**Teaching Materials Social Studies Based Blended Learning to Develop Professional Competency The Primary School Teachers**

By:

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*Abstract*

*Prospective teacher students in the 21st century need to understand learning based on blended learning in addition to mastery of face-to-face learning. That is because PGSD students are now including the 21st century generation so that the learning models and teaching materials that will be presented to their students are automatically adapted to the progress of digital technology, especially information technology. Social studies teaching materials based on blended learning are teaching materials that implement IT in social studies courses that must be mastered by students as prospective teachers in primary schools. The application of IT in social studies teaching materials is in accordance with the results of the assessment analysis of PGSD students who generally want the need for the application of IT in social studies teaching materials. The results of the development of social studies teaching materials based on blended learning can also be said to be meaningful and useful. Among them: 1) Blended learning trains students' ability to develop social studies material, structure, and scientific concepts, answering strongly agree 14.4%, agree 84.4%, and disagree 1.2%. 2) Blended learning facilitates students in understanding the ideals, values, concepts, and main principles of social sciences in the context of the diversity of Indonesian society and the dynamics of global life answering strongly agree 15.6%, agree 83.1%, and not agree 1.3%.*

*Keywords: Social studies teaching material, blended learning, PGSD students*

**Premilinary**

In the 21 now, technology development especially in information technology this rapidly have influenced the thinking and behaving in daily life the included in the education world.Teachers and the requiring teachers should conform through technology education served always up to date, it is not boring, meaningful for students, and effective.Learning by teachers there should be such a paradigm change in its implementation to the students engaged aktif-kreatif mengrjakan on study.Teachers as facilitators, dinamisator, and evaluator during the learning held.

The conventional social studies learning in elementary schools that have been presented by teachers is still texsbooks and prioritizes the lecture method. Learning social studies like this has started to be boring and can not provide maximum understanding to meet the needs of students in gaining knowledge on social life in the national community in the midst of a very dynamic global life. Social studies material taught by teachers in texsbooks has been 'lagged' and is no less meaningful for students because information technology has provided 'knowledge' up-to-date related to phenomena in society at the local and global level.

It is expected that students will have professional abilities as creative-innovative social studies teachers along with the advancement in information technology that accompanies them. This is in line with the statement of Jeffries & Hyde (2010) that online access every day is an important requirement that supports the learning process of students.

LPTK UNY as a higher education institution has a central role in preparing prospective teachers to become professional teaching staff, therefore the Elementary School Teacher Education Study Program (PGSD) is responsible for preparing in particular the professional competencies of elementary school teacher candidates. This competency is in the form of proficiency in mastering broad and in-depth learning material that enables students to meet their specified professional competency standards. One sub professional competency is mastering and utilizing information technology in learning. Based on the description above, this research develops social studies teaching materials based on blended learning as an effort to provide a model for prospective elementary school teachers in implementing social studies learning in accordance with professional competencies that are developed. Social studies teaching material based on blended learning as reference material that can be accessed by students is not currently available in PGSD.

**Professional Competency of Primary School Teachers**

Future teachers must be prepared to teach in a variety of environments, and formats, both in networks and in the context of traditional learning (Kennedy & Archambault, 2012; Moore-Adams et al., 2016). That teachers must be prepared to teach is one indicator that teachers have professional competence. Teacher readiness covers all aspects of the challenges faced both in face-to-face or online learning. As said by Keengwe & Kang (2013) teachers should be aware of the costs and constraints of face-to-face, traditional learning and online (online), and need to develop each learning format in accordance with the needs of students and schools. Face-to-face learning offers tangible interaction benefits with the teacher, assistance can be given immediately if you experience difficulties, collaborate, and provide direct feedback. However, one of the limitations lies in the time and place that has been determined.

