls under the difficult criteria.

Table 1. Indicators of creative thinking ability.

Dimension	Indicators
Generate original ideas	<ol style="list-style-type: none"> 1. The resulting answer is different from the expected answer. 2. The resulting answers contain complex thinking skills consisting of multidisciplinary science.
Produce original works and actions	<ol style="list-style-type: none"> 1. Produce unusual works or actions. 2. Produce works or actions that describe multidisciplinary science.
Have the flexibility of thinking in finding alternative solutions to problems	<ol style="list-style-type: none"> 1. Having the ability to think openly is not limited to one standard solution. 2. Have flexible thinking skills in combining several disciplines to solve problems.

The method of data collection is a closed questionnaire to measure character. Then to measure character, a Likert model rating scale is used where each item is equipped with a choice of 30 answers, namely: very appropriate (*Sangat Setuju*), appropriate (*Setuju*), inappropriate (*Tidak Setuju*), very inappropriate (*Sangat Tidak Setuju*). The character dimensions were used to create the questionnaire, namely religious, honest, disciplined, democratic, caring, curious and responsible dimensions. It will be divided into 25 indicators and 30 statements based on these 7 dimensions. A complete character grid is described in Table 2. In testing the validity of the character questionnaire instrument, it is necessary to test the validity of the instrument items, the validity of the instrument's content, and the reliability. Testing the validity of the questionnaire's contents by using the conversion rate formula. Each instrument item's conversion rate is 1 and the total conversion rate of all character instrument items is 30. Based on the validation provisions of each instrument item in the conversion rate formula, it can be declared valid. Testing the validity of the questionnaire's contents with the Statistical Program for Social Science yielded 0.87 which is considered very strong. Using the Statistical Program for Social Science to test the questionnaire's reliability, the analysis yields a Cronbach's Alpha value of 0.93, indicating that the developed questionnaire is extremely reliable.

Table 2. Character Instrument Indicators.

Dimension	Indicators
Religion	Always pray.
	Always say thanks for God's blessings.
	Expressing admiration for God's greatness.
Honest	Say something true even if it's bitter.
	Avoid defrauding, cheating, plagiarism or stealing.
	Have the courage to do something right.
	Trustworthy does what it says.
Discipline	Compliant and obedient to the time set by the organization or school.
	Obey the applicable regulations without feeling forced.
	Commitment and loyalty to the assigned task or job.
Democratic	Think positively in every association with colleagues.
	Show respect and respect any differences of opinion.
	Listen to and hear every point of view even if it differs from your own.
	Avoid treatment that is harassing and demeaning, including other students who have physical and mental disabilities.
Curiosity	Ask question.
	Digging, tracing and investigating.
	Interested in various things that have not been found the answer.
Care	Helping people in need.
	Doing social activities to help people in need.
	Caring for the school environment.
	Throw garbage in its place.
	Turning off the water faucet that pours water.
Responsibility	Carry out any work that becomes Responsibility.
	Carry out individual tasks well.
	Accept the risk of every action taken.

This research's data analysis method is inferential and descriptive statistical. The descriptive analysis in this study was performed using the Statistical Program for Social Science 26.0 for Windows and the data analyzed was post-test data. The statistical test seeks values such as the mean, standard deviation, minimum and maximum values. Meanwhile, for inferential analysis, of post-test data, inferential statistics were used with the multivariate

analysis of variance test. Prior to the multivariate analysis of variance test, the prerequisite test was done with Kolmogorov-Smirnov, the homogeneity test with Levene Statistics and Box's Test of Equality of Covariance Matrices. The linearity test was done to see if there was a linear relationship between each of the analyzed dependent variables. The prerequisite test and the multivariate analysis of variance test were performed using the Statistical Program for Social Science 26.0 for Windows.

3. Results and Discussion

3.1. Result

After the students have been taught in accordance with the learning design, namely learning with the self-concept based Upanisad learning model, the descriptive analysis results show that there is a significant influence on learning application with the self-concept based Upanisad learning model. Table 3 displays the full descriptive analysis results. The descriptive analysis outcomes show differences in character and creative thinking abilities of students who are educated through learning with a self-concept based Upanisad learning model compared with those who learn without the self-concept-based Upanisad learning model. The data shows that the difference in the character values of students who are taught with the self-concept-based Upanishad learning model is 4.67, having a greater average value than students who are taught without the self-concept-based Upanishad learning model. Meanwhile, the creative thinking ability shows a difference score of 2.47, the creative thinking ability of students who are educated by the self-concept-based Upanisad learning model gains an average score greater than those who are not. The outcomes also indicate that learning with a self-concept based Upanisad learning model is more influential on students' character than their ability to think creatively.

Table 3. Results of character and creative thinking skills analysis.

