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# READINESS OF ELEMENTARY SCHOOL TEACHERS IN IMPLEMENTING CHARACTERS INTEGRATED LEARNING IN THE SCIENCE SUBJECT

# KESIAPAN GURU SEKOLAH DASAR DI PELAKSANA KARAKTER TERPADU BELAJAR DI ILMU TOPIK

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## ABSTRAK

Banyak persoalan yang timbul di masyarakat dewasa ini berakar pada persoalan moralitas sebagai akibat terpinggirkannya nilai-nilai karakter, Untuk mengatasi persoalan ini, perlu ditegakkan lagi nilai nilai karakter yang baik pada setiap anggota masyarakat, dan cara yang tepat adalah melalui proses pendidikan, di antaranya melalui pendidikan di sekolah mulai dari pendidikan dasar sampai pendidikan tinggi. Untuk mengetahui apakah para guru pada Sekolah Dasar siap mengemban tugas ini, maka diadakan penelitian untuk mengetahui kesiapan para guru dan masalah-masalah yang terkait dengan pelaksanaannya. Melalui angket yang kemudian diolah secara deskriptive persentasi pada sampel guru SD yang tersebar di Kota Semarang, Kabupaten Semarang dan Kabupaten Temanggung, dapat diketahui bahwa para guru menganggap sangat penting untuk mengintegrasikan pembelajaran karakter dalam matapelajaran IPA. Namun demikian mereka membutuhkan bimbingan/ contoh untuk mengembangkan model pembelajaran dengan fitur-fiturnya, yang mengintergrasikan nilai-nilai karakter dalam mata pelajaran IPA.

## ABSTRACT

Many problems that arise in today's society are rooted in the issue of morality as a result of the marginalization of the values of character. To solve this problem, need to be enforced the values of good character on every member of the community, and the proper way is through the educational process, including through education in schools ranging from elementary education to higher education. To find out whether the teachers in elementary schools are ready to take this work, the research conducted to determine the readiness of teachers and the problems associated with its implementation. Through a questionnaire calculated in descriptive percentage on a sample of elementary school teachers who are spread in Semarang, Semarang District and Temanggung, it can be concluded that in teachers' view it is very important to integrate the learning of characters in the lesson. However, they need guidance /examples to develop learning model with its features, which integrate the values of the characters in the science subject.

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Keywords: characters integrate learning; learning models; moral values

## INTRODUCTION

Lately too often we read in the newspapers or see on TV, the news regarding corruption, brawl, rape, and drug abuse. This problem is not limited in big cities but also in villages. Even more depressing, the culprit is not only

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Kampus Unnes Bendan Ngisor Semarang 50233 E-mail: nathanhindarto@yahoo.com uneducated people, but also involves the educated people and children. Developing in science and technology today does not necessarily eliminate the various problems in the society, especially issues related to morality.

Social and cultural situation in our society also increasingly alarming, lately. The events of increasingly degrading education and human dignity. The destruction of moral values, the spread of injustice, absence of a sense of solidarity, and others have taken place in our educational institutions. The schools we saw many unjust and violent behavior, either because of external interventions or education practitioners itself (Koesoema, 2008: 114).

Based on the analysis of social behavior, moral crisis is one that shows no evidence of caring aspects of flavor, character, and conscience of society. It is characterized by selfishness, disregard for others and the environment. Increased human competence in the mastery of science and technology by itself is not accompanied by an increase of virtue in the human consciences (Raka, 2011: 21). The condition is certainly very worrying for the community, especially parents and teachers (educators). Therefore, it is necessary to find solutions to overcome the problems of moral crisis through education, every school should have an explicit moral value code that is clearly communicated to students either in thr form of class discussions and role playing or rewarding students for proper behaviour (Anderson, 2000; Santrock, 2007:438). Suparno (2002: 42) offers four models of values/morals learning, namely: (1) as a separate subject, (2) integrated in all subjects, (3) models out of teaching, and (4) the combined models. Each model has its own advantages and disadvantages.

Integrated learning model will be easier to instill values and also more effective, because it does not need to add new subjects which are now considered too heavy. Educational values are integrated in the learning process through the introduction of values, facilitating awareness of the importance of obtaining the values, and internalize the behavior values into everyday life of learners through the learning process, which takes place both inside and outside the classroom in all subjects. Through the learning activities, in addition to master the targeted competencies, also conducted to make the students recognize, realize/care, and internalize the values and practicing good behavior.

