INTERRUPTING LEARNING THROUGH CHILDREN GAME: "GALAH ASIN", ONE PLAY, SEVERAL DISCIPLINES

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Abstract

Purpose of Study: Indonesia, with its multi-culture and multi-ethnic, has many varieties of the traditional game for children. However, it is quite rare to find primary teachers adopting those games for students learning. Most primary teachers encounter creativity and professional challenges in embracing traditional games as a student-oriented pedagogy. Therefore, this paper discusses the possible implementation of traditional games in primary learning. Specifically, it focuses on GalahAsin as game-based primary teaching and learning. This research further investigates the integration of various primary subjects into GalahAsin through trials and simulations. Six groups of students of PGSD Universitas Muhammadiyah Surakarta participated in an in-depth qualitative study that investigated their understanding of GalahAsin, S.W.O.T analysis of the game, and the making processes in implementing it into primary learning.

Methodology: The research gathered students’ framing and reframing of game’s modification, presentation, simulation and reflection through discussions and class observations. The findings discover the possible model of integrated learning incorporating GalahAsin. The structure of the game enables students to modify it into extensive puzzle-based learning models.

Results: The findings demonstrate how the integration of GalahAsin into primary teaching has boundless potential to become holistic learning.

Implications/Applications: In recent years, active, meaningful and fun learning has magnetized researchers to consider it as a subject area of importance in primary education. In this investigation, we also interested in how the pedagogical gap between two fields of education might be addressed so that the content knowledge is able to be aligned with active, meaningful and fun learning through traditional game-based teaching model.

Keywords: Galah Asin; Game-Based Learning; Teaching Model; Integrated Learning.

INTRODUCTION

In recent years, students centered education has gained much supports from education stakeholders. The previous Indonesian government made a leap change in the curriculum to support learner-centered education through the 2013 Curriculum. However, the shift was not followed by adequate resources and was considered experimental (http://www.sekolahdasar.net/2014/12/mendikbud-putuskan-curikulum-2013-dihentikan.html. Retrieved on October 28, 2016. (2014)). The recent government, thus, decided to re-implment the 2006 curriculum and planned to revise and implement the 2013 Curriculum when it is ready. Despite the Curriculum shifts, in the stage of development of the learning model, it is the professional level and professional commitment of teachers that matter most. (Soedijarto, 2013)

Through both curriculums, teachers have been developing teaching models to support student-centered education called PAKEM, PAIKEM and PAIKEM GEMBROT. These teaching models are intended to become active, innovative, creative, effective, fun, happy and meaningful learning for students. However, the implementation of those models in primary settings is still low. Based on experience and observation in primary classrooms, the term ‘innovative’, ‘creative’, ‘active’, ‘fun’ and ‘happy’ often interpreted as an activity called ice breaking. Teachers teach students certain clap patterns and songs to gain students attention and attract them to learning. This is where the misconceptions and lack of understanding start. Many primary teachers and student-teachers consider ice-breaking activities as the active and fun teaching model itself. Many education practitioners are bounded by curriculums which often frame learning as in-class activities of certain subjects at a certain time.

“Learning and teaching are often assumed to ‘take place’ in particular slots of a timetable in particular classrooms associated with particular curriculum subjects. (Dalir et al., 2014)

At the beginning of this study, a preliminary question about what people like most during their childhood was asked to several primary teachers and student-teachers. The answers vary from family time, mother’s cooking, climbing trees with
friends, getting wet in the rain with siblings, and traditional plays they played. Less than 5% of respondents answered school time. When the 5% of respondents were asked to elaborate their answered, they said that it was the chance to meet their friends that they like most. What insights were learnt from those answers? The meaningful learnings that children remember are those that have a value of togetherness, the value of real communication, the value of tradition and value of care.

In this study, one of the Indonesian traditional games, GalahAsin, was considered to be a promising teaching model which embraces both active and meaningful learnings. Therefore, this study examined the characteristics of GalahAsin and whether or not it is relevant to be a teaching model to achieve the national educational objectives of primary education. GalahAsin is chosen because this game is national-wide known. In Natuna island, for instance, GalahAsin is also known as Galah while in Riau it is called GalahPanjang. Some regions also know this game as Cak Bur, Gobak Sodor, Galasin, and many more. GalahAsin is known as a traditional game which is played by two teams. One team is an Offense team and the other one is the Defense team. Children in Indonesia have started leaving this traditional game behind. They prefer to play digital games from their gadget. Therefore, this project is also a preservation project of Indonesian traditional games.

