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Implementing Character Education in Higher Education Institutions Through Science Learning

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Penerapan Pendidikan Karakter Perguruan Tinggi Melalui Pembelajaran Sains

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ABSTRACT

One issue identified in this study pertains to the limited scope of character education, which tends to be predominantly focused on Islamic Religion and Pancasila Education Courses. Meanwhile, the Merdeka Belajar-Kampus Merdeka (MBKM) program has emerged as a significant force in promoting character education throughout the educational continuum from elementary to higher education levels. Hence, applying education and character values is imperative in science education within the Elementary School Teacher Education Study Program (PGSD) at the Faculty of Teacher Training and Education (FKIP) in Universitas Lampung. This research aims to describe what characteristics are implemented in the Lesson Plan (RPS) in science courses. The present study uses a descriptive qualitative approach to analyze the learning outcomes subs and learning indicators, afterward aligning them with 18-character values. The values encompassed are religiousness, honesty, tolerance, discipline, hard work, creativity, independence, democracy, curiosity, national spirit, love of the country, respect for achievements, friendliness, love of peace, love of reading, care for the environment, social care, and responsibility. Based on the research results, the 18-character values are spread across learning outcomes subs and students' learning experience activities while attending science lectures at the PGSD Study Program FKIP UNILA. The implementation of character education has the potential to instill students who possess not only academic proficiency but also exhibit humanitarian attitudes towards their peers, as well as foster a sense of mutual respect and cooperation among themselves. Based on the RPS, the science courses used at the UNILA PGSD study program are very suitable for forming students' personality traits. As suggested by the researchers based on the findings they found, religious aspects should be added to RPS because this can be internalized in students and implemented in life.

Keywords: character education, elementary school teacher education, science learning

Permasalahan dalam penelitian ini ialah pendidikan karakter acapkali hanya dibebankan pada mata kuliah Agama Islam dan Pendidikan Pancasila. Sementara itu, Program Merdeka Belajar Kampus Merdeka (MBKM) menjadikan pendidikan karakter sebagai gerakan nasional dari pendidikan di tingkat rendah hingga perguruan tinggi. Oleh sebab itu, perlu adanya penerapan pendidikan atau nilai karakter dalam pembelajaran sains di Program Studi Pendidikan Guru Sekolah Dasar (PGSD) Fakultas Keguruan dan Ilmu Pendidikan Universitas Lampung. Penelitian ini bertujuan untuk mendeskripsikan karakter apa saja yang terimplementasikan dalam Rencana Pembelajaran Semester (RPS) pada mata kuliah sains. Penelitian menggunakan metode deskriptif kualitatif dengan menganalisis setiap sub-sub capaian pembelajaran dan indikator pembelajaran. Lalu disesuaikan dengan delapan belas nilai karakter yang meliputi religious, jujur, toleransi, disiplin, kerja keras, kreatif, mandiri, demokratis, rasa ingin tahu, semangat kebangsaan, cinta tanah air, menghargai prestasi, bersahabat, cinta damai, gemar membaca, peduli lingkungan, peduli sosial, dan tanggung jawab. Berdasarkan hasil penelitian, delapan belas nilai karakter tersebut tersebar dalam sub-sub capaian pembelajaran serta aktivitas pengalaman pembelajaran mahasiswa selama mengikuti perkuliahan sains di Prodi PGSD FKIP Unila. Dengan penerapan atau implementasi pendidikan karakter dapat menjadikan mahasiswa yang tidak hanya mumpuni dari bidang akademisnya saja, tetapi juga sikap-siap kemanusiaan terhadap sesama serta sikap-sikap mutual dalam diri pribadi mahasiswa. Berdasarkan RPS Mata Kuliah Sains yang digunakan di Prodi PGSD UNILA sangat sesuai dalam pembentukan karakter kepribadian mahasiswa. Saran dari temuan-temuan yang didapatkan peneliti kiranya aspek religius ditambahkan dalam RPS sebab ini dapat menginternalisasi dalam diri mahasiswa dan terimplementasi dalam kehidupan.