Treatment	Dependent variable	Mean	Std. deviation	Min.	Max.	Range
Learning with a self-concept- based Upanishad learning model	Character	87.30	7.51	71.00	99.00	28.00
Learning without self-concept-based Upanishad learning model	Creative thinking skills	84.97	5.57	71.00	94.00	23
	Character	82.63	7.51	68	95	27
	Creative thinking skills	82.50	6.42	71	93	22

Prerequisite analysis tests include tests for normality of data distribution, homogeneity of variance, multivariate homogeneity and dependent variable linearity. The first prerequisite test was the Kolmogorov-Smirnov normality test. The analysis results show that all the data from the groups are normally distributed as indicated by a Sig. value of > 0.05, as shown in Table 4. The homogeneity test is the next prerequisite test after the normality conditions are met. The homogeneity test was performed in this study using two analyses: the homogeneity of variance test with Levene's Test of Equality and the multivariate homogeneity test with Box's Test of Equality of Covariance Matrices.

Table 4. Normality analysis test result

Component	Learning approach	Kolmogorov-Smirnov		
		Statistic	Df	Sig.
Character	Learning with a self-concept- based Upanishad learning model	0.10	30	0.20
	Learning without a self-concept -based Upanishad learning model	0.11	30	0.20
Creative thinking skills	Learning with a self-concept- based Upanishad learning model	0.13	30	0.20
	Learning without a self-concept- based Upanishad learning model	0.10	30	0.20

Table 5. Manova test result

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's trace	1.00	9535.67	2.00	57.00	0.00
	Wilks' lambda	0.00	9535.67	2.00	57.00	0.00
	Hotelling's trace	334.56	9535.67	2.00	57.00	0.00
	Roy's largest root	334.59	9535.67	2.00	57.00	0.00
Treatment	Pillai's trace	0.13	4.10	2.00	57.00	0.02
	Wilks' lambda	0.87	4.10	2.00	57.00	0.02
	Hotelling's trace	0.14	4.10	2.00	57.00	0.02
	Roy's largest root	0.14	4.10	2.00	57.00	0.02

The sig value indicates that the results of the homogeneity analysis show the same meaning such as the research data derived from homogeneous data groups. Each test yielded a result greater than 0.05. For the character, the value of Sig. Levine's test of equality is 0.99 while the value of Sig. Creative thinking ability is 0.98. Meanwhile, the homogeneity test using Box's test of covariance matrices yielded a Sig. of 0.13 and an F value equal to 1.87. The next prerequisite test is the linearity test which determines whether each of the analyzed dependent variables has a linear relationship. According to the findings of the analysis, a value of Sig. on deviation from linearity of 0.86 > 0.05 indicates a linear relationship between character data and creative thinking skills. After passing the prerequisite test for multivariate analysis of variance, the research data obtained are typically distributed and homogeneous, allowing hypothesis testing with multivariate analysis of variance to proceed. Table 5 and Table 6 summarize the findings of the entire analysis.

The F coefficient is 9535.67 with a Sig. 0.00 based on Pillai's Trace, Wilks' Lambda Hotelling's Trace, and Roy's Largest Root. This means that there are differences in students' conceptual understanding and speed between those who are taught using Upanisad-based learning and those who are not. The test results of the Between-

Subjects Effects analysis show a F value equal to 5.79 with a Sig. 0.02 which is less than 0.05. This demonstrates that learning with the self-concept-based upanisad learning model has an effect on character. The analysis of the tests of Between-Subjects Effects yields F value of 2.53 with Sig. 0.02 that is less than 0.05. This demonstrates that learning and the Upanisad learning model based on a self-concept have a strong influence on creative thinking abilities.

Table 6. Between-Subjects effects analysis test results

Source	Dependent variable	Type III sum of squares	Df	Mean square	F	Sig.
Corrected model	Character	326.67	1	326.67	5.79	0.02
	Creative thinking skills	91.27	1	91.27	2.53	0.02
Intercept	Character	433160.07	1	433160.07	7675.29	0.00
	Creative thinking skills	420676.27	1	420676.27	11649.37	0.00
Treatment	Character	326.67	1	326.67	5.79	0.02
	Creative thinking skills	91.27	1	91.27	2.53	0.02
Error	Character	3273.27	58	56.44		
	Creative thinking skills	2094.47	58	36.11		
Total	Character	436760.00	60			
	Creative thinking skills	422862.000	60			
Corrected total	Character	3599.93	59			
	Creative thinking skills	2185.73	59			

4. Discussion

The results showed that learning with a self-concept-based Upanisad learning model simultaneously or partially impacts character and creative thinking skills. It is inseparable from how learning is carried out. The Upanisad which is used as a learning model can also be used as a solution to achieve learning objectives. It is because the Upanisads provide systematic guidance in creating conducive learning conditions. The Upanisad is used as a prototype in the learning process because this holy book contains several stages that can be applied before starting to learn. One of the things taught in it is the process of meditation. Meditation becomes an action to focus on silence and with concentration, a learner will become calmer making it easier to focus his mind or facilitate concentration. While meditating, a learner will be ready to receive any lessons or material that will be given. It can be explained that the ideas contained in religious literature whose value is taken to be embedded are essential. Since the idea of religion provides value, the guide creates praxis or action as well as a concept to improve the technical aspect. Moreover, Bali, which is predominantly Hindu, must take the essence of the Upanisad teachings to be implanted as guidance for action, especially in learning. In other words, the value of Hinduism is not only cultural but intellectual. Local wisdom must still needs be internalized especially in global reality (Collier & Stewart, 2022; Marianno et al., 2022; Puspitasari, 2017). The existence of local wisdom can be used as a formula to embed pedagogical values in order to face an increasingly dynamic global reality.