Meanwhile, online learning offers the convenience of flexible time and space, and promotes more individualized instruction, but can limit the ease of teachers in communicating and collaborating with students (Li & Irby, 2008). Blended learning, which combines these two contexts, can increase the benefits of face-to-face and online formats, while reducing constraints (Alammary, Sheard, & Carbone, 2014; Graham, 2006; Picciano et al., 2012). Blended learning promotes active, student-centered collaborative learning (Johnson et al., 2015; O'Byrne & Pytash, 2015; Powell et al., 2015) and can consist of several learning pathways that provide opportunities for each individual to learn. In addition, blended learning can use small group learning formats, individual guidance, and collaborative projects in face-to-face and online contexts that can be adjusted to meet student needs (Murphy et al., 2014; Christensen, Horn, & Staker, 2013; Johnson et al., 2015; Powell et al., 2015).

**Blended Learning**

Teachers must experience blended learning to be able to understand their meaning in developing their professional abilities (O'Byrne & Pytash, 2015). This statement is in line with Kolb's theory of Experiential Learning (Kolb, 1984) that knowledge is created through the transformation of concrete experiences accompanied by reflection. Therefore, teachers need to be involved in mixed learning so that they directly understand the benefits, costs, and challenges of learning design.

The term blended learning is generally referred to as a combination of online learning and face-to-face (Graham, 2006). Blended learning can also be defined as the integration of face-to-face and online approaches and technologies chosen and complementary (Garrison & Vaughn, 2008). Blended learning is categorized as a formal education program. This program facilitates student learning through online learning with a number of control elements that include time, place, path, and / or speed and are monitored by the teacher. The modality of the learning path obtained by each student in a subject or connected subject aims to provide an integrated learning experience (Christenson, Horn, & Staker, 2013).

Blended learning can be seen as a combination of traditional teaching and e-learning environments that combines web-based instruction, video, audio, synchronous, and asynchronous communication with face-to-face learning (Quevedo, 2011). Thus, blended learning refers to the inclusion of e-learning resources in the design and delivery of subjects through face-to-face arrangements (Gomez & Duart, 2012). In other words, blended learning is a wise combination of online and face-to-face learning experiences. The basic principle is that face-to-face and online activities are optimally integrated into unique learning experiences that are appropriate to the context and purpose of education (Garrison & Vaughan, 2008).

Blended learning is not just a percentage distribution of online and face-to-face activities. Blended learning includes the use of an online environment to offer complementary learning experiences that allow time and face-to-face space to be used more efficiently and effectively (Garrison & Vaughan, 2008; Glazer, 2011; Hoffman, 2006; Johnson et al., 2015; McGee & Reis, 2012; Murphy et al., 2014; O'Byrne & Pytash, 2015). The challenge for teachers is learning how to design and implement effective and efficient mixed learning. Therefore, teacher education programs have the opportunity and obligation to meet these challenges by offering formal online and face-to-face training integrated with reflection on experiences (Kennedy & Archambault, 2012).

1. **Blended Learning in Lectures at PGSD**

Various different blended learning design practices in universities have been tried by several researchers (Alammary, Sheard, & Carbone, 2014; Glazer, 2011; Graham, 2006; McGee & Reis, 2012; Means et al., 2013). The design of blended learning in higher education must focus on student learning goals, not on technology (Alammary et al., 2014; Garrison & Vaughan, 2008; Hoffman, 2006; McGee & Reis, 2012). Content delivery mechanisms, student engagement activities, and assessments must be based on lecture content, student learning needs, and pedagogical costs of selected technological tools (Garrison & Vaughan, 2008; Hall & Villareal, 2015; Massie, 2006; McGee & Reis, 2012 ; Means et al., 2013; Shand, Guggino, & Costa, 2013).

Online and face-to-face lecture components need to be integrated comprehensively (Garrison & Vaughan, 2008; Hoffman, 2006; Glazer, 2011; McGee & Reis, 2012). This process, referred to as layering (Glazer, 2011) or weaving (Massie, 2006), gives students the opportunity to learn some content in different contexts. Thus the implementation of blended learning can improve the quality of learning experiences (Garrison & Vaughan, 2008). Blended learning in teacher education programs is beneficial for increasing effectiveness and modeling an effective mixed environment for new teachers (Kang, 2014).