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INTRODUCTION

Education is a systematic undertaking characterized by distinct methodologies that facilitate the acquisition of knowledge, comprehension, and behavioral patterns that align with individual needs. National education based on Pancasila and the 1945 Constitution of the Republic of Indonesia functions to develop abilities and shape the character and civilization of a dignified nation to educate the nation's life, aiming to develop the potential of students to become human beings who have faith, character and are devoted to God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens.

The ultimate determinant of superiority in local, national, regional, and global society lies in the competitiveness and productivity of human resources. To attain optimal production, it is imperative for human resources to possess a high level of competence, discipline, and intelligence in effectively employing suitable technological infrastructure and facilities. The contemporary cohort of individuals residing in the 21st century is characterized by their status as a knowledge-driven civilization. Therefore, individuals should possess pertinent knowledge that aligns with societal advancements, adeptly navigate communication technology, a prominent feature of contemporary life in the 21st century, acquire competencies suitable for the labor market, and ultimately, embody ethical citizenship that upholds and embody the Indonesian identity or character.

Nonetheless, character education continues to be a matter of national concern, mainly due to the extensive implementation of the Freedom of Learning-Independent Campus (FLIC) Program. Character-based education has emerged as a widespread phenomenon across several levels of education, ranging from Early Childhood Education (ECE) to Higher Education, encompassing both non-formal and informal educational settings. Character construction is not solely predicated upon individual achievements but also entails cultivating a character that reflects national greatness.

Character education itself is also only imposed on a few subjects, namely Religion and Pancasila Education, especially regarding students' morals and character. However, it is essential to acknowledge that solely relying on courses to inculcate and develop character is insufficient in practice. The less-than-optimal results from character education through Religion and Pancasila Education Courses are caused by several things. First, these courses provide knowledge about values through course material/substance. Second, learning activities in these courses generally do not adequately encourage the internalization of values by each student to behave with a strong character. Third, relying on forming student character through several courses is not enough. Student character development needs to involve more courses and even cover all courses in higher education.

Specifically, science education (natural science education) is considered difficult, in line with findings that state that students experience difficulties when learning science (Dinatha, 2017). Apart from that, many misconceptions about scientific concepts (Laksana et al., 2017) make science always a topic that must be studied. Science can actually be used to develop students' cognitive, psychomotor, and affective abilities. Thus, science should be studied so that students can apply their abilities with

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character in solving real problems encountered in their daily lives. Nevertheless, in reality, many cases still indicate the low character of Indonesian people. There are also many differences of opinion or problems resolved by students and the community in a characterless way.

Regarding the weaknesses above, character education is required through all subjects, including science learning. It denotes the inclusion of character education values in classroom learning, both the material and the learning process that occurs so that it is hoped that these values will be well embedded in students, who will ultimately be formed into good characters.

THEORETICAL REVIEW

Education, according to Law No. 20 of 2003, is a conscious and planned effort to create a learning atmosphere and process so that students actively develop their potential to have religious and spiritual strength, self-control, personality, intelligence, noble morals, and skills needed by themselves, society, nation, and state. Koesoema (2007: 80) defines education as internalizing culture into individuals and society becoming civilized.

The other defines education as a process of changing the attitudes and behavior of a person or group of people in maturing humans through teaching and training efforts (Muhibbin Syah, 2008: 28). It is an effort carried out by someone to achieve a higher level of life and livelihood. Based on the definitions above, it can be interpreted that education is all planned efforts to develop an individual's existing potential through an internalization process to prepare the younger generation who can fulfill their life goals.

