Local wisdom-based character education for special needs students in inclusive elementary schools

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Abstract

The research aims to describe how local wisdom can be orchestrated in the well-implemented character education for inclusive elementary schools (ESs). A total of 50 teachers and 200 students from 50 inclusive ESs in four districts and one municipality in Indonesia participated in the study. The data, collected by conducting interviews, observation, and documentation, were analyzed by means of qualitative descriptive techniques. There were three major themes identified. Students preferred traditional games as their favorite means of learning. Togetherness in team-based games encouraged the students to see their special needs differences as normal. Furthermore, the accessibility of the traditional games’ tools empowered the students. These findings suggest that traditional children’s games are to be elaborated and used to support the local wisdom-based character education in the inclusive ESs, and teachers are to initiate and develop the use of various locally originated children’s games to enhance character education.

Keywords: character education, local wisdom, special needs;
1. Introduction

The belief in each community has certain strategies and techniques in an effort to develop a life journey, that is in accordance with the context, so the idea of developing character education based on local wisdom for students with special needs in ES, it is very appropriate. It is because in the development of moral quality, personality and togetherness which is increasingly buried by this era, it requires PA based on local wisdom that is in accordance with the student’s environmental conditions.

There is a complexity of local wisdom that functions is as the basis for PK and Al Musanna (2012) will discuss it in 3 ways, they are (1) the emergence of inclusive polemic ES teaching in terms of whether it can use local wisdom, (2) the theory of teaching for wisdom which is a reference in the application of character education related to its relevance to local wisdom, and (3) the basis for developing a model for integrating local wisdom in PK which is the actualization of local wisdom teaching. The existence of a CE model for students in inclusive ESs is inseparable from the dynamics, aiming to arm special needs students to prepare their better lives after graduating from school.

Further, education in Indonesia in recent times apparently leans towards such a priority in mastering science, intelligence but neglecting character education. So, it can be said that the moral or ethical education that they get through school, it is increasingly non-existent and this results in a lack of student knowledge about the moral rules that must be used (Hutabarat, 2010). Most education practitioners might begin to pay less attention to how education can bring a profound impact on one’s behavior that becomes the biggest fault of education and fail to produce the nation’s generations with strong character. If school education successfully improve the students’ character, however, it is expected that in the future the generations equipped with quality soft skills will be professionals who are ready to face the world’s rapid growth (Ahmad et al., 2019).

In terms of educational approaches to character and cultural values, inclusive ESs can assume a significant role in developing strategies necessary in building the national civilization, especially to build values consistent with the national plurality. Hence, diversity is appreciated as a priceless asset rather than contested. For that reason, the development of civilization itself needs to be based on the ethical and cultural values inherent as the national identity.

Though character and cultural value education in Indonesia has long been applied in the learning process, the fact mostly chows that their implementation cannot run optimally due to several things, including (1) the lack of teaching skills of teachers to add character education in the learning process; (2) both in nationally and locally reputable education units, schools are likely more focused on pursuing academic targets especially on the cognitive aspects, so soft skills or non-academic aspects as the main elements of character and cultural value education are often overlooked.

So, based on Law No. 20 in 2003, that concerns about the National Education System which contains educational goals including those related to character education for students with inclusion, the efforts are made to find the most effective way to integrate local wisdom into character education for elementary school students. inclusion becomes an interesting thing to discuss. By focusing on inclusive education, this study seeks to describe what kind of local wisdom can support character education in inclusive elementary school students in the research area.

The results of this paper are structured as follows. A review of literature studies related to character values and inclusive education will be discussed in detail in this section. Next, the methods’ section describes the research setting, instrument, and data analysis. Later, the suggested approach to local-wisdom based character education for inclusive ESs, namely by implementing traditional children games, are presented in the findings, and followed by the discussion comparing the findings to the existing studies and the research conclusions.

1.1. Context and review of literature
In the philosophical history, character value has been known as a relatively new theme. It was only at the end of the 19th century when character value gained a steady position in the study of academic philosophy. Hers (1980) implicitly states that character values have long held a role in philosophical talks, namely since Plato placed the highest 'good' idea in the hierarchy of values. Regarding this, Hans (2005) argues that character values are behavioral tendencies that originate from psychological symptoms such as individual desires, motives, attitudes, needs, and beliefs to one’s unique behavior. In Suseno’s (1987) words, value is a belief that makes a person acts on the basis of his/her choice, and it occurs in the psychological area of personality.

