UCLA METHOD: THE CHARACTER EDUCATION EVALUATION ON BASIC MATHEMATICS LEARNING IN HIGHER EDUCATION

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Abstract

The external turmoil that occurs today has a negative impact on all the structure and order of the domestic system. One of the recovery efforts is the implementation of mental revolution through character education. The character education can be applied to the affective aspect of the basic mathematics learning which will be integrated with basic mathematics material using character to be implemented. In addition, the colleges can be a place for student character development. This research was conducted at Muhammadiyah University of Semarang and Semarang State University. This research is a quantitative descriptive research using UCLA evaluation method. The data were collected by questionnaire method and interview. The results showed, 1) lecturers have little impact on the development of student character.2) program planning, given the integrated learning character education. 3) Program implementation, character education has never been introduced or used in the majority of learning. Indirectly, some character education indicators have been embedded in the students. However, most indicators are still not fully embedded, such as honesty, religious, caring for others, discipline, hard work, self-reliance, and responsibility. Thus, it is necessary to develop character values on basic mathematics learning applied to processes, techniques, and assessment instruments.

Keywords: Character education, UCLA, basic

1. Introduction

The external turmoil that occurs today has a negative impact on all the structure and order of the domestic system. To overcome the above problems, it is necessary to restore and strengthen national resilience through the implementation of mental revolution. One of the main factors that can be used in the implementation of the mental revolution is education. Education is a business community or nation to prepare its generation in the face of challenges for the sake of survival in the future (Ghozi, 2010). Character education is one of the means that plays an important role in creating quality and potential human in the present. Through national education is expected to develop the ability and form the character and the tapping of a dignified nation. Directly, educational institutions can create a character education approach through curriculum, disciplinary enforcement, classroom management, and education programs designed (Aqib, 2011).

There is a tendency of mathematics learning towards the emphasis on procedural capability, calculation counting, formula memorization, only procedural (algorithmic), and low attention to the process of obtaining concepts, procedures or formulas. Mathematics not only emphasizes the cognitive ability, but also the affective and psychomotor ability. The development of affective ability is one of the instances of character education in mathematics learning. Based on the previous study, Sumarmo (2006 a, 2006 b, 2010) suggests several kinds of mathematical soft skills, namely: the disposition of values, culture, and character in learning mathematics; mathematical disposition; positioned logical thinking, positioned critical thinking, and disposition of mathematical creative thinking, mathematical learning independence.

The development of character values in mathematics learning can be applied to process, technique, and assessment instruments. The learning process that prioritizes exploration, problem solving, is the embodiment of one character education. The characters in question are tenacious, diligent, persistent, rational, critical, move according to the rules, and do not like to cut / cut compass (do not want to queue, want to get rich suddenly, through corruption). According to Sugandi (2011) the techniques and assessment instruments selected and implemented not only measure academic / cognitive achievement of students, but also measure the development of student personalities. These personality values include religious, honest, tolerant, discipline, hard working, creative, independent, democratic, curiosity, passionate, friendly / communicative, caring, social, and responsible.

University can be a good place of education for student 'character growth. All forms of lecturing can all be integrated through character education. For example, it would be very relevant to connect the data if the data in the statistics subject is related to the character of accuracy and correctness. Teaching national and international law material to students will be very relevant when it is related with the character of love of motherland. Related to these conditions, to know the application of character education, it is required an evaluation. According Suchman (Arikunto and Cepi, 2010) evaluation is the process of determining the results that have been achieved some activities planned to support the goals achievement. The evaluation of educational programs has many models that can be used. One of them is the CSE-UCLA model (Center for the Study of Evaluation-University of California in Los Angeles). The CSE-UCLA developed by Alkin which evaluates the program in five stages of evaluation: system assessment, program planning, implementation program, improvement program, and certification program (Suryanto, Gafur, and Sudarsono, 2013).

In this research, the researchers will be evaluated the character education in basic mathematics subject using CSE-UCLA method. Based on these evaluations, the researchers hope that they will be used to make decisions whether character education has been instilled by the lecturers integrated in the subject or not. Moreover, it will be obtained the character values that can be embedded in the basic mathematics subject.

2. Methods

2.1 Participants

The population of this study is all students and lecturers in UNIMUS and UNNES. The sample of this research is a student who has taken the basic mathematics subject in UNIMUS and UNNES and also the basic mathematics lecturers at both universities. The sampling technique is purposive sampling. This is in accordance with the research conducted

by (Sholikhah & Soenarto, 2014) which stated that to obtain sampling units that have the characteristics or criteria desired in the sampling technique used purposive sampling.

2.2 Instrument

This research used questionnaires and interview guidelines as the instruments. The result of the questionnaire that needs to be emphasized or confirmed, then the interview will be held. The questionnaires were given to the lecturers and students who are chosen as sample while the interview method is done with question and answer with the lecturers and students discussing about learning in the subject of basic mathematics.

2.3 Research Design

The research approach used descriptive quantitative. The criteria of descriptive percentage using Arikunto's criteria. They are excellent (80% - 100%), good (66% - 79%), good enough (56% - 65%), poor (40% - 55%), and bad ($\leq$ 40%) (Arikunto, 2011). Each item will be tested in relation to the percentage of the variable in question. In this case， each item in the variable will be tested using the relation of the variable percentage. While in the final data analysis, all obtained questionnaire results are checked manually to see more detailed results of the initial data analysis.

