Strengthening Character Education Based on Ethnic Advantage through Higher Education Curriculum Integration in the Industrial Revolution Era 4.0

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ARTICLE INFORMATION	ABSTRACT
Article History: Accepted: 10-01-2023 Approved: 14-03-2023 **Keywords:** *character education;* *ethnic;* *curriculum;* *integrated* **Author Correspondence:** Carolina M. Lasambouw Accountancy Politeknik Negeri Bandung Gegerkalong Hilir St, West Java, 40559, Indonesia E-mail: carolina.magdalena@polban.ac.id	Strengthening character education in the era of the industrial revolution 4.0 is urgent to anticipate the dehumanization of students. This research using exploratory qualitative methods has found seven superior ethnic characteristics in Indonesia as the most dominant: independent, consistent, hardworking, honest, challenging, assertive, and happy to work together. This paper describes the framework for strengthening character education by integrating prominent ethnic characters in Indonesia with the characters that become learning outcomes in national compulsory courses and skills courses in the higher education curriculum. As a result, student achievement in character aspects asses in an integrated manner at the end of the semester.

In the era of the industrial revolution 4.0, the development of technology and information was swift. Media hegemony and the development of science are like a double-edged sword, providing several conveniences and comforts of life for modern humans. However, on the other hand, it raises problems, including negative character issues. Kurniawan (2017) argues that the development of science and technology has the most significant impact, such as dehumanization, on humans nullifying human values and ethical values in life. This opinion reinforces the statement of the Center of Curriculum Redesign (2015, p. 4) "*technology's exponential growth is rapidly compounding the problems via automation and offshoring, which are producing social disruptions. Educational progress is falling behind the curve of technological progress, as it did during the Industrial Revolution, resulting in social pain*". The Ministry of Research has realized this problem, Technology and Higher Education (2016, p. 215), which states that the development of science and technology is currently still dominated by western countries, so "westernized" values are also internalized as science and technology enter. This condition threatens the Indonesian people's unique values, namely spirituality, solidarity, mutual cooperation, deliberation, and a sense of justice. The description shows that developments in the era of the industrial revolution 4.0 have an impact on the morality of the character of young citizens who tend to have an instant, pragmatic, and individualist lifestyle. This character education needs support as a substantive effort to achieve characters that follow Pancasila values.

Strengthening character education must be implemented with a tri-center education scheme involving academic units, families, and the community. As the leading sector, the education unit seeks to strengthen and perfect the education process, especially in the character development sector (Budimansyah, 2010). Educating the nation's life as one of the objectives of implementing statehood in the fourth paragraph of the 1945 Constitution is the primary basis for implementing education. With a good education, a nation can achieve an advanced civilization and compete globally internationally. Education must be able to apply the knowledge and values needed.

In fact, in the era of the industrial revolution, knowledge was needed, and competence was in the form of unique skills and strong character. Martin Luther King (1992) "*we must remember that intelligence is not enough. Intelligence plus character - that is the goal of true education*". As conveyed by Soekarno-the first president of the Republic of Indonesia, "*character is more important than knowledge. Permanent knowledge is an absolute requirement. Without a brilliant character, people cannot contribute to national development*". Referring to the first Indonesian president's mandate that the national education's goal was to provide knowledge, skills, and the character of the Five Fundamental Values (Pancasila). As stated in the Republic of Indonesia *Law number 20 the year 2003* concerning the National Education System article 3, which reads:

"National education functions is to develop capabilities and shape dignified national character and civilization. Hence, the context of educating the nation's life, aiming at developing the potential of students to become human beings who believe and fear God Almighty, have a noble character, are healthy, knowledgeable, capable, creative, independent, and become a democratic and responsible citizen".

Strengthening Character Education (SCE) proclaimed by Indonesia Presidential Decree number 87 in the Year 2017 is the government's effort to implement President Joko Widodo's Nawacita (Nine Change Target) - Jusuf Kalla in the national education system. This SCE policy integrates into the National Mental Revolution Movement. The goal is to encourage all stakeholders to make a paradigm shift, namely, a change in the way of thinking, behaving and acting for the better. SCE places character values as the central dimension in education. The character values that SCE prioritizes are religious, nationalist, independent, gotong-royong, and integrity.

