

The Development of Aquatic Learning Model in Elementary School Through Traditional Game *Lit-litan*

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Abstract

This research aims to generate aquatic learning model through traditional game *Lit-litan* in Elementary School. This research is a type of Research and Development (R&D). The subjects of research are 2nd grade students of SD Negeri Bulu Lor Semarang City. The research instrument is questionnaire to find out student ability in cognitive aspect, affective aspect, and psychomotor aspect. Based on the result of big scale trial for cognitive aspect ability, 64 students or 89.19% are included in very good category, 10 students or 13.51% are included in good category. In addition, from the result of affective aspect, 66 students or 89.19% are included in very good category, 7 students or 9.45% are included in good category, and 1 student or 1.35% is included in good enough category. Whereas in psychomotor aspect, 59 students or 79.73% are included in very good category, 8 students or 10.81% are included in good category, 5 students or 6.776% are included in good enough category, and 2 students or 2.70% are included in less good category. Based on research result on frequency distribution in cognitive aspect, affective aspect and psychomotor aspect, it can be concluded that from 74 students: for cognitive aspect, students with mean of 89.59% are included in very good category, for affective aspect, 89.5% are included in very good category, whereas for psychomotor aspect, 83.24% are included in very good category. The use of traditional game *Lit-litan* can increase pulse, the pulse increase before activity showed mean of 83.56 whereas after activity has mean of 127.52. The conclusion which is related to product use is that physical education, sports and health can use aquatic learning model in Elementary School through traditional game *Lit-litan* as alternative for learning and introduce traditional game to students.

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INTRODUCTION

One of psychological aspects which influence student learning is a factor which can influence student activities, teachers, teaching method, material, motivation, social, environment and opportunity. Here, one relevant aspect to determine students success in learning are student themselves, the material delivered by teacher and teaching and learning system used in class (Purwanto, 2004).

Moreover, the current curriculum system demand student to always active in learning process. According to Rohman (2012), that recently there is demand of changes in educational curriculum which emphasize the need to build nation characters and also demand students to become positive with everything for the goodness of their own future. Therefore, in order that learning process become meaningful, students not only listen, see and note everything and what is heard from teachers, but they also should do activities immediately by reading, answering, arguing, trying, developing potential and talent, doing, communicating, presenting and discussing. Those learning activities should be applied in a learning model.

Thus, learning model has broader meaning than learning strategies, method and procedure. The term learning model has 4 special characteristics which do not shared by learning strategy or method, among others are: logical theoretical thinking base owned by teachers, learning targets which will be achieved, teaching steps which are needed so a learning model can be done optimally, learning environment is what needed so learning targets can be achieved (Rosdiani, 2013).

Furthermore, Physical education, sports and health is part of media to enhance motor skills, physical ability, knowledge, reasoning, understanding on values (attitude, mental, emotional, spiritual, social) and healthy life habits which lead to balanced growth and development (Rahayu, 2016). Physical education, sports and health is an activity to educate children with educational process through physical activity and sport (Paturusi,

2012). Physical education, sports and health through physical activity become media to achieve individual development in a whole (Suherman, 2009). Physical education, sports and health is part of whole education which emphasize physical activity and healthy life fostering as physical, mental, social and emotional growth and development which are suitable and balanced (Febrianto & Soroto, 2017). Essentially, the good physical education, sports and health according to Saputra (2011) enable students to enjoy experience and choose to continue their involvement in activity beyond school hour. Whereas according to Rosdiani (2015), physical education, sports and health is educational process by providing learning experience to students in the form of physical activity, play and exercise which are planned systematically in order to stimulate physical growth and development; motor skill, thinking, emotional, social and moral skill.

Therefore, physical education, sports and health is integral part of education in a whole which support students development through physical activity which is planned systematically by prioritizing physical activity which aims to enhance physical growth and development, develop motor, mental and emotional skill, sportive attitude and grow social spirit. The learning outcome of physical, sport and health education not only limited in school, but it is expected that students will like to do sport beyond the school hour, for example in the evening or in the holiday in which they can play with their peers.