The existence of the Upanishad and the teachings adopted in the learning process also has very important meaning in creating effectiveness and a good learning environment. It is because the Upanishad teaches that students must sit or place themselves close to the teacher as a source of information if they want to increase their understanding and improve their cognition (according to the terminological imprint, which means sitting near the teacher's feet). The teachings contained in the Upanishads also teach that a learner who is currently studying must concentrate his mind fully to absorb as much knowledge as possible. It shows an in-depth viewpoint to build motivation, learning experiences and encouragement to make oneself successful, especially in the learning process. The pedagogical concept of the religious component is a key component in building discipline and increasing self-reflection (Estapa & Tank, 2017; Fidalgo, Thormann, Kulyk, & Lencastre, 2020; Roberts et al., 2018). In other words, as elements of Hinduism, the Upanishad provides perspectives and values to enhance the learning process.

The application of the principles of curiosity (*Tapasa*), focus of attention as prospective teachers (*Brahmacaryena*) and trust (*Shraddhaya*) are elements of the Upanisad that may be used as a guide for thinking or behaving in order to create a learning commitment between students and teachers. The process of focusing attention in the process of learning at the Hindu Religious Education Program Study, *Sekolah Tinggi Keguruan Ilmu Pendidikan Agama Hindu of Singaraja*, has not been optimally carried out. It is because in the meditation process, as a process of focusing the mind, the elements of *Tapasa* (curiosity) have not been internalized (focusing attention as a prospective Hindu religion teacher) and *Shraddaya* (trust) between students and educators. In other words, between educators and students, they must establish interdependent relationships to develop these three characters. Upanisad, which is used as a learning model, emphasizes not only the achievement of learning objectives but also ways to achieve these learning objectives. Three essential concepts describe how to achieve the learning objectives. It coincides with the table presented above that changing character from bad to good require self-commitment, followed up with implementation. The self-commitment instilled through Upanisadic values explains that the learning is an attempt to create capitalization and consistency and an effort to build character based on the principle of curiosity.

The aspects embedded in this Upanisad also show a discourse that learning can take place when the individuals ready to receive the lesson. The reasons for using the Upanishads are expressed by Atha or important factors in improving the quality of learning. From a holistic point of view, the Upanisad teaches the concept of naciketa or a principle about an effort or an action to continue learning oneself, in traditional educational institutions. In other words, it can be explained that the Likert Scale results that still show a minimum result can be optimized with values, ideas, implementations, or Upanisad-based learning modules. Increasing trust is important because it fosters participation in learning subjects and creates bonds between people. It is an essential thing that must be done on an ongoing basis because it can be a foundation for dealing with the dynamics of reality, especially in the field of education. Therefore, it is necessary to carry out and maintain the paradigm of education that integrates pedagogical and religious principles to encourage a competitive attitude in each learner and learning environment

(Chittum, Jones, Akalin, & Schram, 2017; Cooper, Downing, & Brownell, 2018; Greenland, Saleem, Misra, & Mason, 2022; Ruz & Schunn, 2018). In other words, if a learner's motivation, interdependent relationships and competitive spirit grow, the effort to accumulate information and learning motivation will also increase.

Using Upanisadic values can build the learner's character because, in the Upanisadic tradition, there is an orientation to see, define, understand and try to live life. Observation, theory, practice, or visualization are some of the ways that are investigated in order to better understand the facts of life, dynamic learning and improvised behaviors. This integral and comprehensive aspect is explored in totality so it is very relevant in building one's character or learning mentality. All these are useful aspects of the learning process because the Upanisad teaches aspects of Dharma Sadhana namely the realization of teachings that stimulate students to improve themselves and obey what they are learning. It indicates that the Upanishads implicitly or explicitly teach about efforts to build character in each learner. Following the character statement of each student in a classroom setting that helps each learner achieve the learning objectives themselves. Character formation can begin with continuous interaction between individuals, such as exchanging information about the situation, socializing, and interacting within the family, community, school, and environment (Bustami et al., 2017; Groenewoudt et al., 2019). It is also an indication of the creation of a quality study space, with the hope that there will be motivational construction from individuals as homo academics in understanding existing phenomena and creating reflection as a vehicle for contemplation (Dare, Ellis, & Roehrig, 2018; Eze, Chinedu-Eze, & Bello, 2018; Mercader & Gairín, 2020). In other words, it can be explained that the fusion of Hindu religious values into the learning aspect provides a psycho-pedagogical nuance and makes the education and learning process can be successful if various ideas support it.

