Establishment of student characters as citarum river pollution solution program

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Abstract. The role of universities in fostering student character can be integrated within the scope of curricular, co-curricular and extracurricular activities. Thematic Real Work Lecture activity based The Pentahelix is a curricular program in the University Pendidikan Indonesia and supposed to be a forum for student character formation. The purpose of this study is how to shape the character of students who can support the Citarum River pollution solution program. This study uses an approach that is combining the two types of methods namely qualitative and quantitative. This method is called the RnD method or research and development. The results of this study are the presence of the character of students as supporters of the Citarum River pollution prevention program.

1. Introduction

Ideal education is not only oriented towards competence, but also must be balanced with character development. Character is an important thing mastered by students to make humans whole. Indonesia's state education policy attaches great importance to the emergence of characters that must be mastered by students and set out in the national education goals. For this reason, a holistic and planned education from basic education to tertiary education is needed because character development must be multilevel and multi-channel [1].

Higher Education as an educational institution that produces undergraduate and has a wider scope both in quantity and quality, must have a grand design and a special program in fostering the character of students. The grand design for the formation of student characters in tertiary institutions must be planned, systematic, comprehensive, and integrated in the scope of curricular, co-curricular and extracurricular activities. On the other hand, the character will be formed by several factors including principles, designs, strategies and learning models that are influenced by their environment [2].

Given the character does not function in a vacuum, but functions in a social environment [1]. It is possible that the student activities (through curricular, co-curricular, and extracurricular activities) have a character coaching content, but these activities do not become a planned design and program with specific targets and goals. In these conditions the change in the character of the students formed cannot be measured because the evaluation process is not carried out, so the activities cannot be used as a character-building program for students. Theoretically all student activities in tertiary institutions both within the scope of curricular, co-curricular and extracurricular activities can be used as a means of fostering student character. Will be a reliable program if the curricular, co-curricular, and extracurricular activities are integrated and comprehensive as a means of fostering student character.

As a program that has been implemented for a long time and has been developed within the University of Indonesia's Education, the implementation of Thematic Real Work Lectures is used as a vehicle for the formation of student characters. Thematic Real Work Lecture Activities have been assigned to several stages (1) the preparatory stage; (2) the implementation phase; (3) monitoring and
evaluation stages; (4) the seminar stage as a result of Thematic Real Work Lecture; (5) the stage of student withdrawal; (5) reporting phase; and (6) follow-up stage. Thematic Work Lectures are an appropriate learning tool for students. Thematic Real Work Lecture Activities as a curricular program aims to: (1) train students in applying science, technology, arts and culture (IPTEKSBUD) obtained in college to be applied in solving problems in society, (2) training and develop soft skills and student character, (3) train students to understand the condition of the community both in rural and urban areas, so that students have sensitivity and concern for the community who need help, and (4) prepare prospective national leaders who favor honesty, justice, the truth and the poor. This strongly supports the character development program because character development requires the contribution of the community and community to find out the character of the students needed and the involvement of local issues [3]. But in reality, the target of the Real Work Lecture can deviate from the goal. Where after the Real Work Lecture ends, the students do not get meaningful self-learning. Likewise, the quality of community life at the location of the Real Work Lecture did not show significant changes. Even the public's view could have dropped the image of universities [3].

This condition can certainly be avoided if students have the character that supports the Citarum Harum Thematic Real Work Lecture program. The Citarum Harum Thematic Real Work Lecture Program is a Real Work Lecture that involves Pentahelix Components (Academics, Society, Government, Industrial World, and Mass Media) to Participate and Strengthen Programs to Accelerate Pollution and Damage Control in the Citarum River Basin. Students as the main subjects in the Citarum Harum Thematic Real Work Lecture need a strong character to carry out programs in the community. Considering they will face challenges namely how to adapt to the community, work together with teams, and innovate in creating a balanced environment of the Citarum Harum watershed. Based on this, this study seeks to answer the characters needed by students in carrying out the Citarum Harum Thematic Real Work Lecture, so that later it will be beneficial for the character development policy in Higher Education.