The research method used in this research is evaluative / evaluation. It was used to evaluate a program / activity in one particular unit. This is consistent with the method used by Divayana (2017) and Divayana, Suyasa and Sugiharni (2016). The research design of this research is the evaluation model of CSE-UCLA. Five kinds of evaluation according to Alkin cited in (Haryadi, 2011). They are 1) system assessment, providing information on the state of the system, 2) program planning, program planning that can meet system requirements, 3) program implementation, providing information on whether the program has been introduced to certain groups that have been planned before, 4) program improvement, on how the program works and runs. Or is there a new problem that arises. 5) program certification, providing information on the value or use of the program. This research is still evaluating at three stages of system assessment, program planning, and program implementation.

3. Results

The result of the questionnaire analysis shows that none of the questionnaire statements have very good criteria. However, there are two statements that have good criteria, that is, "before leaving college, I always pray first" and "lecturer always gives opportunity to argue or ask questions". It shows that student's religiosity level and lecturer tolerance have good criteria.

There are ten statements with fairly good criteria. The lecturers' religious level in the lesson that can be said is quite good is shown from the statement "lectures begin by reading prayer first", lecturers give permission for prayer / worship when lectures are underway, "and" when *adzan* reverberates and learning is ongoing, lecturers stop lecturing to listen of calling to pray ". The character of social care to the students also have a fairly good criteria shown in the attitude of students who always help anyone who needs help, including when needed by friends or institutions. In addition, students also often follow the social activities to help others. The students 'responsibilities character had categorized quite well and shown in the statement "if I was called lecturers outside class hours, I immediately faced him/her   although I have a very important activity".

For the characterization of character education in the samples studied have good enough criterion, such as the lecturer enters the character values in the lecturing, the lecturers give the advice when the lecturing takes place, and the students get the learning that can be applied in everyday life.

For the statements that have bad criteria there are 14 statements, including four negative statements and ten positive statements. The analyses of the 14 statements are good discipline character from the students. It was shown from the majority of students who are not late in the lecturing. However, the honesty of students is still not good when students are still often cheat and help friends at the time of the exam. The discipline character of the lecturers is also still not good. It was shown from the lecturer who did not come on time and the implementation of lecturing that are not in accordance with the schedule that has been determined. In addition, some statements indicate that the learning has not been implemented character education, so that less lecturing affects the development of student's character.

The percentage of character education indicator based on the result of interview about the implementation of character education on basic mathematics learning can be seen in table 1 as follows.

Table1. Percentage of character education indicator

No.	Character	Percentage
1.	honesty	54,55 %
2.	dicipline	50 %
3.	creative	40,91 %
4.	curious	27,27 %
5.	courageous	40,91 %
6.	responsible	63,64 %
7.	tolerance	27,27 %
8.	hard working	36,36 %
9.	demokratic	22,73 %
10.	communicative	36,36 %
11.	self-reliance	22,73 %
12.	Religious	45,45 %
13.	caring for others	31,82 %
14.	socialize	27,27 %

From the table above, it shows that the responsibility is one of the characters with the criteria quite good. Whereas, honesty, discipline, creative, spirit, and religious have less good criteria. In addition, rest, curiosity, tolerance, hard working, democratic, friendly / communicative, independent, care for the environment, and social care were categorized bad. Therefore, based on the interview results, it can be concluded that character education has never been introduced or used in the majority of learning.

Based on the result of questionnaire analysis and interview, it can be concluded that students and lecturers have good character on religious and tolerance indicators. However, the learning effort that imparts character education to improve the character of the students has not been done. Proven in the interview results, none of the characters have very good and good category because character education has never been introduced or used in learning.

Thus, using the CSE-UCLA method, the evaluation results are obtained, namely 1) assessment system, lecturing has little impact on student's character development. 2) program planning, given integrated learning character education. 3) Program implementation, character education has never been introduced or used in the majority of learning.

4. Discussion

Based on the results of research that has been done, the evaluation of character education on basic mathematics learning using CSE-UCLA method is able to know the extent

of the implementation of character education on the learning of basic mathematics subject. The characters observed are honest, discipline, creative, curiosity, enthusiasm, and responsibility, tolerance, hard working, democratic, friendly / communicative, independent, religious, caring, and social. Based on the results of questionnaire analysis and interviews, it can be seen that the learning efforts that inculcate character education to improve the character of the students have not been done. It can be seen from the interview results, no character has a category very good and good because character education has never been introduced or used in learning. So, it is necessary for the implementation of character education in learning (Tobing, 2007 and Lickona, 2004).

The results can be poured in character education evaluation on basic mathematics learning using CSE-UCLA method, and obtained the evaluation result, that is 1) assessment system, lecturing less impact on student's character development. 2) program planning, given integrated learning character education. 3) Program implementation, character education has never been introduced or used in the majority of learning. Therefore, it is required the development of character values on learning to form students with character. This is in line with Amri, Jauhari, & Elisah (2011) that character-based education can form a complete human character.

5. Conclusions

Dari hasil penelitian dan pembahasan, diperoleh kesimpulan 1) *system assessment,* perkuliahan kurang berdampak pada perkembangan karakter mahasiswa. 2) *programm planning*, diberikan pembelajaran terintegrasi pendidikan karakter. 3) *Programm implementation*, pendidikan karakter belum pernah diperkenalkan ataupun digunakan pada mayoritas pembelajaran. Sehingga dibutuhkan pengembangan nilai karakter pada pembelajaran matematika dasar yang diterapkan pada proses, teknik, dan instrumen penilaian.

From the research and discussion results, the researcher can be concluded that:
1) system assessment, lectures have little impact on the development of student characters.
2) program planning, given integrated learning character education.
3) Program implementation, character education has never been introduced or used in the majority of learning. Therefore, it takes the development of character value in basic mathematics learning applied to the process, technique, and assessment instrument.

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