The existence of character as a value also synchronizes between teachers and students so that they can build strong character pillars, especially those relating to cognitive and psychomotor of the students, and develop an individual's competence, in essence, as a learning creature (Blayone et al., 2017; Burford et al., 2013; Kintu et al., 2017; Shernoff et al., 2017; Tomas, Evans, Doyle, & Skamp, 2019; Zhou & Li, 2022). Students who have the character will be able to adapt to the nuances of a very dynamic era (Blotnicky et al., 2018; Chang & Hall, 2022; Farrell & Brunton, 2020; Kurdi et al., 2020; Pedro et al., 2018; Tunkkari et al., 2022). Moreover, the existence of good character will enable to make students able to take part in good learning, which will certainly influence one's ability to think creatively. The thinking ability of the creative can be better formed because learning with the self-concept based Upanisad learning model provides a learning atmosphere in which an on-going learner must concentrate fully to absorb as much knowledge as possible. It shows an in-depth perspective on efforts to build motivation, learning experiences, and encouragement to make oneself successful, especially in the learning process. If the students focus on what is learned, they will be able to think creatively. Students with creative thinking skills can be taught to develop many ideas and opinions, to ask questions, to acknowledge the truth of others' opinions, and to be open and responsive to different perspectives (Akpur, 2020; Antara, Suma, & Parmiti, 2022; Redifer et al., 2021). Improving creative thinking skills in the learning process has recently become critical. The ability of students to think creatively during the learning process can influence student learning outcomes. The ability to think creatively will play a role in achieving learning outcomes. Well-developed creative thinking skills will have an impact on learning outcomes (Fatmawati et al., 2019; Hidayatulloh et al., 2020). Students with strong creative thinking abilities will excel in school (Resien et al., 2020). In the current learning process, teachers are required to be able to think creatively, productively, innovatively, proactively, and affectively. Those aspects are related to the development of attitudes (know why), skills (know how) and knowledge (know about what) in an integrative way (Murjani & Hamid, 2016; Setyorini & Rizqiana, 2017). By having interesting and varied activities, students can develop their creativity, especially the ability to think creatively. So, the existence of the Upanisad is very important because the reality of education is complex and multifactorial. By internalizing these values consistently and gradually, the learning process, pedagogical goals, and elements of character-building will be achieved.

5. Conclusion

The results showed that learning with the self-concept based Upanisad learning model simultaneously or partially impacts the character and ability to think creatively. This is shown by the mean scores of characters and the creative thinking ability of students taught with the self-concept-based Upanisad learning model. The outcomes of this study also show that learning with the self-concept based Upanisad learning model is more influential on students' character than their ability to think creatively. So, researchers recommend the self-concept-based Upanishad as one of the innovative learning models that are appropriate to use for developing character and creative thinking abilities.

References

- Akpur, U. (2020). Critical, reflective, creative thinking and their reflections on academic achievement. *Thinking Skills and Creativity*, 37, 100683. <https://doi.org/10.1016/j.tsc.2020.100683>
- Alabas, R. (2018). Study on the first appearance of social studies in the elementary school program in Turkey. *International Education Studies*, 11(11), 95-108. <https://doi.org/10.5539/ies.v11n11p95>
- Antara, I. G. W. S., Suma, K., & Parmiti, D. P. (2022). E-scrapbook: construction of digital learning media containing questions of higher order thinking skills. *Journal Edutake Ituksha*, 10(1), 11-20.
- Benner, D. (2021). On justice in pedagogical contexts. *ECNU Review of Education*, 4(4), 669-685. <https://doi.org/10.1177/2096531120933278>
- Blayone, T. J., vanOostveen, R., Barber, W., DiGiuseppe, M., & Childs, E. (2017). Democratizing digital learning: Theorizing the fully online learning community model. *International Journal of Educational Technology in Higher Education*, 14(1), 1-16. <https://doi.org/10.1186/s41239-017-0051-4>
- Blotnicky, K. A., Franz-Odenaal, T., French, F., & Joy, P. (2018). A study of the correlation between STEM career knowledge, mathematics self-efficacy, career interests, and career activities on the likelihood of pursuing a STEM career among middle school students. *International Journal of STEM Education*, 5(1), 1-15. <https://doi.org/10.1186/s40594-018-0118-3>
- Bosica, J., Pyper, J. S., & MacGregor, S. (2021). Incorporating problem-based learning in a secondary school mathematics preservice teacher education course. *Teaching and Teacher Education*, 102, 103335. <https://doi.org/10.1016/j.tate.2021.103335>
- Bralić, A., & Divjak, B. (2018). Integrating MOOCs in traditionally taught courses: Achieving learning outcomes with blended learning. *International Journal of Educational Technology in Higher Education*, 15(1), 1-16. <https://doi.org/10.1186/s41239-017-0085-7>