Ahmad (2001) further formulates character value as a conception of what is desired, which later influences one’s choice of the way to do an action and the immediate and ultimate goal of such an action. For Maksum & Luluk (2004), the definition of value has many implications for the meaning of cultural values, and in a more specific sense, the intended implications are: (1) character values are constructs involving cognitive (logical and rational) and “katektik” processes (interest or rejection according to conscience), (2) character values always function potentially, but always become meaningless when verbalized, and (3) if they are pleasing to culture, values are expressed in a unique way by individuals or groups.

The dimensions of education in this description of character-based education cover everything. It relates to the ideal of educational goals, where the ideal education is the education to form a complete human personality. So, in an effort to achieve these goals, the implementation of educational values and educational practices must be directed at education, that is characterized by the achievement of complete human goals in every education. Consequently, value education cover all dimensions of education carried out through development activities, in both curriculum, extracurricular activities, and teaching and learning activities understood as an effort to nurture values in education.

The same thing was also expressed by the general chairman of the Taman Siswa Legal Council in the philosophical characteristics of the Javanese proverb (Sudarto, 2007), which states: “(1) mahayu hayuning saliro (a way of life to improve self-quality), (2) mahayu hayuning bongso (a struggle for the country and nation), and (3) mahayu hayuningbawana (building world welfare)”. And this command can be achieved if humans can understand, appreciate and carry out their duties as humans, as is stated in “Tri Satya Brata”, “(1) rahayuning bawono limebo waskitaning manungsa (world welfare depends on humans who have the ability to perceive senses), (2) darmaning satrio mahanani rahayuning nagoro (main task of maintaining state security), and (3) rahayuning manungso dumadi soko kamanungsane (the human safety is determined by his behavior)”. 

Furthermore, regarding the values of academic character that have been described based on educational goals, they include faith, piety, noble character, knowledgeable, honest, disciplined, democratic, fair, responsible, oriented to excellence, mutual cooperation, healthy, independent, creative, appreciate and speak. Another opinion was also expressed by Kritiko, Woulfe, Sukkar, & Saini (2011) which states that the values that must be instilled in elementary school students include: polite, caring, cooperative, disciplined, humble, angry, tolerant, independent, honest, confident, tough, positive, fair, peaceful, hardworking, creative, responsible and sincere. In relation to it, Sue (2002) affirms that character formation consists of the following three things: knowing the good (goodness), desiring the good (desiring the good) and encouraging him to take action good (doing the good). Thus, someone who has character (good or bad) makes him/her appear different from others, so that it becomes a special marker when others recognize him/her (McLaughlin, 2009).

The context of national education, the functions and objectives of national education, it has been explained in the National Education System Law no. 22 of 2003, to be precise in chapter II article 3 are to “develop capability, character, and civilization by enhancing Indonesia’s intellectual capacity and developing students’ human values of being faithful and pious to one and only one God; possessing a moral and noble character; being healthy, knowledgeable, competent, creative, and independent; and acting as democratic and responsible citizens”. Nadraha (2007) suggests that character and cultural
values can be instilled through several academic approaches, namely (1) cognitive development, (2) value analysis, (3) value clarification, and (4) learning-to-do approach. In Suyitno et al. (2019) words, character education integrated in the learning process requires exemplary actions of teachers and students.

In its implementation, inclusive schools, with their core concepts, are mandated to implement character education. These concepts, as found in the Statement of Salamanca, (UNESCO, 1994), includes the followings. (1) Children with special needs have a wide diversity in their characteristics and needs. (2) The difference is normal. (3) Schools need to accommodate all children, including persons with disabilities. (4) The living environment is a place where children with special needs go to school (5) The inclusion model is very important and requires the participation of the community. (6) The essence of inclusion is student-centered learning. (7) Flexibility that is adapted to students is the character of the applied curriculum. (8) Appropriate support and adequate resources are what is needed in an inclusive education model. (9) Inclusive school models should benefit all students because they help create inclusive society, and (10) inclusion increases the efficiency and effectiveness of education costs. Additionally, As the Directorate of Special School Development, Directorate General of Primary and Secondary Education Management, Ministry of National Education (2009) general principles of inclusive education management must be adhered to. Then, the essence of school management is the learning activity itself, so the activities in the form of support must be directed at the learning activity itself, they are the creation of an active, creative, effective learning atmosphere, and does not rule out character education based on local life.