According to the Ministry of National Education, character (2010: 3) is a person's character, morals, nature, or personality, formed from internalizing various virtues believed and used as a basis for seeing, thinking, behaving, and acting. Koesoema (2007: 80) explains that character is the same as personality. Personality is deemed as a characteristic, trait, style, or attribute of a person that originates from formations received from the environment, such as the family environment during childhood and the person's innate traits from birth. Fundamentally, Thomas Lickona (1991: 51) stated that character is "A reliable inner disposition to respond to situations in a morally good way." Furthermore, Lukona asserted, "Character not conceived has three interrelated parts: moral knowing, feeling, and behavior."

Character education, as Lickona mentioned, contains three main elements: knowing the good, desiring the good, and doing the good (Lickona, 1991: 51). In addition, Frye (2002: 2) defines character education as "A national movement creating schools that foster ethical, responsible, and caring young people by modeling and teaching good character through an emphasis on universal shared values." Therefore, character education must become a national movement of educational institutions as agents for building individual character through learning. Through character education, schools must have the potential to bring students noble character values, such as respect and care for others, responsibility, integrity, and discipline. On the other hand, character education must also be able to distance individuals from despicable attitudes and behavior.

Independent Campus Character Education

MBKM is one of the innovations the Minister of Education initiated to answer educational challenges. Within it, there are two main concepts. First, the concept of Freedom of Learning implies freedom of thought. According to Nadiem Makarim, the essence of freedom of thought must start first with educators. This view must be seen as an effort to respect changes in learning in educational institutions, in elementary, secondary, and higher education institutions. Second, Independent Campus continues the concept of Freedom of Learning. An Independent Campus is an effort to throw off the

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shackles to move more quickly. Independent Campus also provides autonomy to universities to exercise their autonomous rights.

MBKM has several advantages, including, first, making the world of lectures more flexible. To create a more flexible and better education, the primary goal of the Freedom of Learning Program is to remove the shackles of campus so that it is easier to move around. The second is to allow students to deepen their courses. The third is to provide a platform for students to enter society. This opportunity is considered capable of facilitating students to be more competent and enter directly into the community. Fourth, students can prepare themselves to enter the world of work.

MBKM aims to improve the competency of graduates, both soft and hard skills, so that they are better prepared and relevant to the needs of the times, preparing graduates as future leaders of the nation who are superior and have personalities. Thus, the MBKM innovation is pertinent to the development of character education and is based on 18-character values. Students' freedom, critical thinking, cooperation, and communication are competitive and superior characters as the nation's next generation.

To develop character education, a strategy is needed, according to Ki Hadjar Dewantara. Among them, first, education is a culture that encourages students to have an independent spirit. The second is to shape students' character to have a national spirit and open themselves to international development. While the third is to develop students' personalities to become pioneers, the fourth is to educate or develop the potential or talents that are the nature of each student (Widodo, 2017). This attitude is necessary and must be developed in education to form a generation that is independent, intelligent, collaborative, communicative, creative, and has character. This is because the character does not appear by itself but is taught, formed, and built consciously and deliberately based on each individual's identity (Soedarsono, 2008).

Science Learning (Natural Science Education)

Natural science is often abbreviated to science, which was later absorbed into the Indonesian language to become *sains*. According to Abdulah (1998), science can be defined as knowledge that is systematically arranged in the form of the results of observations and experiments to produce an explanation of a phenomenon that can be proven and is active and dynamic.

Science learning is closely related to nature systematically so that it is not only knowledge in the form of concepts, principles, and facts but also knowledge in the discovery process. There are four elements in the essence of science: (1) Attitude, namely curiosity about living things, objects, natural phenomena, and cause and effect relationships that give rise to new problems that can be solved through correct procedures (science is open-ended). (2) Process is a problem-solving procedure through scientific methods, including formulating hypotheses, designing experiments or trials, evaluating, measuring, and drawing conclusions. (3) Products are in the form of facts, principles, theories, and laws. (4) Application is the implementation of scientific methods and scientific concepts in everyday life.