Referring to Regulation of the Minister of Research, Technology and Higher Education Number 44 the Year 2015, strengthening character education in tertiary institutions is provided through groups of general compulsory subjects consisting of Religious Education, Pancasila Education, and Citizenship Education. However, according to (Asyanti, 2012), "*the success of character education in Indonesia has not been measured objectively* ."This argument acknowledges by the statement of the Minister of Education and Culture at a national symposium regarding the cultivation of Pancasila values in Malang, East Java, Saturday (14/9/2019) that Pancasila and Citizenship Subjects had not had a significant impact on the formation of students' character. They allegedly still focused on knowledge, so there has yet to be a concrete implementation of planting Pancasila values in educational institutions. In practice, character education implements separately, mainly charged to three compulsory subjects (Religious Education, Pancasila Education, and Citizenship Education). It does not involve other expertise courses. Even though, in general, the three national general courses are only carried out in one semester. Therefore, there needs to be a follow-up to character education after implementing the three national compulsory courses.

Based on the description, this study aims to form a framework for strengthening character education based on ethnic excellence by integrating general compulsory and expertise courses into a higher education curriculum. The results of this research can contribute to developing a character education program that will encourage the formation of Pancasila's characters in students also, having characters that are in line with industrial needs and able to be globally competitive in the era of the industrial revolution 4.0.

METHOD

The research design uses a qualitative-explorative approach. Researchers are trying to analyze the phenomenon of character education of students in tertiary institutions by integrating target characters of the national compulsory courses and the skills courses. Syaodih, N (2012) stated that qualitative research tends to focus on analyzing a phenomenon, belief, social activity, and perceptions or thoughts of people individually and in groups. The method implements as an effort to apply excellent ethnic character in the integration of national compulsory subject curricula and expertise courses that priorly not implemented. Bungin (Bungin, 2013) further states that other researchers have not studied the explorative method carried out if the problem has never been explored, so the exploratory researcher must try to find a solution to the problem to be studied.

The activity begins with mapping the ethnic superiority of the 10 tribes in Indonesia, which have the largest population. The focus is on identifying the criteria, which are stated in the literature as well as the results of interviews with participants from the tribe concerned, as criteria that are very important and very strong as an identity for the superiority of that tribe. Furthermore, information on superior criteria from each ethnicity which is the object of research, will be used as the basis for compiling a list of superior characteristics based on ethnicity. At the same time, a literature review and regulatory study were carried out to collect data and information about the main characteristics that are the targets for achievement of national compulsory courses in the cycle of educational activities as determined by the Ministry of Education and Culture.

Based on the data and information that has been collected, a character list is then made as the target to be achieved by students in the learning process of national compulsory courses as well as in skills courses. In the next stage, all data and information results are processed, tabulated, and analyzed. The results of the character analysis are compared with the target characters in the national compulsory courses and skills courses and enriched with identifying forms of ethical and unethical behavior and various arise problems.

These results are then used to build an integrated character education framework regarding ethnicity, culture, and religion with national compulsory and expertise courses in vocational higher education. The last stage discusses the interrelationships between categories and their social implications. Finally, the character assessment rubric can be used as an assessment tool to measure character achievement as defined in the curriculum. The research design is as follows.
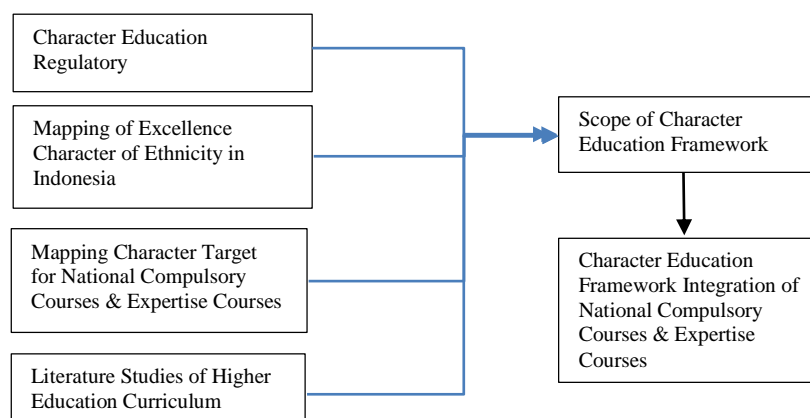
Figure 1. Research Design

RESULTS AND DISCUSSION
The implications of the industrial revolution era 4.0 for character development

The industrial revolution era 4.0 was marked by massive and comprehensive developments in technology and information. However, along with the convenience that is obtained, the pace of development also causes social turmoil due to the unpreparedness of society to accept significant changes, one of which is inconsistency with educational progress (CCR, 2015). Inequality in education appears is a matter of character, as found by research by Lasambouw & Mathilda (2020) (Lasambouw & Mathilda, 2020)*"changes in learning patterns from face-to-face to online learning changes many thought patterns and impact behavior changes* ."The transition of learning methods provides convenience in terms of distance and time efficiency. On the other hand, *online* learning has implications for changing students' mindsets and characters.