1.2. Study objectives

The formation of integrated character from the children with special needs in inclusive elementary schools is the aim of this study.

2. Method and materials

Qualitative descriptive research is the type of research, where this research will examine learning activities that include local wisdom in inclusive elementary schools from a naturalistic perspective. It attempts to describe the character education of students with special needs with local wisdom inspiring their learning activities.

2.1. Participant

The participants were selected from 50 ESs by consideration of purposive sampling technique, in which these ESs were in the areas where the majority of Javanese indigenous community live, the Special Regency of Yogyakarta. These areas include four districts i.e., Sleman, Bantul, Kulonprogo and Gunungkidul, as well as the municipality of Yogyakarta. A total of 200 students and 50 teachers responsible for these students participated in the study. The selection of participants were based on the participants’ familiarity with local wisdom.

2.2. Data Collection Tools

In accordance with the research objectives, the study used several types of instruments. Separate sets of questionnaires were used for the interview of the students and the teachers. Questions for the students were notably structured in simple sentences. Observation guidelines were utilized in the recording of the needs of the inclusive ESs’ teachers and students, with regard to their carrying out the local wisdom-based character education. A set of implementation guideline in the form of local
wisdom-based character education module was distributed for the teachers and the students. All data collection procedures were documented using recording devices.

2.3. Data collection process

Individual semi-structured interviews and observations were conducted by a team of researchers as an effort to provide researcher triangulation. The students were interviewed with at least an adult other than the interviewer present and were asked questions in casual manner. They were encouraged to not be afraid to answer honestly and to be open about their feelings and opinions. The questions for the students revolve around their feelings and thoughts while learning, such as whether they enjoyed learning by playing traditional games, how their feelings are about doing activities together, or whether there is any difficulty in doing activities like traditional games. Teacher’s questions were more complex from asking their opinion on the implementation of character education by means of local wisdom or how they see the opportunities for learning in traditional children’s games. Traditional children’s games were eventually preferred as the main activities incorporating local wisdom as the students were enthusiastic about playing the games and were observed using the instruments as the activities were happening. All activities were documented in paper and recording.

2.4. Data analysis

The transcribed interviews, observation guidelines, and the recordings were analyzed by the team of researchers. The process of data analysis according to Sugiyono (2009) includes the process of searching and compiling data systematically, where it is obtained by means of interviews, observations, and documentation, the next step is organizing the data into categories, then describing it into units, is continued by synthesizing, and is followed by compiling into a pattern, and finally what is selected and is important to learn. After all the processes have been passed, the next step is to draw conclusions that are easy to understand for both yourself and others. This can be done when data collection takes place, and when completing data, after data collection is completed within a certain period of time (Miles & Huberman in Sugiyono, 2009). At the time of the interview, the researcher had analyzed the answers of the interviewees. If the interviewee's answers after being analyzed are insufficient or unclear, the researcher will proceed to a stage where certain data obtained are considered credible. In addition, qualitative data analysis activities are carried out interactively and take place on an ongoing basis.

3. Result

Based on the data analysis conducted, there were 3 identified themes, they were (1) students preferred traditional games as their favorite learning tool that combines local wisdom, (2) the students were encouraged to see their differences in special needs as normal while putting forth togetherness while playing traditional games, and (3) the students were empowered by the accessibility of the tools required for playing the traditional games. The assessment of needs and identification of character education needs based on local socio-cultural wisdom and their distribution regarding service needs, they are the basic data on the prevalence of students in 50 ES obtained from the results of this study. The benchmark for developing character education in inclusive elementary schools is taken from the prevalence rate of each district/city in the Special Region of Yogyakarta. The potential in this profound local socio-cultural wisdom was explored and developed in accordance with the progress of the times. The development of local culture, however, seems to have stopped because there are so many modern foreign cultures inflowing in this country.