The aim of physical education, sports and health is to help students to think critically and to develop skill, technique, strategy of various games, one of them is traditional game (Rahayu, 2016). According to Wang (2012), one goal of physical education is to teach the concept which will help student to learn and do motor skill. Tangkua, et al. (2015), physical education, sports and health is a broad and interesting field of research which emphasize human movement enhancement. In the simple word, Yudha & Nasution (2015) state that the goal of physical education, sports and health is to enhance

students' physical fitness. Whereas according to Riza, et al (2015) that physical education, sports and health in a whole has goal to develop physical fitness aspect, movement skill, critical thinking skill, social skill, emotional stability, moral action, health life aspect, and introduce clean environment through physical activity, sport and health which is planned systematically in order to achieve the goal of national education.

From several views about the goal of physical education, sport and health as had been explained above, teacher play crucial role in determining whether or not learning will succeed, the final outcome of learning in the form of report score.

According to Kusmaedi (2010), traditional game is kind of activity which contain usual rules and derived from indigenous culture of Indonesian society. Traditional game consist of some games which grow and develop specially, in accord with cultural values and life values of people and the process which is better from one generation to next generation (Kurniati, 2016). Traditional game is the game which comes from various ethnics existed in Indonesia (Linggar, 2010). According to Misbach (2006), traditional game can stimulate various aspects of children development namely cognitive aspect (imagination, creativity, problem solving, anticipative, and contextual understanding), social aspect (build relation, cooperation, train social maturity with peers, train skill in socializing with adults and community), motor aspect (train endurance, flexibility, motor sensor, gross motor and fine motor), emotional aspect (increase empathy, self control, and emotional catharsis), language aspect (understanding of value concepts in speaking), spiritual aspect (aware of relatedness to transcendental thing). Ecological aspect (understand the utilization of surrounding natural elements wisely), moral values aspect (understand the moral values inherited from earlier generation to next generation).

Therefore, traditional games are games which are used or played in Indonesia, which can be applied on learning models, one of them is aquatic game. According to Mardianan (2012),

aquatic is something related to water such as: swimming, outdoor swimming, diving, water polo, beautiful swimming, surfing, rowing, water skiing, water polo canoe. Aquatic is the form which can be done in river, lake, sea, beach or swimming pool. The forms of activity can be swimming, water polo, surfing, diving, rowing, canoeing, and another forms (Susanto, 2010). The aim is to train cognitive, affective and psychomotor abilities. Therefore, the activities are needed to train, to give information to children and family (Hendrayana & Wahyoedi, 2004).

Furthermore, the aim is to apply traditional games in aquatic learning, namely swimming activities. The ability to function usefully, style oriented, authoritarian and generate to students (Sriningsih, 2017; Ishak, 2017). In swimming activities, it can be used as a model of aquatic learning. It is a kind of activity which contain reflective special rules and comes from indigenous culture of Indonesian society, and one example of traditional game for those activities is *Lit-litan* (Kusmaedi, 2010).

Lit-litan is a traditional game from Srikencana village which had been for long time disappeared and children never play it anymore. *Lit-litan* is a traditional game played in swamp in which the numbers of player are not limited. One player stand up to become the guard, and another players become perpetrators. The game pattern is the guard and the perpetrators can use the methods of swimming, diving in the bottom of water, walking or running in accord with rules or mutual agreement. The players of *Lit-litan* usually boys, because the habit done in the past that children who often play in swamp or lake are boys. The numbers of player are not limited, but for the size and location of the game, they depend on collective agreement and the numbers of player.

From the aspects above, the researcher is intended to generate the products in the form of aquatic learning models in Elementary School.

METHODS

This research used research and development (R&D) method. In implementing R&D, the researcher conducted need analysis as the first step in conducting the research. In this stage, the researchers conducted observation in SD Negeri Bulu Lor, North Semarang sub-district to implement physical education, sport and health learning by observing learning process, aquatic learning material, students' physical activity, students' characteristic and the existing facility and infrastructure.

The procedure to develop aquatic learning model is done through some stages including: the analysis of product developed, develop initial products, expert validation, field trial, and product revision.

The sample of this research are students of Elementary School with subject of research are 2nd grade students. The researcher instrument used were questionnaire to know student ability in cognitive aspect, affective aspect and psychomotor aspect in aquatic learning through traditional game *Lit-litan*.

RESULTS AND DISCUSSION

The development of aquatic learning model through traditional game *Lit-litan* for 2nd grade students of SDN Bulu Lor is done by giving new aquatic games in physical, sport and health education learning. The first stage is determine the initial product. The things which are considered are pool, numbers of player, duration of game, and game rules.