Character changes as an accompaniment to the development of the industrial revolution were also revealed by Kurniawan (2017), who stated that the development of science and technology had the most significant impact, namely dehumanization in the form of humans nullifying humans and ethical values in life. The dehumanization of these characters includes character changes of students who tend to have instant, pragmatic, and individualist lifestyles. One of the causes of dehumanization, as revealed by Kemenristekdikti (2016) namely the dominance of western countries in the development of science and technology. The implication, the values of "western culture," which tends to be less aligned with the values of Pancasila, are also internalized.

The role of superior ethnic characters in character education

Each ethnicity has a superior character that acts as a basis for developing character education. Based on the understanding that students in an educational institution in one region can come from various ethnic groups. As stated by Pitoyo & Wahyudi (2017, p. 80), ethnic development in Indonesia is heterogeneous, with a high level of diversity. Therefore, mutual respect needs to support this diversity. When this attitude forms in a heterogeneous society, national unity and a sense of nationalism can quickly realize. As the results of Lasambouw, Ediana & Neneng's research (2021) *through relationships between communities of different ethnicities, cooperation and mutual recognition can be built to find and agree on the existence of special generic characters. At this stage, personal development will occur, namely, Proud to be the Indonesian nation*. This statement reinforces the opinion of Pitoyo and Triwahyudi (2017) that a society with the same views, spirit, and goals will exist through a multiculturalist society that respects cultural differences. Likewise, the results of Lasambouw, Ediana & Neneng's analysis (2021, p. 641) show that " *the contribution of the excellent character of the ethnic groups in Indonesia is needed to strengthen and enrich the values of national identity. "*

Based on the 2010 population census data, Indonesia has 1340 ethnicities. This study identified superior ethnic characteristics focused on 13 ethnic groups that have the largest population in Indonesia. The superior characteristics of the 13 ethnic groups are assumed to represent the superior characteristics of other ethnic groups. This ethnicity includes ethnic Javanese, Bugis, Malay, Minang, Sundanese, Betawi, Minahasa, Banjar, Batak, Baduy, Madurese, Dayak, and Acehnese. The dominant superior characters in these ethnicities can be seen in figure 2 and 3.

Aceh	Dayak	Madurese	Javanese	Sundanese	Baduy	Batak
Militant	Patient	Religious	Hard worker	Cheerful	Abstain from harming others	Assertive
Consistent	Preserving culture	Independent	Openess	Embrace	Obey the law	Migrants
Loyal	Honest	Expressive	Expressive	Gentle	collaboration	Resilient
Assertive	Sincere	Upholding self-esteem	Simple Life	Respecti	preserving the natural heritage	The Golden voice
Willing to sacrifice	Toughness	Be brave	Get along well	Respect	Democratic	Honest
Obey	Consistent	Migrant	Politeness	Friendly	Independent	Consistent
Upholding self-esteem	Be persistent	Confidence	Customs	Humble	Honest	Never give up
	Resilient	Straightforward	Mutual Attitude	Easy to get along	Sincere	Strong
	Fair	Frankly			Assertive	Toughness
	Be brave				Loyal	Mutual cooperation
	Keeping promises				Upholding their customs	

Figure 2. Superior Ethnic Characteristics of 13 ethnic groups in Indonesia Aceh, Dayak, Madurese, Javanese, Sundanese, Baduy, and Batak (Source: Lasambouw, Ediana, & Neneng (2021)

Banjar	Minahasa	Betawi	Minangkabau	Malays	Bugis
Loyal friend	Religious	Socialist	Nomads	Hard worker	Be brave
Like to Trade	Discipline	Cultural practitioner	Simple	Polite	Never give up
Religious	Mutual cooperation	Sincerely	Hard worker	Mutual help	Togetherness
Empathy	Honest	Easy to get along	Straightforward		
Gentle	Fair	Polite	Egalitarian		
Loyal	Love to sing				
Forgiving	Strong brotherhood				
	To be responsible				