Value education to the individual or child is one of the primary obligations that must be executed by all parties, as it will shape the character and is an important foundation for the formation of a society that is prosperous and civilized (Megawangi, 2004). Character education is becoming increasingly urgent to implement in our educational institutions, whilst the wide variety of non-educational behavior has penetrated our educational institutions, such as the phenomenon of violence, sexual abuse, corruption, and abuses that occurred at the school.

Character education will broaden students understanding about moral values and ethics that make them more capable of making decisions that are morally accountable. Character education implemented in educational institutions can be one means of civilizing and humanizing. As a result, it will create an environment that respects human life, respect for the uniqueness of the deity and creation, as well as produce a noble person who has the intellectual ability and moral well-balanced so that the public will become more humane (Lickona, 2004: 122).

Character education is not just to have an integrative dimension, in the sense of intellectual moral confirmed learners so that it becomes a solid personal and reliability, but also curative personally and socially. Character education can be one means of cure social sickness, and the improvement of society. Brooks and Goble (1997) states that: "Character education is systematically applied in primary and secondary education is a valuable bargaining power for the entire community. The students benefit by gaining positive behaviors and habits that can improve productivity and confidence in them. The duties of the teacher become lighter and more rewarding when the students have a greater discipline in the classroom. Parents rejoice when their children learn to be more polite, have respect, and productive. The school administrators will see a wide variety of improvements in terms of discipline, attendance, the introduction of moral values for students, and teachers, as well as reduced vandalism in schools (Benninga, et al, 2003)

In an effort to improve the appropriateness and quality of character education, the Ministry of National Education of Indonesia (2010) developed a character education grand design for each stage, level and type of education unit. The Grand Design for the conceptual reference and operational development, in implementation and assessment on each stage and level of education. The main values developed by the Ministry of National Education on character education consist of: the values of human behavior in relation to the Almighty God, Ourselves, the Others, the Environment, and National (Table 1). It should be kept in mind that it is important for character education to involve more than a listing of moral virtues on a classroom wall. Instead of that students and teachers need to participate in critical discussion of values to discuss and reflect on how to incorporate virtues into their daily lives.

#### METHOD

The study was conducted to determine the readiness of elementary school teachers in applying integrated character learning in subjects. Elementary school teachers were chosen as a sample spread out in Semarang, Semarang Regency and Temanggung. Of the three regions is obtained 100 samples of lower class primary school teachers (1<sup>st</sup>-3<sup>rd</sup>) and 100 elementary school teachers from higher class (4<sup>th</sup>-6<sup>th</sup>).

Questionnaire is in the form of multiple choices with 4 options. Data were analyzed with descriptive statistics. Questionnaire response options for each number is given a score of 4 for strongly agree, 3 agree, 2 disagree and 1 for strongly disagree. By calculating the average value of each response number, determined response categories on the number.

Through this questionnaire wanted to know the opinion of the elementary school teachers on the implementation of character education, character values that should be integrated in existing subjects and learning needs of the teachers in the implementation of the integrated character.

#### **RESULT & DISCUSSION**

In generally, all teachers sampled in this

Table 1. The main value of character

study agreed that character education should be given to the students, and this education should be given as early as possible. All of the respondents both of of lower-class or higherclass teacher recognized and aware the important of character education. This is quite understandable, because teachers are idols and models for young children (Santrock, 2007: 439; May, 2009:6-10)

In the implementation of character education all agree that this need not be a separate subject. This is presumably related to the number of subjects that exist in today's elementary schools, especially in high-grade classroom. The implication of this means that character education should be integrated into other existing subjects.

The integration of character education into other subjects gives its own difficulties in the preparation for teachers in developing learning plans. Teachers in higher class seem more aware of importance to deliver the character education. This difficulty is felt greater at high grade classroom teachers than that of the low grade (compare the average score of item No. 4 in Table 2 and 3). This condition may be caused by the fact that the lower grade teachers are more accustomed to delivering integrated learning, whereas the high-grade teachers deliver lessons in a subject discipline. The consequences of this can be seen in the scores of items 6, the high-grade teachers more likely to seek assistance in integrating character educa-

No	The main value of character	Value
1.	Character value in relation to God	• Religious • Tolerance
2.	Value of the character in relation to one- self	<ul> <li>Honest</li> <li>Discipline</li> <li>Hard work</li> <li>Independent</li> <li>Creative</li> <li>curiosity</li> <li>Likes to read</li> <li>Responsibility</li> </ul>
3.	Values in conjunction with other persons	<ul> <li>Rewarding achievement</li> <li>Friendly / communication</li> <li>Peace loving</li> <li>Democratic</li> </ul>
4.	Value of the character in relation to the environment	<ul><li>Care for the environment</li><li>Social Care</li></ul>
5.	National values	<ul><li>The spirit of nationality</li><li>Patriotism</li></ul>