These four elements are characteristics of a complete science that cannot be separated from each other. It is hoped that with these four elements, students will experience the learning process comprehensively and understand natural phenomena that occur through scientific method activities and problem-solving to discover new facts that can be proven.

Thus, science learning is a conscious effort to explore and reveal natural symptoms or phenomena by applying scientific steps and shaping the personality or behavior of students so that they can understand the process of science learning and can develop in society.

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Implementation of Character Education in Higher Education Institutions Through Science Learning

Character formation can be internalized in various ways and very diverse forms. Two characters can be developed: a) social character, i.e., a character that is more emphasized through social education, and b) scientific character, namely a character that is more developed through science education. Still, it does not rule out the possibility that science education can touch and develop social character and vice versa. This is possible because science learning with its characteristics, if applied correctly, can touch various "values" needed in forming students' character, including those of students in higher education.

In this case, science learning is one of the fields of science that has the aim that every student, whether in school or higher education, has a good personality, applies a scientific attitude, and can develop the potential that exists in nature to be used as a source of knowledge and can be applied in everyday life.

Hence, science learning is not just a collection of theories. However, in every form of teaching, more emphasis is placed on the evidence and usefulness of that science and concerns students' scientific character and attitudes. For this reason, scientific character and attitudes must be developed to become individuals who meet educational goals. To achieve educational goals through character education, the Ministry of National Education identifies the values of character education as follows:

1. Religiousness is attitudes and behavior that are obedient in carrying out the teachings of the religion they adhere to, tolerant towards the practice of worship of other religions, and living in harmony with followers of other religions.
2. Honesty is behavior based on efforts to make oneself a person who can always be trusted in one's words, actions, and work.
3. Tolerance is attitudes and actions that respect differences in religion, race, ethnicity, opinions, attitudes, and actions of others different from themselves.
4. Discipline is actions demonstrating orderly behavior and compliance with various rules and regulations.
5. Hard work is behavior that shows genuine effort in overcoming various obstacles to learning and completing assignments as well as possible.
6. Creativity is thinking and doing something to produce new ways or results from something one already has.
7. Independence is attitudes and behaviors that do not easily depend on others to complete tasks.
8. Democracy is a way of thinking, behaving, and acting that equally values the rights and obligations of oneself and others.
9. Curiosity is attitudes and actions that seek to know more deeply and broadly about what one learns, sees, and hears.
10. National spirit is a way of thinking, acting, and insight that places the interests of the nation and state above the interests of oneself and one's group.
11. Love of the country is a way of thinking, behaving, and acting that shows loyalty, concern, and high appreciation for the nation's language and physical, social, cultural, economic, and political environment.
12. Respect for achievement is attitudes and actions that encourage oneself to produce something useful for society, recognizing and respecting the success of others.
13. Friendliness/communication is actions that show a sense of enjoyment in talking, socializing, and working with other people.

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14. Love of peace is attitudes in words and actions that cause other people to feel happy and safe in their presence.
15. Love of reading is the habit of making time to read various beneficial literature to him.
16. Care for the environment is attitudes and actions that always strive to prevent damage to the surrounding natural environment and develop efforts to repair natural damage that has occurred.
17. Social care is attitudes and actions that always want to assist other people and communities in need.
18. Responsibility is a person's attitude and behavior to carry out his duties and obligations, which he should do towards himself, society, the environment (natural, social, and cultural), the country, and God Almighty.

These character values can be applied through learning, namely science learning. Science learning can be used to form good morals and character. The results of research conducted by Zuchdi et al. (2010) indicated that a character education model with a comprehensive approach integrated with learning in the field of study, for example, science learning based on the development of school culture, can improve study results and the quality of student's character.

Process skills in science learning are directed at discovering a scientific product through facts, concepts, principles, and laws. Characters strengthened through science learning include curiosity, honesty, tolerance, discipline, hard work, creativity, independence, communication, and responsibility.