The results of the interviews with the topics of local wisdom-based character education involving the teachers from the selected ESs indicate that the local wisdom receives special attention from teachers and community leaders to be continuously explored and developed in accordance with the
current developments. Many problems related to local wisdom have been identified, one of which is that teachers and community leaders consider all cultural wisdom to be developed to counteract the influx of foreign cultures developing in local communities today.

The interview results support the findings of the observations, that participating ES students prefer games in the learning process. As mentioned in the interview with teachers, there are various types of local wisdom in the form of traditional children games, namely Galasin, Congklak, Hide and Seek, Spinning Tops, Marbles, Stilt, Boi-Boian, Mobil-Mobilan, Bola Bekel, Pletekon, Engklek, Ular Naga Panjang, and Bentik/Gatrik. In this paper, a number of sample traditional games that can represent what inclusive ES students prefer are describes, namely Galasin/Gobak Sodor, Congklak, Gasing, Egrang, Bentik/Gatrik, and Ular Naga Panjang. These games have been adapted to the typology of children with special needs because these games are safe and fun to play.

3.1. Galasin or Gobak Sodor

Galasin, or its other name is Gobak Sodor, this is a local game native to Indonesia. This is a type of team game, where 1 team consists of 3-5 people. The way to play this game is to block your opponent so they can't cross line by line to the finish line by going back and forth. The winner of this game is determined by the total number of members who can reach the finish line by going back and forth in the field area.

3.2. Congklak or Mancala

Congklak or Mancala is a type of traditional game that is known by various names throughout Indonesia. This game can only be played by two people using 98 congklak seeds to fill 16 holes in the
plastic or wood-made *conglak* board. *Congklak* seeds usually come from shells, or you can use stones or seeds from plants.

![Image of Congklak or Mancala](https://example.com/conglak_image.jpg)

**Figure 2. Congklak or Mancala (Yudiwinata, P. & Handoyo, P. 2014).**

The game begins by determining who plays first. The first player must take all the seeds from one hole and then fill them one by one into the specified hole, from left or right, until all the seeds are placed. After that, the first player takes all the seeds from the last place in which the seed is placed. The steps are repeated until there is a winner with the greatest number of seeds.

### 3.3. Gasing (A Spinning Top)

*Gasing* is played by turning it on a balanced axis at a point. It is the oldest game found from archaeological sources. Apart from being a game for children and adults, it is often in gambling and fortune-telling using *gasing*.

Materials commonly used in making *gasing* includes wood, plastic or other materials. If it is made of wood, usually the process starts with carving until it becomes a body of *gasing*. Then nylon will be used as the *Gasing* rope, but in traditional *Gasing*, it is usually made of tree bark. And the length varies, and this depends on the length of the arm of the person playing it.

*Gasing* moves based on the gyroscopic effect. *Gasing* usually wobbles for a while until the interaction of the tip (*paksi*) with the ground makes it spins in its upright position. After the *gasing* rotates upright for a while, the angular momentum and the gyroscopic effect will decrease little by little until finally, the body part falls roughly to the ground.

![Image of Gasing or Panggalan](https://example.com/gasing_image.jpg)

**Figure 3. Gasing or Panggalan (Yudiwinata, P. & Handoyo, P. 2014).**
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*Gasing* is an ancient game that still exists today. Its shape is like a ball with a rope coiled around its axis. If the rope is thrown correctly, *gasing* will rotate in balance. This game is not difficult to play, but it takes strength to throw it. If the player is hesitant in throwing the *gasing*, the *gasing* can quickly fall.

3.4. *Egrang* (*Stilts*)

*Egrang* is a pole or stick used by someone to stand a certain distance above the ground. The walking *Egrang* is a kind of *Egrang* that is equipped with stairs as a stand, or straps to be tied to the player’s feet, for the purpose of walking as the player stands above the normal height. On floodplains, beaches, or labile lands, buildings are often made on stilts to protect them from being damaged by water, waves, or shifting soil. *Egrang* has been used for hundreds of years.

![Egrang](image)

Figure 4. *Egrang* (Yudiwinata, P. & Handoyo, P. 2014).

In Indonesia, *Egrang* was popularized by the people of Jakarta. It can only be played by people who are used to and can maintain balance. The stilts are two long sticks with platforms for the feet to stand on. If a player falls, he/she will be given a penalty. At the beginning, punishment does not need to be given because the player is still in the learning stage. However, if the player has already been able to use it, the penalty must be given.