No	Statement	Average score	Category
1.	Character education needs to be taught to students	3,9	strongly agree
2	Character education should be a separate subject	2,24	disagree
3	Character education can be integrated into existing subjects	2,86	agree
4	Teachers need assistant in integrating character into some subjects	2,67	agree
5	Character education caused students to be polite, have a commendable personal, embarrassed to act anarchy	3,81	strongly agree
6	Teachers already know how to teach character inte- grated in other subjects	2,68	agree

Table 2. Response of the Lower Class Teachers on the Importance of Character Education

Score rank : 1 - 4

Table 3. Response of the Higher Class Teachers on the Importance of Character Education

No.	Statement	Average score	Category
1.	Character education needs to be taught to students	3,80	strongly agree
2	Character education should be a separate subject	2,50	disagree
3	Character education can be integrated into existing subjects	2,91	Agree
4	Teachers need assistant in integrating character into some subjects	3,66	strongly agree
5	Character education caused students to be polite, have a commendable personal, embarrassed to act anarchy	3,91	strongly agree
6	Teachers already know how to teach character inte- grated in other subjects	2,38	Disagree

Score rank : 1 - 4

Table 4. C	haracter	Values ii	n Each	Subject
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Subject	Character values
Natural Sciences	Creative, curiosity, love of science, responsibility
Social Sciences Religion	Curiosity, the spirit of nationalism, social care Religious tolerance, peace-loving
Indonesian Language Civics	Creative, friendly, communicative peace-loving Religious, tolerance, patriotism, democratic
Sports	Hard work, creativity, responsibility
Arts Mathematics	Creative, peace-loving, national spirit, independent Creative, love of science, careful, thorough

## Table 5. Priority of Needs Assistance

No.	The need for assistance
1	Developing Lesson Plan
2	Preparation of Instructional Materials
3	Developing Evaluation Tool
4	Usage / Making Teaching Aids
5	Developing Syllabus
6	Implementation of class room action research

39

tion into subjects.

In order for effective character education can take place, then according to the respondents, character values should be choose for integration can be seen as shown in Table 4. This sorting is solely for ease in describing the values of the characters in each Competency Standard / Basic Competence of subjects, thus character education can take place more targeted, and it will be easier in evaluation implementation.

he teachers need in mentoring as an effort for preparing to implement the integrated character of learning in subjects was shown in Table 5. The first need was in composing Preparation Lesson Plans. On the development of lesson plans always involve measures of activity. Therefore, teachers have to develop a learning model to integrate character education in the subject, along with related features, such as teaching materials and learning evaluation (Hindarto et al, 2012). Learning steps in the integrated character learning model in an instruction comprise of: Introduce. Relate, Apply, Feedback, and Develop. For example, in teaching on the topic of 'Environment'. In first step, introduce, teachers to motivate students by observing pictures of beautiful environment and also seedy neighborhood from flooding. Students are asked to reveal what is observed in the pictures. Through challenging and open questions, science can and should motivate students to learn and raises curiosity about the world in which they live (Savala & Alarcon, 2007). Step two, teachers relate the subject matter with the values of the character such as, curiosity, discipline and responsibility to be implanted. In the third step, the teacher encourages students to know the value of a character in the cognitive, affective and practice of real value in daily real life. Through science children understand why a lot of plastics waste floating, even broken and swept away houses. The next step, teacher gives feedback to evaluate the achievement of learning objectives and help students to reflect on the phenomenon of physics in flooding. The last, developing step, the teacher helps the student to plan an awareness to behave disciplined and responsible for safeguarding the environment.

The second need assistance was the development of teaching materials. Developed teaching materials should not merely emphasize on the aspect of knowledge/cognitive only. Affective aspects that intersect with the values of the characters are pushed to virtue should receive adequate attention. Cooperative learning with problem-solving strategies can be used effectively presumably for this (Benninga et al, 2003; Gok & Silay, 2010). Preparation of evaluation tools and props are needed in the next priority, so learning the characters do not get caught up in things that are verbal only. Because the character is not just what people think, but what one do so. Component behavior should be observed in the everyday reality life of students (Salta and Tzougraki, 2004). The last priority need is the facilitation of the activities of Classroom Action Research. This capability needs to be mastered for teachers to be able to solve the problems in the learning activities in class.