The second stage is expert validation. The result of questionnaire filled by experts obtain mean of 3.33, whereas Elementary School physical education teachers obtain mean of 3.73 so it is included in very good category. Therefore, it can be concluded that the development of aquatic learning models in Elementary Schools through traditional game *Lit-litan* can be used for small scale trial. Input in the form of suggestion and comment about the products of aquatic learning model through traditional game *Lit-litan*

among other is that it is important to improve and revise that model.

The third stage is small scale trial. This trial is done toward students of SDN Bulu Lor, North Semarang district, Semarang City, Central Java Province. This trial aims to find out and identify various problems such as weakness, deficiency or ineffectiveness of products to be used by students.

The fourth stage is product revision after small scale trial. Suggestion and feedback from experts as showed in Table 1 is that the initial product should be improved and revised immediately in accord with suggestion and input given to experts. After the initial product had been revised in accord with suggestion and input, the experts give assessment and it can be concluded that aquatic learning products through traditional game *Lit-litan* is feasible for small scale trial.

Table 1. Suggestion and Input from Aquatic Experts and Teachers

Aspect	Weakness	Alternative solution
The aim of game	The aim has not been clearly directed to something desired	The aim of game emphasize 3 aspects (domains) namely affective, cognitive and psychomotor
The description of game	The description is less understood in general	The description is made more clearly in order to be understood
The plot of game	The plot is not in accord with steps of rule	The plot of game is arranged from the easy to the concrete

The fifth stage is big scale trial. the trial can be done in same school namely sd negeri bulu lor toward 74 students consisting of class iib and iic. The result of big scale trial showed that students ability in cognitive aspect on aquatic learning by using traditional game *Lit-litan* is 64 students or 86.49% are included in very good category, 10 students or 13.51% are in good category. Besides, from the result of affective aspect, students who are included in very good category are 66 students or 89.19%, 7 students or 9.46% are in good category, and 1 student or 1.35% is in good enough category. Whereas in psychomotor aspect, 59 students or 79.73% are included in very good category, 8 students or 10.81% in good category, 5 students or 6.76% in good enough

category, and 2 students or 2.70% are in less good category.

The last stage is discussion of final product in aquatic learning through the game *Lit-litan*. The product generated in this research and development is the learning guidance book. With the development of aquatic learning models in Elementary Schools, it is expected that the models can help physical education teachers in aquatic learning process in schools, particularly as alternative teaching materials and teaching variations in aquatic learning material (Kurniawan & Zawawi, 2017). Besides, to enhance students activeness and fitness in each domain and the educational goal namely cognitive aspect, affective aspect, and psychomotor aspect. It is supported by Deritani (2014); Naheria (2015); Setiawan & Triyanto (2014) who say that traditional game can enhance cognitive, affective and psychomotor ability. motor ability is influenced by aquatic exercise, Trisnowiyanto (2016).

Furthermore, according to suggestion and some experts and physical education and sport teachers, the game *Lit-litan* can be used by 2nd grade students of Elementary School. Regarding to safety, this game has been said as safe. The swimming pool used in this game is shallow swimming pool, with the depth of 60 cm – 90cm.

CONCLUSION

Based on the research results and discussion about development of traditional game *Lit-litan* for physical education, sports and health in Elementary School, then it can be concluded as follow: (1) The model of traditional game *Lit-litan* had been found as alternative material in learning materials which is suited with characteristic of Elementary School students, (2) The traditional game *Lit-litan* in physical education and sport learning is effective in enhancing psychomotor aspect, cognitive aspect and affective aspect based on research results conducted in SD Negeri Bulu Lor. The effectiveness of traditional game *Lit-litan* get positive responses from students in physical education and sports as much as 97.46%, whereas

negative response is 2.53%. Thus, it can be concluded that traditional game *Lit-litan* in physical education and sports can be accepted by teachers and students based on research results conducted in SDN Bulu Lor. The result of questionnaire filled by teachers is analyzed in a presentation and 92.5% of physical education, sports and health teachers give positive responses and 7.5% of physical education teachers give negative response, which means that physical education teachers give more positive response.