Figure 3. Excellent Ethnic Characters of Banjar, Minahasa, Betawi, Minang, Malay and Bugis (Source: Lasambouw, Ediana, & Neneng (2021)

Based on the table, ten dominant characteristics possessed by 13 ethnic groups in Indonesia have been identified: (1) honesty; (2) hard work; (3) likes to work together; (4) religious; (5) brave; (6) loyal; (7) nomads; (8) firm; (9) sincerely; and (10) friendly. The special ethnic character is in line with the target character of achievement for national compulsory courses and skills, as shown in figure 4.
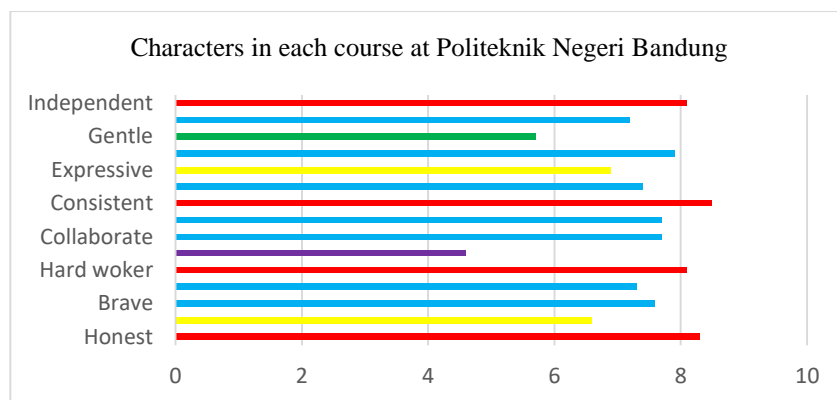
Figure 4. The Skills Course Target Characters

The questionnaire results, which 51 lecturers supported at Politeknik Negeri Bandung, identified four (4) dominant characters: honesty, hard work, consistency, and independence. These characteristics can optimize the potential character of the people and nation of Indonesia by holding the characteristics of a multicultural nation. This is done as an effort to strengthen character education to achieve better *learning outcomes* as explained in Lasambouw, Ediana & Neneng (2021) "*the development of character education values based on the ethnic superior character can be started from simple things that occur in an effective learning process"*. Furthermore, to realize a successful character education program, various components are needed, including *family and community involvement*, as well as the availability of models that will serve as examples, including the group model (Lasambouw*, Neneng, Ediana* , 2020).

Strengthening character education through curriculum integration in higher education

Higher education, as the highest education sector in the education unit, has a strategic role in creating a superior young generation, has character, and is capable of global competitiveness as mandated by Republic Indonesia Law number 12 in 2012. In realizing these superior graduates, it is necessary to support a relevant curriculum. In reality, in higher education curricula, character education is imposed on national compulsory subjects, namely Religious Education, Pancasila Education, Citizenship Education, and the Indonesian Language. The implementation of teaching is also partial, only one semester, and usually carried out in the early semester. As a result, the impact of character education seems disconnected and unsustainable. Therefore, a method is needed to "connect" character education from the beginning to the end of the semester.

Efforts that can be made are by integrating national compulsory courses, expertise courses, and professional courses. So that the character education process can be continuous from the beginning till the end of the semester. This can be done based on reference to Republic Indonesia Law number 12 in 2012 that higher education has autonomous rights to develop a curriculum according to the needs of graduates. Furthermore, the method of strengthening ethnic superior character-based character education can be applied by integrating the character achievement targets in each subject in the study program (Permendikbud No. 20 of 2018).

This course integration method is in line with the opinion of Winataputra (2012) that one of the micro character education can be carried out through classroom learning activities using an integrated approach in the course (*embedded approach*). Strengthening this opinion, Soetanto (2012) describes two strategies for implementing character education in order to achieve the desired results. One of them is the integration of character education into every subject in the scientific field, both technology, and art.