Not all values of the characters must appear in each lesson, but should be focused on one or a few characters values on each learning session (see Table 4). Teachers in higher class seem more aware of importance to deliver the character education. In this way, the integration of the value of character and delivery of the moral messages in the learning will be easier to do. During the class, teacher should able to convey a moral message in parallel with the instruction of the lesson, not just focused on cognitive aspect (Hindarto, 2010).

Teacher can used their notion in history of physics concept development or brief biography of scientist to introduce moral values. For example, a succed story of Michael Faraday, eventhough his life was sorrow in the early years, but because of his unbreajabke spirit, he became a welknown scientist. A lot of moral values can be drawn through science's history. This will certainly facilitate teachers in implementing the curriculum in 2013 with a charge of character education.

Effective assistance to primary school teachers is needed, so they are ready to implement the character integrated learning in subjects. Giving instructions without adequate preparation of teacher's insight and understanding, the teacher will make the learning task just to meet the administrative requirements (Muslich, 2008: 6-8)

#### CONCLUSIONS

Based on the above it can be concluded that the primary school teachers realize the importance of character education and its effects. It is be a good start for the underlying readiness of teachers in implementing character education in schools. Character education does not need to be a separate subject, but delivered in an integrated way in other subjects.

In order to establish the readiness of teachers in implementing the integrated character education in the subjects, teachers need assistance/guidance, especially in Preparing Lesson Plans, Teaching Materials Preparation and Evaluation of learning,

As a suggestion it can be urged that the need to develop models of learning for character education can be carried out effectively and the necessary assistance/guidance or training for teachers who served in the field.

## REFERENCES

- Anderson, D.R. (2000). Character Education, Who is Responsible? *Journal of Instructional Psychology*, 27(3), 139-143
- Benninga, J.S., Berkowitz, M.Z., Kuehn, P., & Smith, K. (2003). The relationship of Character Education Implementation and Academic Achievement in Elementary School. *Journal* of Research in Character Education, 1(1), 19-32
- Brooks, B. D. & Goble, F. G. (1997). The Case for Character Education: The Role of the School in Teaching Values and Virtue. Northridge, CA: Studi 4 Productions.
- Gok, T. & Silay, I. (2010). The Effect of Problems Solving Strategies on Students Achievement, Attitude and Motivation. *Lat. Am. J. Phys. Educ. 4(1), 7-21*
- Hindarto, N. (2010). *Pendidikan Karakter Dalam Pembelajaran Fisika Modern.* Orasi Ilmiah dalam Rapat Senat Terbuka. Semarang: Unnes

Hindarto, N., Rusilowati, A., & Supriyanto, T., (2012).

'Karisma' Suatu Model Pembelajaran Karakter Terintegrasi Dalam Mata Pelajaran, Prosiding SemNMas Mipa Unnes dengan temja Peran Mipa Dalam Peningkatan Kualitas Hidup dan Pengembangan Pendidikan Karakter, Semarang 13 Pebruari

- Koesoema, D. (2010). *Pendidikan Karakter: Strategi Mendidik Anak di Zaman Global.* Jakarta: Grasindo.
- Lickona, T. (2004). Character Matters, New York: Simon & Schuster.
- May, P. (2009). Creative Development in the Early Years Foundation Stage. London – New York: Routledge
- Megawangi, R. (2004). *Pendidikan Karakter Solusi Tepat untuk Membangun Bangsa*. Jakarta: Star Energy (Kakap) Ltd.
- Muslich, M. (2008). *KTSP Pembelajaran Berbasis Kompetensi dan Kontekstual*, Jakarta: PT Bumi Aksara
- Raka, G., (Tim Pakar Yayasan Jati Diri Bangsa). (2011). *Pendidikan Karakter di Sekolah,* Jakarta: PT Elex Media Komputindo,
- Salta, K. & Tzougraki, C. (2004) Attitudes Toward Chemistry Among 11<sup>th</sup> Student in High Schools in Greece. *Science Education.* 88, 535-547
- Santrock, J.W. (2007) *Child Development,* 11<sup>th</sup> editionm, New York: McGraw-Hill Int.
- Suparno, P. (2002). *Pendidikan Budi Pekerti di Sekolah: Suatu Tinjauan Umum.* Yogyakarta: Penerbit Kanisius.
- Zavala, G. & Alarcon, H. (2007). Innovative Training of In-Service Teaching for Active Learning: A Short Teacher Development Course Based on Physics Education Research. *Journal of Science Teacher Education.* 18, 559-572
- ..... (2010). Panduan Pendidikan Karakter di Sekolah Menengah Pertama. Jakata: Kemendikbud