3.5. *Bentik* or *Gatrik*

*Bentik* or *Gatrik* is usually called *Tak Kadal*. In this game, each group consists of at least 2 people and there are two groups in this game. The tools needed to play this game are two pieces of bamboo: 1 small bamboo (about 10 cm long) and 1 bamboo with a size of 30 cm. The small bamboo is placed between two stones and is then hit with a longer bamboo. If there is a player who cannot hit the bamboo, he/she will get a penalty. Usually, the penalty is to give a piggyback ride to the winning player. This game basically emphasizes the skill of hitting, catching, and throwing the *Bentik* stick to the right direction. In playing the game, players do the following stages.
3.5.1. Stage 1 (Nyutat)

Group I hold the Bentik stick. A janak is placed across a hole in the ground, then the picking stick is inserted into the hole and shed as hard as possible (nyutat) so that the janak flies away to the Group II area. If the janak is caught, the player cannot continue the game (dead). But if the janak is not caught, the player in Group II will try to return the janak to the bentik batter (mbok-mbokan) that crosses over the hole. If the janak can hit the bat, the player cannot continue the next game (dead). Next, the next player will start the game from the start. But if the janak does not hit the batter, the game is continued by the next player.

3.5.2. Stage II (Ngantil)

The game in the second part is a continuation of the first part, and it is called ngantil. A janak is placed on a bat. Then, the janak is released upward for at least two tik-taks and is hit as hard as possible (ngantil). If the janak is released before two tik-taks, the player is declared 'dead' and cannot continue the game. Group II tries to catch the janak. If it is caught, the game is declared finished. But if it is not caught, the player from Group II must try to return it right into the hole, so that the Group I players cannot continue the game. If the janak is still far from the hole, the distance between the janak and the hole is measured by using a bat or depending on the number of tik-taks. If the tik-tak is only twice, the distance is calculated using a bat (mbok-mbokan). However, if the tik-tak is 3 times or more, the distance is measured using the janak. The number of tik-taks must be remembered by the player himself (honest).

3.5.3. Stage III (Tik-Tok)

In the next game, a janak is placed in a hole. Part of the janak tip is placed on the edge of the hole. The janak that pops out of the hole is hit upwards to be then hit immediately or hit several times first and then hit as hard as possible. Group II as the guard tries to catch the janak. If it is not caught, the guard must carry the player from the place where the janak falls to the bentik hole as a victory prize.

3.5.4. Stage IV (Gendongan)

The last part of the game is a piggyback ride. If Group I scores higher than Group II, Group I players will be given a piggyback ride by Group II players at a certain distance as agreed upon by each group, and vice versa. Bentik game is expected to help preserve one of Indonesia's original cultures.

3.6. Ular Naga Panjang (Long Dragon Snakes)

In ancient times, Ular Naga Panjang was very popular among children aged five to twelve. This game is better played on the field because the game will be more exciting when played by a great
number of players. This game is usually played by more than seven people. In this game, two people serve as guards and the rest become players who will walk past the guards. Guards are preferably chosen by Hompimpa to be fairer.

After two guards are chosen, the rest will line up with their hands placed on the shoulders of their friends in front of them, then they will walk in circles past the guards. While walking, they sing a special song *Ular Naga Panjang*, until it is finished. When the song is finished, the guards will catch one person, and the person caught must get out of line.

This game is very popular and liked by children in inclusive ESs, including children with special needs. They play happily as if they do not have any burden while playing. All their energy and attention are focused on the game, and they want to win the game they are playing. Joy increases when they win the game for they feel satisfied.

![Figure 6. Ular Naga Panjang](Yudiwinata, P. & Handoyo, P. 2014).

4. Discussion

As mentioned in the findings, the interview and observation results found that children traditional games are preferred by inclusive ES students as media to instill characters. In other research, such traditional children games have been recognized as effective media for developing early children’s cognitive and motoric skills (Yudiwinata & Handoyo, 2014; Hasanah, 2016) and positive learning and pro-social behavior (Chin & Zakaria, 2015). Especially for students with special needs, it is proven that locomotor motion in mild mentally retarded children has increased by playing traditional games.