- Burford, G., Hoover, E., Velasco, I., Janoušková, S., Jimenez, A., Piggot, G., . . . Harder, M. K. (2013). Bringing the “missing pillar” into sustainable development goals: Towards intersubjective values-based indicators. *Sustainability*, 5(7), 3035-3059. <https://doi.org/10.3390/su5073035>
- Bustami, Y., Corebima, A. D., & Suarsini, E. (2017). The social attitude empowerment of biology students: Implementation JiRQA learning strategy in different ethnics. *International Journal of Instruction*, 10(3), 15-30. <https://doi.org/10.12973/iji.2017.1032a>
- Castaneda, L., & Selwyn, N. (2018). More than tools? Making sense of the ongoing digitizations of higher education. *International Journal of Educational Technology in Higher Education*, 15(1), 1-10.
- Chang, C.-F., & Hall, N. C. (2022). Differentiating teachers' social goals: Implications for teacher-student relationships and perceived classroom engagement. *AERA Open*, 8, 23328584211064916. <https://doi.org/10.1177/23328584211064916>
- Cheung, A. C. K., & Xie, C. (2021). Evidence-based reform in education: Global perspectives. *ECNU Review of Education*, 4(1), 3-6. <https://doi.org/10.1177/2096531120984793>
- Chittum, J. R., Jones, B. D., Akalin, S., & Schram, Á. B. (2017). The effects of an afterschool STEM program on students' motivation and engagement. *International journal of STEM education*, 4(1), 1-16. <https://doi.org/10.1186/s40594-017-0065-4>
- Cintia, N. I., Kristin, F., & Anugraheni, I. (2018). Application of discovery learning learning model to improve creative thinking skills and student learning outcomes. *Educational Science Perspective*, 32(1), 67-75. <https://doi.org/10.21009/pip.321.8>
- Collier, B., & Stewart, J. (2022). Privacy worlds: Exploring values and design in the development of the Tor anonymity network. *Science, Technology, & Human Values*, 47(5), 910-936. <https://doi.org/10.1177/01622439211039019>
- Cooper, K. M., Downing, V. R., & Brownell, S. E. (2018). The influence of active learning practices on student anxiety in large-enrollment college science classrooms. *International Journal of STEM Education*, 5(1), 1-18.
- Dare, E. A., Ellis, J. A., & Roehrig, G. H. (2018). Understanding science teachers' implementations of integrated STEM curricular units through a phenomenological multiple case study. *International Journal of STEM Education*, 5(1), 1-19. <https://doi.org/10.1186/s40594-018-0101-z>
- Dichev, C., & Dicheva, D. (2017). Gamifying education: What is known, what is believed and what remains uncertain: A critical review. *International Journal of Educational Technology in Higher Education*, 14(1), 1-36. <https://doi.org/10.1186/s41239-017-0042-5>
- Dumont, H., & Ready, D. D. (2020). Do schools reduce or exacerbate inequality? How the associations between student achievement and achievement growth influence our understanding of the role of schooling. *American Educational Research Journal*, 57(2), 728-774. <https://doi.org/10.3102/0002831219868182>
- Dyson, B., Shen, Y., Xiong, W., & Dang, L. (2022). How cooperative learning is conceptualized and implemented in Chinese physical education: A systematic review of literature. *ECNU Review of Education*, 5(1), 185-206. <https://doi.org/10.1177/20965311211006721>
- Estapa, A. T., & Tank, K. M. (2017). Supporting integrated STEM in the elementary classroom: A professional development approach centered on an engineering design challenge. *International Journal of STEM Education*, 4(1), 1-16.
- Eze, S. C., Chinedu-Eze, V. C., & Bello, A. O. (2018). The utilisation of e-learning facilities in the educational delivery system of Nigeria: A study of M-University. *International Journal of Educational Technology in Higher Education*, 15(1), 1-20. <https://doi.org/10.1186/s41239-018-0116-z>
- Farrell, O., & Brunton, J. (2020). A balancing act: A window into online student engagement experiences. *International Journal of Educational Technology in Higher Education*, 17(1), 1-19.
- Fatmawati, A., Zubaidah, S., & Mahanal, S. (2019). *Critical thinking, creative thinking, and learning achievement: How they are related*. Paper presented at the In Journal of Physics: Conference Series, IOP Publishing.
- Febrianti, Y., Djahir, Y., & Fatimah, S. (2016). Analysis of students' creative thinking skills by utilizing the environment in economics subjects at SMA Negeri 6 Palembang. *Profit Journal*, 3(1), 121-127.
- Fenwick, T., & Edwards, R. (2016). Exploring the impact of digital technologies on professional responsibilities and education. *European Educational Research Journal*, 15(1), 117-131.