Curriculum integration is implemented by paying attention to each curriculum component. Based on the provisions of the Ministry of Education and Culture (2020), curriculum as a teaching design consists of four elements, namely learning outcomes, study materials, learning processes, and assessment. Referring to these provisions, In the following, a character education framework based on superior ethnic characters is presented that is integrated with the characters that are the target of learning outcomes for students in national compulsory courses and expertise courses.
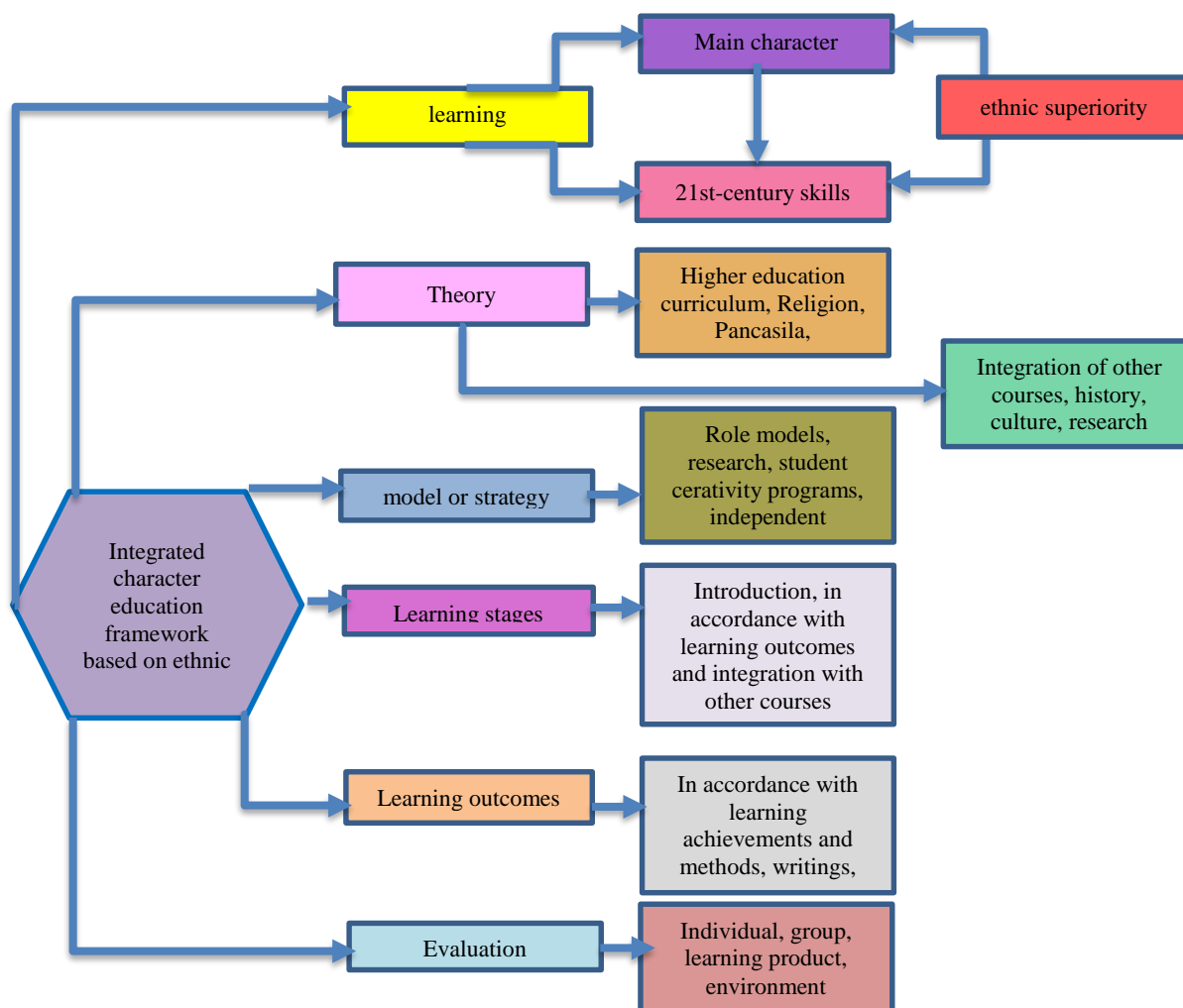
Figure 5. Framework on integrated character education for strengthening curriculum

Based figure 5, strengthening ethnic superior character-based character education is character education material that can be inserted into national compulsory courses and expertise courses in an integrated manner using all curriculum components.