The existence of children's games in this present time, however, is rather alarming. This may be caused by many factors, including children's interest in traditional games that keeps diminishing due to technological developments that have brought about the emergence of new games in various forms of electronic gadgets. One of the examples for this would be a game on a mobile web application that has been developed by adapting assistive technology to improve the social interactive skill of students with Attention Deficit Hyperactivity Disorder (ADHD) (Simamora, Kurniawati, & Puspitasari, 2015). In addition to this factor, the elimination of traditional games is due to the lack of cultural transfer that is barely working. This probably happens because of the breakdown of the process of inheriting traditional games from parents to their children and that the development of small cities towards metropolitan ones has an impact on the increasingly limited playgrounds for children. Thus, children's playing studios are needed as a means to facilitate the children's creative needs.

As each game requires its players to obey the rules, learning through games is perceived to be fun. Such a simple penalty might let them act carefully in order to win. Similar to this, but in different research focus, Charles et al. (2017) found that children's involvement in traditional games should be revived with regular rules and regulations because of its significance in refining their motor fitness abilities. Besides dealing with the motor fitness, the traditional game mechanisms – or those of digitalized ones – which require students to solve a certain level of challenge let them complete the
mission even with a kind of advanced difficulty and a higher level of success (Kam, et al., 2009). Thus, students are trained to be persistent with what they are doing. Such quality, being persistent or having strong perseverance is one of the character education agendas apart from being discipline and excellence-oriented. These characters can be developed through Gobak Sodor and Egrang, two examples of the local wisdom of Indonesia.

Besides, some traditional games played in a group of people improve students’ social interactions with their peers. In this study, Either Gobak Sodor, Congklak, Egrang, or Ular Naga Panjang are usually played in groups. While playing, students will unconsciously interact with the other players to achieve in both the goals of the game and expressing their feelings. Therefore, these local-wisdom based games can improve their interpersonal skills as they learn to appreciate and respect others’ feelings or efforts. This is in line with Moreno & Poppe (2016) who employed Interactive Tag Playground (ITP) to examine children engagement, behavioral cues, and social interactions. They argue that traditional game mechanisms can promote social interactions, prevent shy children from being excluded and promote physical activity (Moreno & Poppe, 2016). Thus, the characters of being friendly, healthy, and fair to others can be enhanced through these at least four local wisdom-based games. Collectively, these findings appear consistent with MacCormack, Matheson, & Hutchinson (2015) who have worked with youths with autism spectrum disorder (ASD) and found that structured and unstructured play can develop social skills in naturalistic settings.

For games that are normally played in small groups or pairs, Bentik, Gasing, and Congklak also offer such a special challenge. As players expect to be the winner, they concentrate on how to skilfully use their strategies while sometimes negotiate with their opposing player if necessary. As they play the games with a classmate who might have special needs, they also learn to compensate special conditions, for example, their counterpart needs more time to think about the strategies or to decide what to do next in the game. Thus, such social-culturally initiated games with their local wisdom can support the efforts to instil noble characters in students in general, and special needs ones, particularly as the present study, focuses on.

The important thing from this research is that the selected traditional games, they are proven to be able to provide support for character education aimed at extraordinary students in the context of this research. However, as it only examines the classic children games from a particular culture in Indonesia and merely focuses on youth character development without considering other potential factors, the future research should carefully investigate the roles of traditional games with their local wisdom in improving other learning skills and specific characters of exceptional learners across ages. Later, to assess the students’ character values, self- and peer-assessment as well as other methods can be applied comprehensively, for example by using the model suggested by Setiawan, Mardapi, Supriyoko & Andrian, (2019) who successfully develop 12 indicators and 24 items constructed based on SA model for assessing students’ affective domain.

5. Conclusion

The results of this study indicate that character education based on local wisdom is implemented for students with special needs in inclusive schools, it has been quite effective, it is done by utilizing traditional children’s games from the local community where the students live. Elaboration on the potential traditional games from the various indigenous culture in each country can be carried out to explore the possibility for development as efforts for coping the needs of exceptional learners. Likewise, modules, SOPs, and guidelines for developing character education based on local wisdom for students with special needs, further development by involving special teachers, researchers, and other related parties to ensure the quality of extraordinary education.

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