RESEARCH METHOD

The method used in this research was descriptive qualitative. Descriptive qualitative research uses procedures that produce descriptive data in the form of written or spoken words from the observed behavioral conditions. The data obtained in this qualitative research is in the form of words or sentences and images (Trisliatanto, 2020). Data collection techniques use documentation. The documentation used is 18 characters for each science learning RPS indicator. Data analysis includes the stages of data collection, raw data presentation, data reduction, data presentation, and drawing conclusions. In this research, the authors analyzed sub-subject learning outcomes (hereinafter abbreviated as CPMK) contained in the Semester Lesson Plan (hereinafter abbreviated as RPS) in natural science education learning, which included RPS for developing natural education science learning in elementary schools, basic biology concepts, and learning natural sciences in elementary schools based on project-based learning. Each sub-CPMK in the three RPS was analyzed concerning 18-character values, encompassing religious, honest, tolerant, disciplined, hardworking, creative, independent, democratic, curiosity, national spirit, love of the country, respect for achievements, friendliness, love of peace, love of reading, care for the environment, social care, and responsibility. The author uses source triangulation. The source used is 18 characters based on the Ministry of National Education identifying the values of character education.

RESULTS AND DISCUSSION

Based on the research results conducted by the authors, 18 characters were found that were spread across the RPS for developing natural education science learning in elementary schools, basic biology concepts, and learning natural sciences in elementary schools based on project-based learning. The 18-character values are spread across the indicators of the sub-CPMK.

The value of the character of hard work is strongly reflected in sub-CPMK 1 regarding students who can study learning principles that are adaptive to current developments (RI 4.0 towards Society 5.0). In this sub-CPMK, there are active student activities, namely studying. Study activities are an effort to examine the principles of learning, which means students must be able to adapt to their

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conditions, needs, and environment to master knowledge, attitudes, and skills. This activity reflects the hard work that students will do. The character values in the sub-CPMK were found in the RPS for project-based methods.

The value of the character of hard work is also reflected in the RPS for the development of elementary school natural science education learning in the sub-CPMK of students who can develop natural science education learning media in elementary schools using scientific multiliteracy learning. Developing learning media for natural science education in elementary schools is not only about understanding the theory related to media creation and its teaching sources but also requires understanding the methods, capitals, and techniques for learning natural science education in elementary schools. That way, students can produce interesting and interactive learning media according to elementary school students' needs. The following is a table on the application of character values in natural science education learning.

Table 1. Application of Character Values in RPS for Science Learning

No.	Character values	Sub-CPMK
1	Religiousness	**RPS FOR PROJECT-BASED METHODS** Sub-CPMK 6: Students can develop HOTS-oriented interdisciplinary learning scenarios with a STEM 4.0 approach in natural science education material in elementary schools.
2	Honesty	**RPS FOR PROJECT-BASED METHODS** Sub-CPMK 5: Students analyze HOTS-oriented learning models and designs in natural science education material in elementary schools.
3	Tolerance	**RPS FOR BIOLOGY** Sub-CPMK 10: Students can explain about living things and their environment, including ecology and the interdependence between living things.
4	Discipline	**RPS FOR PROJECT-BASED METHODS** Sub-CPMK 8: Students are skilled in applying HOTS-oriented interdisciplinary learning with a STEM 4.0 approach to natural science education material in elementary schools.
5	Hard work	**RPS FOR PROJECT-BASED METHODS** Sub-CPMK 6: Students can develop HOTS-oriented interdisciplinary learning scenarios with a STEM 4.0 approach in natural science education material in elementary schools.
6	Creativity	**RPS FOR PROJECT-BASED METHODS** Sub-CPMK 6: Students can develop HOTS-oriented interactive teaching aids/multimedia.
7	Independence	**RPS FOR DEVELOPING LEARNING IN NATURAL SCIENCE EDUCATION IN ELEMENTARY SCHOOLS** Sub-CPMK 3: Students can apply innovative natural science education approaches, models, and learning strategies.
8	Democracy	**RPS FOR PROJECT-BASED METHODS** Sub-CPMK 6: Students can develop HOTS-oriented interactive teaching aids/multimedia.
9	Curiosity	**RPS FOR BIOLOGY** Sub-CPMK 4: Students can explain about invertebrates and vertebrates.
10	National spirit	**RPS FOR THE DEVELOPMENT OF ELEMENTARY SCHOOL NATURAL SCIENCE LEARNING SCIENCES**