Blended learning can facilitate the shift from didactic teaching to constructivist, collaborative, and student-centered learning approaches (Beldarrin, 2006; Fan & Lê, 2011) Communication between parents and teachers, students and students, and teachers and teachers for the better. The teacher can monitor student learning well. Thus, the implementation of blended learning in teacher education programs can help them enter the workplace more readily (Arnett, 2015).

Online learning requires different costs than physical learning spaces (Johnson et al., 2014). In addition, online learning provides more creative learning opportunities (Salyers et al, 2010). The literature also shows that online learning environments can be more responsive to different learning styles and rhythms (Pombo et al., 2012). Therefore, effective online learning occurs when the quantity and quality of interaction of the learning community can increase student involvement (Abedin, Daneshgar, & D'Ambra, 2010; Oliveira, Tinoca, & Pereira, 2011). Teachers need training to master the ability to carry out blended learning (Johnson et al., 2015; Kellerer et al., 2014; Powell et al., 2015).

1. The Need for Social Studies Teaching Materials Based on Blended Learning

Blended learning-based lectures are programs that have been implemented by UNY, with the hope that lectures can run efficiently. UNY uses besmart to facilitate lectures with a blended learning model. Blended learning can not only make it easier for students to access material or collect assignments, but also can facilitate discussion, sharing material (can be files, pictures or videos). In addition, blended learning through besmart can also be a means of student argumentation, both in groups and between individuals, as well as how to access and evaluate student learning outcomes.

Carman (2002) suggests five important components that need to be considered in implementing blended learning. The five components include: (a) live event, i.e. a face-to-face learning session; (b) self-faced learning, students undertake learning independently, access learning material in the form of text-based or multimedia-bassed on line (via web or mobile devices) or off line (printed teaching materials or CDs); (c) collaboration, creating a collaborative atmosphere, students can communicate with other students and with lecturers, among others via mobile phone, email, on line chat; (d) assessment, measurement of learning outcomes can be done through pre-assessment and postassessment; and (e) reference materials, the content of material in blended learning needs to be supported by sources of teaching materials that can be obtained on line or off line.

Based on the needs analysis "Social Studies Teaching Materials Based on Blended Learning to Develop Professional Competence of Primary Teacher Candidates" to 160 students of PGSD FIP UNY class of 2018 obtained the following picture:

The internet is accessed every day in learning activities on and off campus

|  |  |  |  |
| --- | --- | --- | --- |
| Always | Often  | Rarely | Never |
| 56,3% | 42,5% | 1,2% | - |

Internet access to enrich online literature:

|  |  |  |  |
| --- | --- | --- | --- |
| Always | Often  | Rarely | Never |
| 35,6% | 59,4% | 5% | - |

The internet accessed to complete a task college:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Every day | Always | Often  | Rarely | Never |
| 1-3 jam | 45% | 55% | - | - |

Time the use of the internet to do their tasks and enrich matter college:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Every day | Always | Often  | Rarely | Never |
| 1-3 jam | 34,6% | 50,8% | 12,3% | 2,3% |
| 4-6 jam | 14,7% | 57,4% | 27,2% | 0,7% |
| 10< jam | 7,9% | 8,8% | 45,6% | 37,7% |

Internet serves as libraries digital

|  |  |  |  |
| --- | --- | --- | --- |
| Always | Often  | Rarely | Never |
| 35% | 57,5% | 7,5% | - |

Internet serves to downloaded song, pictures, video

|  |  |  |  |
| --- | --- | --- | --- |
| Always | Often  | Rarely | Never |
| 52,5% | 43,1% | - | - |

The internet provide comfort and speed communicate

|  |  |  |  |
| --- | --- | --- | --- |
| Always | Often  | Rarely | Never |
| 64,4% | 35,6% | - | - |

1. Student's attitude towards social studies teaching material based on Blended Learning

Below shows the attitudes of 160 students who filled out the questionnaire on how social studies teaching material is based on blended learning in the learning process.