Games and plays have been recognized as a medium for learning. At the initial stage, plays served as a medium that provides opportunities for the practice of life-skills and possibilities of exploring ways of learning. Lavega, Alonso, Etxebeste, Lagardera, and March envisioned traditional plays as a vehicle to develop students’ emotional and social skills. This study also explored the possibilities of GalahAsin as cognitive tools that raise students’ motivation and interest in learning different subjects.

**METHOD**

**Participants**

The participants in this study were 35 student-teachers from faculty of education and teacher training, Muhammadiyah University of Surakarta. They were all 5th-semester students pursuing a primary teaching and training degree and were doing a professional practice at primary schools. It should be noted that this study formed part of a Local Culture Education (LCE) subject that the participants were taking. The aim of the project in the LCE subject was to preserve Indonesian traditional games as well as to build awareness about traditional games as a teaching model in primary settings. Participants were the groups that chose GalahAsin as their traditional game for their project.

**Instruments and Procedure**

To participate in the study, participants were involved in a total of six sessions, each lasting for 100 minutes, i.e. two sessions of theoretical knowledge and practice, one session of GalahAsin SWOT analysis and discussion, one session of GalahAsin modification, one session of trials and one session of simulation. The discussions were noted and voice-recorded, activities in trials and simulation sessions were video-recorded to ensure the data are reliable and valid.

![Figure 1. A pedagogical model for developing GalahAsin as a teaching model in primary settings.](image)
Before starting their project, participants took 2 sessions, in which they were provided with basic and theoretical knowledge about SWOT analysis. Xiaoling ([Xiaoling, W. 2009]) stated that SWOT analysis is a comprehensive tool to scrutinize the internal and external elements of a game so that students could plan a more thorough learning experience. Participants were provided with a traditional game to analyze by considering the safety and fairness of the game. They also discussed possible modification of the game to ensure a safe and secure learning environment and to support and promote meaningful and active learning.

B. SWOT Analysis

Participants discussed in their group to explore the strengths, weaknesses, opportunities, and threats in GalahAsin for a model of teaching in primary settings. SWOT analysis is instrumental to formulate and choose the teaching strategy of the modified game.

a. Strengths

Participants figured out why children (and or adults) love to play GalahAsin. They discussed the learnings gain by children from the game. What values do children get and what skills are learned through playing it.

b. Weaknesses

GalahAsin was evaluated in terms of the game field, rules, playing time, risks, game equipment, and the weaknesses were listed for a chance of modification.

c. Opportunities

Participants developed their analytical thinking skills through analyzing four domains of GalahAsin; social/cultural, behavioral/physical, affective/emotional and cognitive/intellectual. (Akbari, Abbasian, & Jansooz, 2013)

d. Threats

Participants discussed how traditional game-based teaching models can fit into the national curriculum. What the biggest challenge is to implement such models into primary settings.

GalahAsin Modifications

Games and plays can be re-structured, adjusted and modified to the need of students. The modifications that participants made should aim for a safer and more secure learning, a fairer game, and more achievable learning goals. Therefore, participants scrutinized the elements of the game, including rules, players, duration, game field, equipment, and Modifications also targeted integrated learning with 5 main subjects (Science, Mathematics, Indonesian, Social Studies, and Pancasila and Civics) in primary education.

Trials

At this stage, participants were in the process of finalizing their GalahAsin modifications. Through trials, they experienced the process of teaching the game, experienced the playing process and acknowledged step by step the procedure and rules of their modified GalahAsin. This stage serves as a self-evaluation and reflection to participants works and suggests improvements for their modified game.

“I think that we need to add a referee to the game and in the rules. It was hard to see what’s really happening when everybody focused on running forward and solving the puzzle.” (Participant E, video 3, August 20, 2016)

Simulations

Participants performed as primary teachers and taught their peers from different groups about their modified GalahAsin. The peers should act out as primary students and followed the instructions. This stage informed the participants about possible challenges when they implement the game into primary settings.