- Fidalgo, P., Thormann, J., Kulyk, O., & Lencastre, J. A. (2020). Students perceptions on distance education: A multinational study. *International Journal of Educational Technology in Higher Education*, 17(1), 1-18.
- Fisher, D. (2021). Educational leadership and the impact of societal culture on effective practices. *Journal of Research in International Education*, 20(2), 134-153. <https://doi.org/10.1177/14752409211032531>
- Geertz, C. (1992). Culture and religion. In (pp. 9-20). Yogyakarta: Canisius Press.
- Geng, S., Law, K. M., & Niu, B. (2019). Investigating self-directed learning and technology readiness in blending learning environment. *International Journal of Educational Technology in Higher Education*, 16(1), 1-22. <https://doi.org/10.1186/s41239-019-0147-0>
- Greenland, S., Saleem, M., Misra, R., & Mason, J. (2022). Sustainable management education and an empirical five-pillar model of sustainability. *The International Journal of Management Education*, 20(3), 100658. <https://doi.org/10.1016/j.ijme.2022.100658>
- Groenewoudt, A. C., Rooks, G., & van Gool, P. J. (2019). When problems lead to ideas: The roles of daily vigor and social interactions. *The Journal of Creative Behavior*, 53(3), 286-297. <https://doi.org/10.1002/jocb.179>
- Hansson, P., & Öhman, J. (2022). Museum education and sustainable development: A public pedagogy. *European Educational Research Journal*, 21(3), 469-483. <https://doi.org/10.1177/14749041211056443>
- Hardy, I. J. H., Ness, A. M., & Mecca, J. (2017). Outside the box: Epistemic curiosity as a predictor of creative problem solving and creative performance. *Personality and Individual Differences*, 104, 230-237. <https://doi.org/10.1016/j.paid.2016.08.004>
- Head, G. (2020). Ethics in educational research: Review boards, ethical issues and researcher development. *European Educational Research Journal*, 19(1), 72-83. <https://doi.org/10.1177/14749041211056443>
- Heiberger, R. H., Munoz-Najar Galvez, S., & McFarland, D. A. (2021). Facets of specialization and its relation to career success: An analysis of US Sociology, 1980 to 2015. *American Sociological Review*, 86(6), 1164-1192. <https://doi.org/10.1177/00031224211056267>
- Hidayatulloh, M. K. Y., Muslim, S., Rahmadyanti, E., Ismayati, E., & Kusumawati, N. (2020). Level of creative thinking effect through multiple solution task type problem-solving on learning outcomes. *Journal of Education, Teaching, and Learning Volume*, 5(1), 177-184. <https://doi.org/10.26737/jetl.v5i1.1821>
- Holmlund, T. D., Lesseig, K., & Slavik, D. (2018). Making sense of “STEM education” in K-12 contexts. *International Journal of STEM Education*, 5(32), 1-18.
- Hu, X., Ortagus, J. C., Voorhees, N., Rosinger, K., & Kelchen, R. (2022). Disparate impacts of performance funding research incentives on research expenditures and state appropriations. *AERA Open*, 8, 23328584211071109. <https://doi.org/10.1177/23328584211071109>
- Huang, N.-t., Chang, Y.-s., & Chou, C.-h. (2020). Effects of creative thinking, psychomotor skills, and creative self-efficacy on engineering design creativity. *Thinking Skills and Creativity*, 37, 100695. <https://doi.org/10.1016/j.tsc.2020.100695>
- Hudde, A. (2022). Educational differences in cycling: Evidence from German cities. *Sociology*, 00380385211063366. <https://doi.org/10.1177/00380385211063366>
- Ivemark, B., & Ambrose, A. (2021). Habitus adaptation and first-generation university students' adjustment to higher education: A life course perspective. *Sociology of Education*, 94(3), 191-207. <https://doi.org/10.1177/00380407211017060>
- Jacobson, M. J., Levin, J. A., & Kapur, M. (2019). Education as a complex system: Conceptual and methodological implications. *Educational Researcher*, 48(2), 112-119.
- Jones, B. D., Miyazaki, Y., Li, M., & Biscotte, S. (2022). Motivational climate predicts student evaluations of teaching: Relationships between students' course perceptions, ease of course, and evaluations of teaching. *AERA Open*, 8, 23328584211073167. <https://doi.org/10.1177/23328584211073167>
- Kahne, J., & Bowyer, B. (2017). Educating for democracy in a partisan age: Confronting the challenges of motivated reasoning and misinformation. *American Educational Research Journal*, 54(1), 3-34. <https://doi.org/10.3102/0002831216679817>
- Kalogeropoulos, P., Russo, J. A., & Clarkson, P. (2021). Exploring educator values alignment strategies in an intervention context: The emergence of the Beacon strategy. *ECNU Review of Education*, 4(2), 327-348. <https://doi.org/10.1177/2096531120923127>
- Kassim, H., Nicholas, H., & Ng, W. (2014). Using a multimedia learning tool to improve creative performance. *Thinking Skills and Creativity*, 13, 9-19. <https://doi.org/10.1016/j.tsc.2014.02.004>