|  |  |  |
| --- | --- | --- |
| No | Statement | Percentage |
| SA | A | DA | SDA |
| 1. | Social studies education is equipped with internet-based learning tools (online learning) as a means of student independent learning | 35,6 | 61,9 | 2,5 | - |
| 2. | Lecturers provide initiation (assignments) that must be done by students independently outside face to face via web e-learning and students send answers to assignments via the web | 16,3 | 71,9 | 11,8 | - |
| 3. | Lecturers can examine student assignments more freely in time, and more intensively with the use of e-learning | 18,8 | 78,1 | 4,1 | - |
| 4 | The frequency of activities, attendance, and activeness of students in using the web can be detected as part of the assessment | 15,6 | 70,6 | 12,5 | 2,3 |
| 5 | Social studies teaching materials that are available need to be supplemented with supplementary material (supplementary reading) that is more practical and easy to understand | 25 | 71,9 | 3,1 | - |
| 6 | Social studies teaching materials need to be supplemented with non-printed teaching materials in the form of videos that illustrate the implementation of social studies learning in elementary schools | 34,4 | 65,6 | - | - |
| 7 | The internet functions as a developer of social studies material that needs to be packaged in the form of electronic lectures | 21,3 | 73,1 | 5,6 | - |
| 8 | The use of the internet in social studies courses serves as a substitute for media when students and lecturers are not face to face | 27,5 | 69,4 | 3,1 | - |
| 9 | The use of the internet in social studies lectures makes it easy for students to find learning resources | 39,4 | 60,6 | - | - |
| 10 | Social studies lectures with blended learning develop student abilities in the use of ICT | 23,8 | 75,6 | 0,6 | - |
| 11 | Blended learning develops students' ability to master scientific material which includes dimensions of knowledge, values, and social skills | 16,9 | 80 | 3,1 | - |
| 12 | Blended learning trains students' abilities to develop social science material, structure, and concepts | 14,4 | 84,4 | 1,2 | - |
| 13 | Blended learning facilitates students in understanding the ideals, values, concepts, and basic principles of social sciences in the context of the diversity of Indonesian society and the dynamics of global life | 15,6 | 83,1 | 1,3 | - |
| 14 | Blended learning facilitates students in understanding the interaction phenomena of the development of science, technology, art, religious life, and the development of society and global interdependence | 15,6 | 82,5 | 1,9 | - |
| 15 | Blended learning helps students master the basic competencies of elementary school social studies | 15 | 83,1 | 1,9 | - |
| 16 | Blended learning equips students to develop social studies learning materials creatively | 15 | 82,5 | 2,5 | - |
| 17 | Blended learning develops the ability of students to utilize various learning resources to keep up with the times | 16,9 | 83,1 | - | - |
| 18 | Blended learning equips the ability to continuously revise student performance | 12,5 | 81,3 | 6,2 | - |
| 19 | Blended learning develops students' abilities in utilizing information and communication technology to communicate and develop themselves | 18,8 | 80,6 | 0,6 | - |
| 20 | The implementation of blended learning IPS education needs socialization and training for students, and allied lecturers | 29,4 | 69,4 | 1,2 | - |

Strongly agree = SA

Agree = A

Disagrre = DA

Strongly disagree = SDA

**Cover**

That teaching materials based social class blended learning is useful for college students pgsd fip uny as a candidate teacher in primary school. To meet the social class competence of teachers in primary schools in the 21 then blended learning based on social class is to be undertaken by the study program pgsd the create graduates with high capability had the capacity to carry out based learning it in accordance with the 21 century. And learning or class based it it is time for a course of study carried out by the lptk who would bear the teacher in primary school.

**Daftar Pustaka**

Abedin, B., Daneshgar, F., & D’Ambra, J. (2010). Underlying factors of sense of community in asynchronous computer supported collaborative learning environments. Journal of Online Learning and Teaching, 6(3), 585–596.

Alammary, A., Sheard, J., & Carbone, A. (2014). Blended learning in higher education: Three different design approaches. Australasian *Journal of Educational Technology*, 30(4), 440-454.