2. Methods

This research uses a qualitative approach and descriptive method. A qualitative approach is defined as a process of inquiry to understand human social problems, based on building complex and holistic images, formed with words, reporting detailed views of informants, and carried out in a natural environment [4]. We interviewed 28 respondents consisting of one staff member of the Center for Community Empowerment, Entrepreneurship, and Development of the Indonesian Ministry of Education Real Work Lecture, as well as twenty-seven students of the Citarum Harum Thematic Real Work Lecture Even 2018/2019 in two sub-districts namely Katapang and Batujajar Sub-Districts. Descriptive research describes and interprets what exists, relating to the conditions of existing relationships; applicable practices, beliefs, ongoing processes, perceived effects or developing trends [5]. For this reason, we use a research technique in the form of interviews that contains ten open interview questions. Data about the Real Work Lecture program was obtained from interviews with staff from the Center for Community Empowerment, Entrepreneurship, and Development of Real Work Lectures at the Indonesian Education University, while the characters needed in Real Work Lectures were obtained from interviews with students of Real Work Lectures.

3. Results and Discussion

Based on the results of research all student activities in higher education both within the scope of curricular activities, co-curricular activities, and extracurricular activities can be used as a means of fostering student character. Like the thematic real work lecture program with the theme of fragrant Citarum through the activities carried out by students finally raises the characters that must be possessed by students. Fragrant Citarum Thematic real work program can be seen in the following table:

Table 1.1

Programs and Activities
## Citarum Harum’s Real Thematic Work Lecture

| No. | Program                                      | Activity Details (Pentahelix Role)                                                                 | Character Aspects needed by Students                  |
|-----|----------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 1   | Community empowerment through pioneering Fruit Gardens | 1. Monitoring the development / growth of fruit trees totaling 739 stems in Sectors 7 and 8  
2. Identify the area of land, the number and type of fruit that has not been planted in 2018 in the Citarum watershed  
3. Conducting socialization and negotiation with the community, Sector and Local Government  
4. Procurement of 1000 fruit tree seedlings with a minimum height of 1 meter  
5. Distribution, planting and maintenance of fruit trees.  
6. Making a prototype of a fruit tree tourist landscape | • Willing to sacrifice  
• Environmental care  
• Social care  
• Responsible  
• Love peace  
• Friendly / communicative  
• Tolerance  
• Discipline  
• Hard work  
• Creative  
• Honest  
• Forgiving |
| 2   | Literacy Corner/Reading Gardens in the Citarum Watershed | 1. Identify the location of the literacy / reading corner in the Citarum watershed  
2. To socialize to the public about the Literacy Corner / Reading Garden program in the Citarum River Basin  
3. Make a prototype landscape Literacy Corner / Taman Bacaan in the Citarum River Basin  
4. Facilitating material for the creation of a Literacy Corner / Reading Garden in the Citarum River Basin  
5. Launching and handing over Literacy Corner / Reading Gardens to the local community in the Citarum River Basin | • Neatness  
• Beauty  
• Social care  
• Responsible  
• Love peace  
• Friendly / communicative  
• Tolerance  
• Discipline  
• Hard work  
• Creative  
• Honest |
| 3   | Character Education for children in the Citarum watershed | 1. Identifying character values for children in the Citarum watershed;  
2. Conduct socialization of Character Education for children in the Citarum River Basin with interested parties;  
3. Identify locations and students who will be given character education; | • Religious  
• Politeness  
• Assertive  
• Patient  
• Forgiving  
• Responsible  
• Friendly / communicative  
• Tolerance  
• Discipline |
| Chapter | Activity | Description |
|---------|----------|-------------|
| 4 | Washing Machines and Plastic Waste Counters | 1. Dissemination of Plastic Waste Counting and Washing program; 2. Facilitating the design of Washers and Plastic Waste Counters; 3. Making Plastic Washing Machines and Counters; 4. Limited testing of Washers and Plastic Waste Counters. |
| | | • Hard work • Creative • Honest • Intelligent |
| 5 | Processing Waste into Fertilizer Using Bisman Machine | 1. To socialize the program for processing waste into fertilizer using bisman machines; 2. Identifying waste as fertilizer material; 3. Introducing bisman machines as processing waste into fertilizer; 4. Processing waste into fertilizer using bisman machines. |
| | | • Professional • Responsible • Friendly / communicative • Tolerance • Discipline • Hard work • Creative • Honest • Intelligent |
| 6 | Advanced family assistance in the Citarum watershed is environmentally and economically based | 1. Dissemination of advanced family assistance programs in the Citarum watershed based on the environment and economy; 2. Identify families who have not received an assistance program in the Citarum watershed based on the environment and economy; 3. Identifying the needs of the community through mentoring advanced families in the Citarum watershed based on the environment and economy. |
| | | • Religious • Responsible • Honest • Sincerely • Polite • Affection • Care • Cooperation • Confidence • Creative • Hard work • Never give up • Fair • Leadership • Humble • Tolerance |
| 7 | Incinerator Care Assistance | 1. Dissemination of incinerator care assistance programs; 2. Identify the need for an incinerator care assistance program; 3. Incinerator care assistance program. |
| | | • Responsible • Friendly / communicative • Tolerance • Discipline • Hard work • Cooperation • Creative • Honest • Intelligent |
Pilot community empowerment through bamboo arboretum