- Kintu, M. J., Zhu, C., & Kagambe, E. (2017). Blended learning effectiveness: The relationship between student characteristics, design features and outcomes. *International Journal of Educational Technology in Higher Education, 14*(1), 1-20. <https://doi.org/10.1186/s41239-017-0043-4>
- Kraus, S., Jones, P., Kailer, N., Weinmann, A., Chaparro-Banegas, N., & Roig-Tierno, N. (2021). Digital transformation: An overview of the current state of the art of research. *Sage Open, 11*(3), 21582440211047576. <https://doi.org/10.1177/21582440211047576>
- Kriyantono, R. (2014). *Practical techniques of communication research* (7th ed.). Jakarta: Kencana Prenada Media.
- Kurdi, G., Leo, J., Parsia, B., Sattler, U., & Emari, S. A. (2020). A systematic review of automatic question generation for educational purposes. *International Journal of Artificial Intelligence in Education, 30*(1), 121-204.
- Marianno, B. D., Hemphill, A. A., Loures-Elias, A. P. S., Garcia, L., Cooper, D., & Coombes, E. (2022). Power in a pandemic: Teachers' unions and their responses to school reopening. *AERA Open, 8*, 23328584221074337. <https://doi.org/10.1177/23328584221074337>
- May, K. E., & Elder, A. D. (2018). Efficient, helpful, or distracting? A literature review of media multitasking in relation to academic performance. *International Journal of Educational Technology in Higher Education, 15*(1), 1-17.
- Mercader, C., & Gairín, J. (2020). University teachers' perception of barriers to the use of digital technologies: The importance of the academic discipline. *International Journal of Educational Technology in Higher Education, 17*(1), 1-14. <https://doi.org/10.1186/s41239-020-0182-x>
- Montag-Smit, T., & Maertz Jr, C. P. (2017). Searching outside the box in creative problem solving: The role of creative thinking skills and domain knowledge. *Journal of Business Research, 81*, 1-10. <https://doi.org/10.1016/j.jbusres.2017.07.021>
- Murjani, A., & Hamid, A. (2016). Improving creative thinking skills and student learning outcomes through generative learning models on buffer solution material. *Journal of Science Education Innovation, 7*(2), 103-108.
- Nagovitsyn, R. S., Bartosh, D. K., Ratsimor, A. Y., & Maksimov, Y. G. (2018). Formation of social tolerance among future teachers. *European Journal of Contemporary Education, 7*(4), 754-763. <https://doi.org/10.13187/ejced.2018.4.754>
- Parmiti, D., Rediani, N., Antara, I., & Jayadinigrat, M. (2021). The effectiveness of local culture-integrated science learning through project based assessment on scientific attitudes and science process skills of elementary school students. *Indonesian Science Education Journal, 10*(3), 439-446. <https://doi.org/10.15294/jpii.v10i3.31301>
- Pedro, L. F. M. G., Barbosa, C. M. M. d. O., & Santos, C. M. d. N. (2018). A critical review of mobile learning integration in formal educational contexts. *International Journal of Educational Technology in Higher Education, 15*(1), 1-15. <https://doi.org/10.1186/s41239-018-0091-4>
- Peng, Z., Benner, D., Nikolova, R., Ivanov, S., & Peng, T. (2021). Ethical and moral competences of upper secondary students: A comparative study. *ECNU Review of Education, 4*(4), 686-706. <https://doi.org/10.1177/2096531120973958>
- Pham, L., Limbu, Y. B., Bui, T. K., Nguyen, H. T., & Pham, H. T. (2019). Does e-learning service quality influence e-learning student satisfaction and loyalty? Evidence from Vietnam. *International Journal of Educational Technology in Higher Education, 16*(1), 1-26. <https://doi.org/10.1186/s41239-019-0136-3>
- Puspitasari, N. W. R. N. (2017). Power and religion: Geertz position of present-day Bali. *Balinese Studies Journal, 7*(1), 249-258. <https://doi.org/10.24843/JKB.2017.v07.i01.p13>
- Redifer, J. L., Bae, C. L., & Zhao, Q. (2021). Self-efficacy and performance feedback: Impacts on cognitive load during creative thinking. *Learning and Instruction, 71*, 101395. <https://doi.org/10.1016/j.learninstruc.2020.101395>
- Resien, C., Sitompul, H., & Situmorang, J. (2020). The effect of blended learning strategy and creative thinking of students on the results of learning information and communication technology by controlling prior knowledge. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal, 3*(2), 879-893. <https://doi.org/10.33258/birle.v3i2.997>
- Roberts, T., Jackson, C., Mohr-Schroeder, M. J., Bush, S. B., Maiorca, C., Cavalcanti, M., . . . Cremeans, C. (2018). Students' perceptions of STEM learning after participating in a summer informal learning experience. *International journal of STEM education, 5*(1), 1-14. <https://doi.org/10.1186/s40594-018-0133-4>
- Rogers, J., & Revesz, A. (2019). Experimental and quasi-experimental designs. In *The Routledge handbook of research methods in applied linguistics*. In (pp. 133-143): Routledge.
- Roopesh, O. (2021). Educating 'temple cultures' heterogeneous worship and hindutva politics in Kerala. *Sociological Bulletin, 70*(4), 485-501. <https://doi.org/10.1177/00380229211051042>
- Roy, S., & Brown, S. (2022). Higher education in india in the time of pandemic, sans a learning management system. *AERA Open, 8*, 23328584211069527. <https://doi.org/10.1177/23328584211069527>