“The game ran differently than we tried last week. We find how some rules need to be changed and adjusted for students in fifth grade so that they are able to understand. Also, we find it challenging in managing the ‘students’. We need to develop more explicit instructions for them.” (Participant L, video 14, August 26, 2015)

Suggestions and recommendations were made by participants’ peers and they developed their modified GalahAsin by considering their micro-teaching experience and peers’ opinions.
FINDINGS AND DISCUSSION

Indonesian Constitution (Act Number 20, the Year 2003) on National Education system stated the national objective of education is:

“To develop competence and build character as well as develop dignified national civilization in the framework of advancing the intellectual life of the nation, with objectives the development of learners’ potentials to become a man that believes in God the Almighty, has noble morality, is healthy, masters knowledge, is bright, is creative, is independent and to become a democratic and responsible citizen.” [National Education Law No. 20 Year 2003, Retrieved from http://peraturan.go.id/inc/view/11e44c4ebd4a2040aa70313231363139.html. on October 14, 2016. (2016)]

Soedijarto (Soedijarto. 1991) recommended those objectives to be transformed into more operational objectives that consist of: (1) scientific and intellectual objectives; (2) spiritual and moral objectives; (3) emotional objectives; (4) life-skills objectives and (5) physical education objectives.

The modified GalahAsin models have characteristic as a puzzle game, in which other subjects can be included in the play. The integration of different subjects through jigsaw needs to be completed during the play thus become one of the missions to accomplish. This modification allows GalahAsin to embrace the five operational objectives.

Data Analysis

The analysis of strengths, weaknesses, opportunities, and threats informed several possibilities in modifying GalahAsin.

| Strengths | Weaknesses | Opportunities | Threats |
|-----------|------------|---------------|---------|
| - Teaches some motor skills (physical education) | - Time consuming. | - Each team create a secret language to communicate between members. (New technology, Creativity). | - Teachers may think that Galah Asin will take much time and energy and they will not able to teach all materials to their students by the end of the term. |
| - Develops honesty, risk taking, fast thinking, responsibility, discipline, hard work, resilience, critical & creative thinking, obedient, respect, understanding, concentration, tolerant. (character education) | - Energy consuming for both teacher and students. | - Possible movements integration in the play. (Physical Education) | - Schools’ priority in educating children is schools ranking based on students’ exam score and quantity of students who passed the national exam. |
| - Fun, enjoyable and happy learning. (Active and engaged learning) | - Un-supervised. | - Rewards for the most honest patient player or award for player with a particular character in focus. (Character building, affective skills) | - As long as the national exam is the main ‘objective’ in education, teaching models such as modified Galah Asin will not be taken into account. |
| - Leadership skills | - Fields availability. | - Puzzle game for integration of other subjects. (Intellectual domain, Cognitive) | | - Chance of injury. |
| - Communication skills. | - Fields condition. | | - Chance of chaos. |
| - Analytical skills. | - Rules: hard to accomplish when any member of team gets tagged means team shift. | | |
| | - Only 10 children play per game. | | |

Figure 2. SWOT analysis of GalahAsin

The strengths analysis revealed GalahAsin accommodates characters education, cognitive skills, social skills, active and meaningful learning, and physical education. The weaknesses analysis suggested modifications of the rules. For instance, to make GalahAsin more achievable, team-switch happens when all members of the offense team had been tagged by the defense team. However, to ensure no time wasted, each game is given 7 minutes before a switch. In the analysis of Opportunity, participants were encouraged to think out of the box. The analysis resulted in a modification of GalahAsin
by combining puzzle games. The threats analysis portrayed curriculum and policy about the objective of education for schools and teachers were prioritizing ‘winning’ national exams.

Modified GalahAsin as Teaching Model

Figure 3. The possible teaching model of modified GobakSobor with a puzzle game.

Aarseth (2003, p.3) ratifies that all games must have rules for advancing and losing, therefore rules are the most fundamental part of all the elements in a game. Ensuring safer and more secure learning, rules, fields, duration of each game and playing procedure are modified.