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		Sub-CPMK 1: Students can explain the nature of natural science education and learning theories of natural education science.
11	Love of the country	**RPS FOR PROJECT-BASED METHODS** Sub-CPMK-6: Students can develop HOTS-oriented interdisciplinary learning scenarios with a STEM 4.0 approach in natural science education material in elementary schools.
12	Respect for achievements	**RPS FOR PROJECT-BASED METHODS** Sub-CPMK 6: Students can develop HOTS-oriented interactive teaching aids/multimedia.
13	Friendliness	**RPS FOR BIOLOGY** Sub-CPMK 12: Students can explain and apply food and nutrition and maintain personal and environmental health.
14.	Love of peace	**RPS FOR BIOLOGY** Sub-CPMK 12: Students can explain and apply food and nutrition and maintain personal and environmental health.
15.	Love of reading	**RPS FOR DEVELOPING LEARNING IN NATURAL SCIENCE EDUCATION IN ELEMENTARY SCHOOLS** Sub-CPMK-3: Students can apply innovative natural science education approaches, models, and learning strategies.
16.	Care for the environment	**RPS FOR BIOLOGY** Sub-CPMK-10: Students can explain about living things and their environment, including ecology and the interdependence between living things.
17.	Social care	**RPS FOR BIOLOGY** Sub-CPMK 12: Students can explain and apply food and nutrition and maintain personal and environmental health.
18.	Responsibility	**RPS FOR DEVELOPMENT OF NATURAL SCIENCE LEARNING IN ELEMENTARY SCHOOLS** Sub-CPMK 9: Students can develop HOTS-based educational science assessment instruments for scientific multiliteracy learning.

The table above presents columns containing character values and sub-subject learning outcomes. There are 18 characters implemented in science learning in higher education at the Elementary School Teacher Education Study Program. The sub-sub-CPMKs above are only part of the application of character values in learning. As in the RPS for project-based methods, the sub-subject learning outcome is that students can develop HOTS-oriented interdisciplinary learning scenarios with a STEM 4.0 approach in natural science education material in elementary schools. Students are expected to develop learning scenarios. Students prepare learning scenarios step by step to realize learning in class with students. Students do not let go of spiritual or religious elements, such as greeting and praying before starting lessons.

Then, in the RPS for developing natural science education learning in elementary schools, students are expected to apply innovative approaches to learning models and strategies. The character value that can be implemented is independence. Students can first independently understand elementary schools' approaches, models, and strategies for learning natural sciences. After that, students can apply their understanding in the learning process. It can foster self-confidence, independence, and courage.

Another character value is respecting the achievements implemented in the RPS for project-based methods. Students are expected to develop interactive teaching aids or multimedia oriented toward higher-order thinking skills (HOTS). In HOTS-oriented multimedia development activities,

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students can use specific applications that support the creation of learning media that is not only interactive but also achieves a HOTS orientation. Each student is given freedom in developing multimedia to appreciate the work of other colleagues. Besides that, multimedia development taught to students can create creativity, which will later help them learn natural sciences in elementary schools.

The character value of caring for the environment is very well represented in the RPS for biology, with the sub-subject outcome of students being able to explain living things and their environment, which consists of ecology and the interdependence of living things. Learning about living creatures in a particular ecosystem and their lives depending on each other teaches the need to care for each other. Thus, the character value reflected in this learning outcome is caring for the environment.