Arnett, T. (2015). Startup teacher education: A fresh take on teacher credentialing. Retrieved from <http://www.christenseninstitute.org/publications/startup-teacher-education/>

Aydin, I. (2013). The Effect Of Microteaching Technique On Turkish Teacher Candidates’ Perceptions Of Efficacy In Lesson Planning, Implementation, And Evaluation. Electronic Journal of Social Sciences, 12 (43), 67-81. Retrieved from: www.esosder.org

Beldarrain, Y. (2006). Distance Education Trends: Integrating new technologies to foster student interaction and collaboration. *Distance Education*, 27(2), 139–153. http://dx.doi.org/10.1080/01587910600789498

Carman, J. M. (2002). *Blended learning design, five key ingredients*. Diakses dari http://blended2010.pbworks.com/f/Carman.pdf

Cavanaugh, C., Sessums, C., & Drexler, W. (2015). A call to action for research in digital learning: Learning without limits of time, place, path, place…or evidence. Journal of Online Learning Research, 1(1), 9–15. Retrieved from http://www.learntechlib. org/j/JOLR/v/1/n/1/

Christensen, C., Horn, M., & Staker, H. (2013, May). Is K-12 blended learning disruptive? An introduction to the theory of hybrids. Retrieved from <http://www.christenseninstitute.org/wp-content/uploads/2013/05/Is-K-12-Blended-Learning-Disruptive.pdf>

Fan, S. & Lê, Q. (2011). Developing a Valid and Reliable Instrument to Evaluate Users’ Perception of Web-Based Learning in an Australian University Context. *Journal of Online Learning and Teaching*, 7(3), 366–379.

Garrison, D. R., & Vaughan, N. D. (2008). Blended learning in higher education: Framework, principles, and guidelines. San Francisco, CA, US: Jossey-Bass.

Glazer, F. S. (Ed.). (2011). Blended learning: Across the disciplines, across the academy. New pedagogies and practices for teaching in higher education. Sterling, VA: Stylus Publishing.

Gomez, L. & Duart, J. (2012). A hybrid approach to university subject learning activities. British Journal of Educational Technology, 43 (2), 259–271. <http://dx.doi.org/10.1111/j.1467-8535.2011.01175.x>

Graham, C. R. (2006). Blended learning systems. In C. J. Bonk & C. R. Graham (Eds.), The handbook of blended learning: Global perspectives, local designs (pp. 3-21). San Francisco: Pfeiffer.

Hall, S., & Villareal, D. (2015). The hybrid advantage: Graduate student perspectives of hybrid education courses. *International Journal of Teaching and Learning in Higher Education*, 27(1), 69-80.

Herrington, A., Herrington, J., Oliver, R., Stoney, S., & Willis, J. (2001). Quality guidelines for online courses: The development of an instrument to audit online units. In G. Kennedy, M. Keppell, C. McNaught & T. Petrovic (Eds.) Meeting at the crossroads: Proceedings of ASCILITE 2001 (pp. 263-270). Melbourne: The University of Melbourne.

Hoffman, J. (2006). Why blended learning hasn’t (yet) fulfilled its promises: Answers to those questions that keep you up at night. In C. J. Bonk & C. R. Graham (Eds.), The handbook of blended learning: Global perspectives, local designs (pp. 27-40). San Francisco: Pfeiffer.

Jefferies, A. & Hyde, R. (2010). Building the future students’ blended learning experiences from current research findings. Electronic Journal of e-Learning 8(2), 133–140.

Johnson, L., Adams Becker, S., Estrada, V., & Freeman, A. (2015). NMC horizon report: 2015 K-12 edition. Retrieved from The New Media Consortium: http://cdn.nmc.org/ media/2015-nmc-horizon-report-k12-EN.pdf

Kang, J. J. (2014). Learning to teach a blended course in a teacher preparation program. Contemporary Issues in Technology and Teacher Education, 14(1), 54-71

Keengwe, J., & Kang, J. (2013). A review of empirical research on blended learning in teacher education programs. Education and Information Technologies, 18(3), 479493.

Kennedy, K., & Archambault, L. (2012). Offering preservice teachers field experiences in K-12 online learning: A national survey of teacher education programs. Journal of Teacher Education, 63(3), 185-200. doi:10.1177/0022487111433651

Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Englewood Cliffs, NJ: Prentice-Hall.