1. To socialize the Community Empowerment Pilot Program through bamboo arboretum;
2. Identifying the need for a community empowerment pilot program through bamboo arboretum;
3. Providing seeds for making bamboo arboretums;
4. Distribution, planting, bamboo seedlings;
5. Making a prototype of a bamboo arboretum landscape.

- Love the environment
- Responsible
- Friendly / communicative
- Tolerance
- Discipline
- Hard work
- Cooperation
- Creative
- Honest
- Intelligent

Based on the activities of students in the fragrant Citarum thematic lecture work program, it can be denied that this activity will require the character that exists in students who need the character of Religious, Responsibility, Honest, Respectful, Polite, Affection, Care, Cooperation, Self-Confidence, Creative, Hard Work, Unyielding, Fair, Leadership, Humility, Tolerance, Love the Environment, and Professional. This is consistent with the opinion [6] Responsibility, discipline and independence; Honest; Respect and courtesy; Affection, Care, and Cooperation; Confident, Creative, Hard Work, and Never Give Up; Justice and Leadership; Good and humble; Tolerance, Peace of Love, and Love of Unity. People who have strong character and individuals who have social who have good character, morals and character. According to Coon, [7] The role of character as a subjective assessment of a person's personality is related to personality attributes that can be accepted by society. Character is the overall natural disposition and disposition that has been fully controlled which regulates the individual in the whole psychological work system which makes it typical in the way of thinking and acting. According to Ekowarni, [7] in the micro order of character is defined as (a) the quality and reaction to oneself, others, and certain results; and (b) psychological character, character and character.

In reality, the character that should be possessed by students when carrying out a fragrant thematic real work program is not all can be implemented. Based on the results of interviews with 27 real work participants there were 9 characters that could not be implemented. Among these characters are Responsibility, Cooperation, Professional, Creative, Hard Work, Caring, Confident, Religion, and Love for the Environment. The character that cannot be implemented by students in the thematic and fragrant real thematic work programs is more because they are ignorant of moral values. The ignorant attitude that makes students motivate to do good is low. This is in line with the opinion [1] that the social environment often does not support humans for character so that people are ignorant of morals. Whereas local wisdom in various regions teach about goodness [8].

Character building is recognized to be far more difficult and requires more time. The situation and conditions of the nation's character which are in concern have prompted the government to take the initiative to prioritize the development of national character. The development of national character was made into the mainstream of national development. This means that every development effort must always be directed to give a positive impact on character development. In the opinion [9] that from the point of view of national development the factors that can be used as a basis for consideration in determining the priority of character development are (1) the need to maintain the integrity of the nation; (2) the need to build a noble society; (3) the need to become a developed nation; (4) The need to improve the nation's prosperity on an ongoing basis; and (5) the need to uphold justice. The process of character formation in a person is influenced by the typical factors that exist in the person concerned which are often called endogenous factors and by environmental factors or often called exogenous factors. It is important to remember that endogenous factors can be said to be factors that are beyond the reach of the community. Everything that is in our influence, both as individuals and as part of society is an environmental factor (exogenous). Normatively, the formation or development of good character
requires good environmental quality. So many environmental factors play a role in the formation of character, namely family, mass media, social environment and school [9].

4. Conclusion
The characters that must be strengthened to students as participants of the real thematic Citarum fragrant work lectures are Responsibility, Cooperation, Professional, Creative, Hard Work, Caring, Self-Confidence, Religious, and Love the Environment. Strengthening character to students can be done through student training activities before they enter the community. The success of the Citarum Thematic Fragrant Work Lecture activities is very much determined by the program planning and personal readiness of the students.

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