REFERENCES

- Febrianto. F. A., & Suroto. (2017). Survei Keterlaksanaan Kurikulum 2013 Pada Mata Pelajaran Pendidikan Jasmani Olahraga dan Kesehatan di SMK Negeri Se-Kecamatan Boyolangu Kabupaten Tulungagung. *Jurnal Pendidikan Olahraga dan Kesehatan*, 5(3), 17-24. Retrieved from <http://jurnalmahasiswa.unesa.ac.id/index.php/jurnal-pendidikan-jasmani/article/view/20089>
- Deritani, N. L., Soegiyanto, & Sulaiman. (2014). Pengembangan Permainan Tradisional Ekar Mix dalam Pembelajaran Penjasorkes. *Journal of Physical Education and Sports*, 3(1). Retrieved from <https://journal.unnes.ac.id/sju/index.php/jpes/article/view/4795>
- Ishak, M., & Puad, Y. R. (2017). Gaya Mengajar Otoriter dan Demokratis terhadap Hasil Belajar Renang Gaya Bebas. *Jurnal Pendidikan Jasmani dan Olahraga*, 2(1). Retrieved from <http://ejournal.upi.edu/index.php/penjas/article/view/912017-11>
- Kurniati, E. (2016). *Permainan Tradisional dan Perannya dalam Mengembangkan Keterampilan Sosial Anak*. Jakarta: Kencana.
- Kusmaedi, N., et al. (2010). *Permainan Tradisional*. Bandung: FPOK UPI.
- Mardiana, A., et al. (2012). *Pendidikan Jasmani dan Olahraga*. Banten: Universitas Terbuka.
- Paturusi, A. (2012). *Manajemen Pendidikan dan Olahraga*. Jakarta: Rineka Cipta.
- Rahayu, T. E. (2016). *Strategi Pembelajaran Pendidikan Jasmani*. Bandung: Alfabeta.
- Riza, A. N., Soegiyanto, & Rustiani, E. R. (2015). Kontribusi Disiplin Kerja, Supervisi Akademik dan Partisipasi Guru dalam Musyawarah Guru Mata Pelajaran (MGMP) terhadap

- Kompetensi Pedagogik Guru Penjasorkes SMK di Kabupaten Jepara. *Journal of Physical Education and Sport*, 4(2), 100-104. Retrieved from <https://journal.unnes.ac.id/sju/index.php/jpes/article/view/9849>
- Rosdiani, D. (2015). *Kurikulum Pendidikan Jasmani*. Bandung: Alfabeta.
- Saputra, Y. M. (2011). Model Pengawasan Pembelajaran Pendidikan Jasmani di Sekolah Dasar. *Cakrawala Pendidikan*, XXX(10), 474-489. Retrieved from <https://journal.uny.ac.id/index.php/cp/article/view/4209>
- Setiawan, I, & Triyanto, H. (2014). Pengembangan Permainan Tradisional Gobak Sodor Bola dalam Pembelajaran Penjas pada Siswa SD. *Media Ilmu Keolahragaan Indonesia*, 4(1). Retrieved from <https://journal.unnes.ac.id/nju/index.php/miki/article/view/4395>
- Sriningsih. (2017). Keterampilan Renang Gaya Kupu-Kupu Melalui Pendekatan Bermain dalam Pembelajaran Akuatik. *Jurnal Pendidikan Jasmani dan Olahraga*, 2(2). Retrieved from <http://ejournal.upi.edu/index.php/penjas/article/view/09-02-07>
- Suherman, A. (2009). Pengembangan Model Pembelajaran *Outdoor Education* Pendidikan Jasmani Berbasis Kompetensi di Sekolah Dasar. *Penelitian Pendidikan*, 11(2). Retrieved from <http://jurnal.upi.edu/penelitian-pendidikan/view/1835/pengembangan-model-pembelajaran-outdoor-education--pendidikan-jasmani-berbasis-kompetensi-di-sekolah-dasar.html>
- Susanto, E. (2012). Model Pembelajaran Akuatik Siswa Prasekolah. *Journal of Physical Education and Sports*, 1(1). Retrieved from <https://journal.unnes.ac.id/sju/index.php/jpes/article/view/95>
- Wang, J. (2012). Connecting Theory to Practice – Effective Ways of Teaching Motor Learning Course for Undergraduate Physical Education Students. *International Journal of Physical Education, Fitness and Sports*, 1(4). Retrieved from <https://ijpefs.com/index.php/ijpefs/article/view/8>
- Yudha, M. P., & Nasution, J. D. H. (2015). Kontribusi Tingkat Kebugaran Jasmani terhadap Hasil Belajar Pendidikan Jasmani Olahraga dan Kesehatan. *Jurnal Pendidikan Olahraga dan Kesehatan*, 3(3), 740-744. Retrieved from <http://jurnalmahasiswa.unesa.ac.id/index.php/jurnal-pendidikan-jasmani/article/view/14352>