Li, C-S., & Irby, B. (2008). An overview of online education: Attractiveness, benefits, challenges, concerns and recommendations. College Student Journal, 42(2), 449-458.

Mannathoko, M. (2013). Does Teaching Practice Effectively Prepare Student-Teachers to Teach Creative and Performing Arts? The Case of Botswana. International Journal of Higher Education, 2 (2), 115- 121. <http://dx.doi.org/10.5430/ijhe.v2n2p115>.

Massie, E. (2006). The blended learning imperative. In C. Bonk & C. Graham (Eds.), The handbook of blended learning: Global perspectives, local designs. San Francisco: Pfeiffer.

McGee, P. & Reis, A. (2012). Blended course design: A synthesis of best practices. Journal of Asynchronous Learning Networks, 16(4), 7-22.

Means, B., Toyama, Y., Murphy, R. F., & Baki, M. (2013). The effectiveness of online and blended learning: A meta-analysis of the empirical literature. Teachers College Record, 115(3), 1-47.

Moore-Adams, B. L., Jones, W. M., & Cohen, J. (2016). Learning to teach online: a systematic review of the literature on K-12 teacher preparation for teaching online. Distance Education, 37(3), 333-348. doi:10.1080/01587919.2016.1232158

Murphy, R., Snow, E., Mislevy, J., Gallagher, L., Krumm, A., & Wei, X. (2014). Blended learning report. Retrieved from Michael and Susan Dell Foundation: https://www. msdf.org/whitepapers/blended-learning-report/

O’Byrne, W. I., & Pytash, K. E. (2015). Hybrid and blended learning: Modifying pedagogy across path, pace, time, and place. Journal of Adolescent & Adult Literacy, 59(2), 137-140.

Oliveira, I., Tinoca, L., & Pereira, A. (2011). Online group work patterns: How to promote a successful collaboration. Computers & Education, 57, 1348–1357. http://dx.doi.org/10.1016/j.compedu.2011.01.017

Picciano, A. G., Seaman, J., Shea, P., & Swan, K. (2012). Examining the extent and nature of American K-12 education: The research initiatives of the Alfred P. Sloan Foundation. The Internet and Higher Education, 15(2), 127-135.

Pombo, L., Smith, M., Abelha, M., Caixinha, H., & Costa, N. (2012). Evaluating an online emodule for Portuguese primary teachers: trainees’ perceptions. Technology, Pedagogy and Education, 21(1), 21-36. http://dx.doi.org/10.1080/1475939X.2011.589156

Porter, W. W., Graham, C. R., Spring, K. A., & Welch, K. R. (2014). Blended learning in higher education: Institutional adoption and implementation. Computers & Education, 75, 185–195. doi:10.1016/j.compedu.2014.02.011

Powell, A., Watson, J., Oglesby, J., Hibbard, L., Fetzer, L., Horn, M., & Patrick, S. (2015). iNACOL blending learning: The evolution of online and face-to-face education from 2008–2015. Retrieved from http://www.inacol.org/wp-content/uploads/2015/07/ iNACOL\_Blended-Learning-The-Evolution-of-Online-And-Face-to-Face-Educationfrom-2008-2015.pdf

Quevedo, A. (2011). Blended-learning Implementation in Undergraduate Teacher’s Formation Courses: Difficulties from the Students’ Point of View. The International Journal of Technology, Knowledge, and Society, 7 (2), 187- 200. <http://dx.doi.org/10.18848/1832-3669/CGP/v07i02/56192>

Salyers, V., Carter, L., Barrett, P., & Williams, L. (2010). Evaluating student and faculty satisfaction with a pedagogical framework. Journal of Distance Education, 24(3). Retrieved from http://www.jofde.ca/index.php/jde/article/viewArticle/695/1169

Shana, Z. (2009). Learning with Technology: Using Discussion Forums to Augment a Traditional-Style Class. Educational Technology & Society, 12 (3), 214–228.

Shand, K., Guggino, P., & Costa, V. (2013). Planning with technology in mind: Preparing pre-service social studies teachers to integrate technology in the classroom. Journal of the Research Center for Educational Technology. Vol 9(1). pp 174-191.