Another learning outcome that reflects character values is that students can explain invertebrates and vertebrates in biology learning courses in elementary school. The character value of curiosity is highly implemented in this sub-outcome because students are required to understand the vertebrate animal group (animals with backbones) and the invertebrate animal group (animals without backbones). With these learning sub-outcomes, students should have high curiosity, so they try to discover the characteristics of vertebrate and invertebrate animals and their animal groups.

Character values education instilled through sub-learning outcomes is crucial as a preparation for students to become educators in the future. A student's character is also significantly influenced by the soul, which is related to external factors (Laksana, 2021). If a student's soul faces positive external factors, it will develop positively. In contrast, if faced with negative external factors, the development of character values will not be optimal. Thus, there needs to be learning outcomes that reflect character values as builders of students' souls (Baharuddin, 2014: 34).

Moreover, education is often known as an institution that is a benchmark for determining the performance of educators in the learning process, so there is a need to empower educators because it is considered a milestone for student success. Education is also a tool or instrument to increase competitiveness in the conditions of social life in the era of globalization. With this meaning, institutions compete to increase the capacity of educational dynamics to produce capable student outcomes (Alimudin, 2017). Therefore, through the learning process of natural science education, the Elementary School Teacher Education Study Program is an effort to uphold and internalize character values in students' souls.

Higher education institutions, therefore, are one of the means and media that can be used as a strategy for building and developing character education for students so that they become students with academic ethics and morals and uphold the noble values of Pancasila. The integration of intended character education starts from preparing learning profiles and outcomes, implementing learning, and evaluating learning outcomes, providing balance in three educational domains, i.e., cognitive, affective, and psychomotor. Besides integrating character education in courses, lecturers as learning controllers can provide exemplary academic character values through disciplined attitudes and behavior in upholding norms, critical and creative actions, rationality in thinking, honesty in speech, and responsibility (Ito, 2017). Therefore, character education must be built and planned systematically and sustainably through various strategies to prepare this nation to face a future full of challenges from globalization. One strategy for building national character is through education and higher education institutions.

Further, preparing the RPS for each course is the obligation of the lecturer in charge of the course. To prepare an ethical and moral learning process, the lecturer must design systemically to prepare and formulate RPS that integrates character education. A lecturer who describes plans for building and developing character education for students in an RPS is a concrete step that needs to be

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cultivated and accustomed to. The integration of character education planning through the preparation of RPS is also a form of lecturer commitment to building and developing student personalities with morals and academic ethics per the norms of life in the scientific community. Hence, the integration of character education for students into courses can be carried out in a planned and measurable manner following the objectives or learning outcomes of the course.

The learning process is fundamentally the implementation and/or application of learning plans to meet learning outcomes, and the learning process is also a form of interaction and internalization of students' cognitive, affective, and psychomotor skills with educators, the learning environment, and resources in specific fields of science. Thus, the learning process under the control of lecturers must also be able to develop ethical and moral student character education under academic values with an identity as prospective graduates (Ito, 2017).

CONCLUSION AND RECOMMENDATIONS

The importance of character values in learning cannot be ignored because these values form the moral and ethical foundation essential for the development of individuals and society. Learning character values teaches students to be honest, responsible, disciplined, caring, and respectful of diversity. By developing these values, students not only become smart academically but can also contribute more broadly to everyday life and society. The 18-character values are strongly reflected in science learning activities in the Elementary School Teacher Education Study Program (PGSD), FKIP, Universitas Lampung, through the courses of natural science learning in elementary schools, development of natural science learning in elementary schools, and biology learning. These eighteen values of character education are distributed in learning outcomes in lectures. They include religiousness, honesty, tolerance, discipline, hard work, creativity, independence, democracy, curiosity, national spirit, love of the country, respect for achievements, friendliness, love of peace, love of reading, care for the environment, social care, and responsibility.

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