Learning Outcomes

Learning outcomes are abilities obtained through the internalization of knowledge, attitudes, skills, competencies, and work experience accumulation (Perpres No. 8 of 2012). The expected learning outcomes after learning ethnic superior character-based character education materials are as follows. (1) Students deepen the meaning of Bhinneka Tunggal Ika by recognizing the special characters of various ethnic groups in Indonesia to increase their sense of nationalism and nationality; (2) Students are expected to be able to apply superior ethnic characteristics in everyday life, both on campus and in the community, to build their identity to become superior human resources; (3) Students will have multicultural competence as a provision to face the era of globalization. At the same time, increasing productive cooperation and tolerance, and (4) *Leadership* competence is based on the values of character education based on superior ethnic characteristics that are applied in real life.

In addition, each course needs to include the target character and the learning achievement. Example as follows: (1) Indonesian language course, learning outcomes for the character of fond of reading, working hard, increasing information literacy, and communicating well; (2) Sports lectures, achievement of character learning, honesty, hard work, love of the motherland; (3) Character Education Materials Based on Ethnic Excellence; (4) Character education materials based on ethnic excellence are intended to strengthen pre-existing character education materials. The main material is as follows: (a) Deepening and exploring the meaning of Bhineka Tunggal Ika through the introduction of various ethnic groups in Indonesia; (b) Exploration of local wisdom through identifying superior ethnic characteristics that are applied in everyday life; (c) Compile the superior values of each ethnicity and make them national moral values that can be applied; (d) identify gaps in superior character values with the reality in the current environment; (f) Provide criticism and solutions to solving problems encountered; and (g) build a golden generation of human resources from ethnic excellence.

Learning Methods

The method of delivering ethnic excellence-based character education material is prioritized by implementing the Tridarma of Higher Education by involving research and community service activities. (Ediana Sutjiredjeki, Neneng Nuryati, 2019). The research findings reinforce the opinion of Soetanto (2012), who explains that the application of the character education method must also involve research and community service as a unified whole of the Tridharma of Higher Education. So far, these activities have been included in extra-curricular activities, so now is the time for these two tri-dharma activities to become part of the study program curriculum. Especially with the declaration of the independent learning policy and student creativity programs, learning methods through research and/or community service can encourage students to gain real experience outside the campus environment, so that character values will build naturally.

Learning Evaluation

One of the most critical things in character education based on ethnic excellence is the assessment of student learning outcomes. According to Tyler (Arikunto, 2009), evaluation is a process of collecting data to determine to what extent, in what ways, and which part of the educational goals have been achieved. With evaluation, all processes of strengthening character education can be measured clearly. Each learning outcome must associate with a particular skill and character value to support the process of evaluating character education based on ethnic excellence. Furthermore, these skills can be integrated with the competencies needed for this century.

Evaluation of ethnic excellence-based character education can be carried out as formative or summative assessments adapted to the expected learning objectives and outcomes. However, it is highly recommended that the assessment is not only carried out by a lecturer but by a team holistically. It is hoped that the assessment will be more objective. In addition, it is necessary to conduct an initial assessment before discussing a new topic. In their research, Lasambouw and Mathilda (2020) found that "the *use of MSC as an enrichment of the evaluation tools will increase the scope of the evaluation. Stories from students themselves will capture MSC's qualitative achievements, which have not yet been accommodated in* the UTS and UAS".

CONCLUSION

Strengthening ethnic superior character-based character education can provide an accurate picture of the application of character in social life. Local wisdom is a spiritual wealth that the community understands in its natural form, even though there is a philosophical basis. The implementation of the integration of character education through national compulsory courses and specialization courses needs to pay attention to each component of the higher education curriculum, namely learning outcomes, materials, learning methods, and learning evaluation. Achievements and learning materials focus on giving a deep understanding of the meaning of Bhinneka Tunggal Ika by recognizing superior ethnic characteristics to increase a sense of unity and nationalism. Furthermore, develop the ability to adapt to a multicultural society to face global challenges. The application of learning methods in strengthening character education in tertiary institutions needs to integrate the tri dharma of higher education, namely teaching, research, and community service, so that students can actively participate and be exploratory. Finally, the evaluation of character education based on superior ethnic characters is carried out by linking each learning outcome with a particular skill and character value. Furthermore, these skills can be integrated with the competencies needed for this century. Thus, the process of strengthening character education based on ethnic excellence through integrating courses in the higher education curriculum can improve the quality of graduates with qualified knowledge, character attitudes, and skills. Moreover, it can produce graduates who are ready to face global challenges and are competitive according to industry needs in the 4.0 era.

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