“When I was a child, I used to play GalahAsin with my friends. I was a girl but most of my friends are boys. I remembered how my friends often didn’t pay attention to the lines when they guarded. So the defense team members just ran so fast and tagged so hard. This is so dangerous because he could fall or other friends could hurt. I think we need another player to act as a line-referee or the teacher should be one. To always remind students about the rule of tagging. Also, it will be fair not to have mix students. So, boys versus boys or girls versus girls.” (Participant A, anecdotal note week 2, August 13, 2015)

In a puzzle game or a strategy and reaction-based games, rules are the key. Therefore, game rules need to planned as thorough as possible. Here is an example of thoughtfully-design Game Rules:

Players:
4 – 5 students per team (8-10 students)

1 line-referee
1 umpire (teacher)

Rules: 1. One team defense consists of 4/5 students and One team Offense also consists of 4/5 students.
2. Defense team’s task is to guard the offense team not to cross and pass squares from start to finish.
3. Offense team’s tasks are to cross from start to finish line and to take a piece of puzzle based on criteria/question from the umpire and arrange the jigsaws in the finish line.
4. Defense team can only run on the line assigned (4 run horizontally and 1 runs vertically)
5. Offense team’s members try not to get tagged by any member of the defense team’s member.
6. If the defense team can tag all members of the offense team, players switch roles.
7. Minimum 2 games per play. One game duration is 7 minutes. If the offense team cannot complete the tasks, players switch roles.
8. Each correct piece of the puzzle that the players bring to the finish line is worth 10 points.
9. Completing the tasks is worth 100 points.
10. In the middle of the game, the line referee will give some questions. If the offense team’s members can answer it, the defense team’s members will freeze for 3 seconds. One type of game called puzzle is an enigma which can be solved without having to draw deep knowledge. (Moursund, D. G, 2006) Thus, this kind of model is suitable for a teaching model for fun learning. The example of puzzles as a result of the modification:
It is evident from the trials and simulation stages that the modified GalahAsin is manageable and is possible to be a game-based teaching model. During the simulation, the model facilitated ‘students’ to learn various lessons in one learning session. They learned about a certain subject, such as mathematics, through the puzzle-game. They learned better communication skill with their peers and learned how to work in a team. ‘Students’ also learned to obey rules and set goals for themselves and were motivated to achieve their learning goals. Positive characters were also developed during the learning, such as respectful, honest, patient, persistent and resilient. Nyota and Maparafind that through traditional games, children learn to share tools, manage conflicts, keep friends and interact socially. Nyota, Shumirai & Mapara, Jacob. 2008; Rutter, Maughan, Mortimore, and Ouston, 1979) There are so much to learn from learning that integrates traditional games. Rutter, Maughan, Mortimore, and Ouston (Mischbach, 2007; Olesova, & Borisova, 2016) asserted that schools and learning communities work effectively when knowledge and learning are taught professionally and characterized by an ethos or culture-oriented which may be expressed in terms of emphasis on self/team-learning, long-life learning, basic social skills and agreed learning goals that are relevant to real situation. (Luo, Li, Peng, and Fan, 2018; López, Daniel, Oscar Espinoza, and Silvia Sarzoza. 2018)

CONCLUSION

In recent years, active, meaningful and fun learning has magnetized researchers to consider it as a subject area of importance in primary education. In this investigation, we also interested in how the pedagogical gap between two fields of education might be addressed so that the content knowledge is able to be aligned with active, meaningful and fun learning through traditional game-based teaching model. Our project suggests that the modified GalahAsin game is a teaching model where learning to know, learning to do, learning to live together and learning to be are able to occur together in one teaching. It is a possible way for holistic learning in primary settings. It purposefully serves as a teaching model which processes knowledge and learning effectively, yet attends to emotional, social and other aspects of life.15&16 

It should become clear that this model is not without problems, whose severity might be relative to the individual teacher and their students. This teaching model also raises further questions due to the nature of the implementation in primary schools and its effectiveness. Answers to these questions are necessary to add further detail to the proposed pedagogical model because they will suggest how the implementation of GalahAsin relates to holistic learning and supports teaching and learning in primary settings.

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