- Ruz, V.-P., & Schunn, C. D. (2018). The nature of science identity and its role as the driver of student choices. *International journal of STEM education, 5*(1), 1-12. <https://doi.org/10.1186/s40594-018-0140-5>
- Schlein, C., Taft, R. J., & Ramsay, C. M. (2016). The intersection of culture and behavior: Intercultural competence, transnational adoptees, and social studies classrooms. *Journal of International Social Studies, 6*(1), 128-142.
- Sekar, D. K. S., Pudjawan, K., & Margunayasa, I. G. (2015). Learning science for grade iv students of Ganesha Education University. *PGSD E-Journal Ganesha University of Education Department of PGSD, 3*(1), 1-11.
- Setyorini, N., & Rizqiana, S. (2017). The effectiveness of article media in learning to write speech manuscripts. *Edudikara: Journal of Education and Learning, 2*(2), 137-145.
- Shadle, S. E., Marker, A., & Earl, B. (2017). Faculty drivers and barriers: laying the groundwork for undergraduate STEM education reform in academic departments. *International Journal of STEM Education, 4*(1), 1-13.
- Shernoff, D. J., Sinha, S., Bressler, D. M., & Ginsburg, L. (2017). Assessing teacher education and professional development needs for the implementation of integrated approaches to STEM education. *International journal of STEM education, 4*(1), 1-16. <https://doi.org/10.1186/s40594-017-0068-1>
- Sleeter, C. E. (2018). Multicultural education past, present, and future: Struggles for dialog and power-sharing intercultural education multicultural education comes into being twenty-two years and two emblematic experiences ago elites react neoliberal multicultural education? *International Journal of Multicultural Education, 20*(1), 5-20. <https://doi.org/10.18251/ijme.v20i1.1663>
- Smith, W. L., & Crowley, R. M. (2018). Social studies needs (new) white people: The case for including allies in the curriculum. *The Social Studies, 109*(4), 202-214. <https://doi.org/10.1080/00377996.2018.1515720>
- Suadnyana, I., Bagus, P., & Yogiswari, K. S. (2019). Upanishads of modern education perspective. *Pasupati Journal, 6*(2), 88-99. <https://doi.org/10.37428/pspt.v6i2.136>
- Suastra, I. W. (2017). Balinese local wisdom and their implications in science education at school. *International Research Journal of Management, IT and Social Sciences, 4*(2), 48-57. <https://doi.org/10.21744/irjmis.v4i2.389>
- Suwastini, N. K. A., Dantes, G. R., Jayanta, I. N. L., & Suprihatin, C. T. (2020). *Developing storyline for role-playing games based on balinese folklore for preserving local wisdom and character education*. Paper presented at the in 3rd International Conference on Innovative Research Across Disciplines (ICIRAD 2019), Atlantis Press.
- Tendrita, M., Mahanal, S., & Zubaidah, S. (2016). *Empowerment of creative thinking skills through think pair share remap model*. Paper presented at the Proceedings of Biology Education Conference.
- Tomas, L., Evans, N. S., Doyle, T., & Skamp, K. (2019). Are first year students ready for a flipped classroom? A case for a flipped learning continuum. *International Journal of Educational Technology in Higher Education, 16*(1), 1-22. <https://doi.org/10.1186/s41239-019-0135-4>
- Tsang, A. (2020). Enhancing learners' awareness of oral presentation (delivery) skills in the context of self-regulated learning. *Active Learning in Higher Education, 21*(1), 39-50. <https://doi.org/10.1177/1469787417731214>
- Tunkari, M., Aunola, K., Hirvonen, R., Silinskas, G., & Kiuru, N. (2022). A Person-oriented approach to maternal homework involvement during the transition to lower secondary school. *Learning and Individual Differences, 97*(5), 1-11. <https://doi.org/10.1016/j.lindif.2022.102164>
- Väliveronen, E., & Saikkonen, S. (2021). Freedom of expression challenged: Scientists' perspectives on hidden forms of suppression and self-censorship. *Science, Technology, & Human Values, 46*(6), 1172-1200. <https://doi.org/10.1177/0162243920978303>
- Wamsler, C. (2020). Education for sustainability: Fostering a more conscious society and transformation towards sustainability. *International Journal of Sustainability in Higher Education, 21*(1), 112-130. <https://doi.org/10.1108/ijshe-04-2019-0152>

- Yildiz, C., & Yildiz, T. G. (2021). Exploring the relationship between creative thinking and scientific process skills of preschool children. *Thinking Skills and Creativity*, 39, 100795. <https://doi.org/10.1016/j.tsc.2021.100795>
- Yin, H. (2022). Empowering student learning in higher education: Pathways to possibility. *ECNU Review of Education*, 1–6. <https://doi.org/10.1177/20965311211073971>
- Zhang, M., Guo, M., & Xiao, B. (2021). Creative thinking and musical collaboration: Promoting online learning groups for aspiring musicians. *Thinking Skills and Creativity*, 42, 100947. <https://doi.org/10.1016/j.tsc.2021.100947>
- Zhou, L., & Li, J. (2022). Developing core competence with project-based learning: Voices from chinese high school students serving visually impaired students. *ECNU Review of Education*, 5(2), 383-389. <https://doi.org/10.1177/20965311211005478>

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