Culture-Based Economic Learning: The Effects on the Students' Characters in the Era of Industry 4.0

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Abstract

The purpose of this paper is to explain the relationship of economic learning with culture in the era industrial revolution's 4.0 and its role in building student character. Culture-based economic learning becomes a forum for developing character in the era industrial revolution 4.0. The paper is a literature review using relevant sources related to theoretical and empirical reviews of the character of students in economic learning based on Minangkabau culture. Sources of theoretical reviews use books, other documents about the Minangkabau character and culture, whereas for empirical reviews use research results published in scientific journals. The analysis shows that there are values and characters that will be built from the implementation of Minangkabau culture-based economic learning.

Keywords: *industrial revolution 4.0, economic learning, culture, character education*

Introduction

When technological progress is moving rapidly, at the same time the country needs Human Resources (HR) which has three important pillars. The three pillars are literacy, competency, and character (World Economic Forum, 2015; Makin's, 2004). Character becomes one of the three important pillars needed in facing the era of the industrial revolution 4.0. If examined, the term character has emerged since the early days of independence. The founders of the nation realized that there were three big challenges that must be faced by Indonesia. First, establishing a unified and sovereign state. Second, building the nation, and the third is building character (Sutarna, 2018).

Strengthening character education especially in the world of education becomes important to do in an effort to balance the rapid technology and the ongoing industrial revolution 4.0. In addition, through the strengthening of character education, the negative impact of the industrial revolution 4.0 can be minimized (Iswan, I., &Bahar, H., 2018; G. Popkova, E., &Sergi, B. S., 2018). The development of the industrial revolution 4.0 must be a serious concern of all parties, especially for the development of the character of children as the next generation of the nation. Educators and parents must take advantage of this opportunity to teach children to think positively, filter out good information and train the child's mindset. Strengthening character education in children and adolescents is urgent to do (Anwar, C., Saregar, A., Hasanah, U., &Widayanti, W., 2018).

Character can be interpreted as a basic value that builds a person's personality, formed both due to the influence of heredity and environmental influences, which distinguishes it from others, and is manifested by his attitude and behavior in daily life (Samani&Hariyanto, 2013). Character is the specific nature, identity, moral, or personality of a person formed from the internalization of various virtues that are believed and used as a basis for perspective, thinking, acting and acting, virtues consisting of a number of values, morals, and norms such as being honest, dare to act , can be trusted and respectful of others. Character means the mental, moral or moral characteristics that distinguish one person from another, character, character. The purpose of character education is the inculcation of values in students and renewal of shared life that respects individual freedom (Ma'mur, 2011).

Character education is a system of inculcating character values to school members which includes components of knowledge, awareness or will, and actions to implement these values, both towards God Almighty, self, environment, and the state to become good human beings (Muslich, 2011). Character education is the process of giving guidance to students to become fully human beings who have character in the dimensions of heart, mind, body, and taste and intention (Samani M, 2013). Another definition describes character education as a serious effort to help someone understand, care and act on the basis of ethical values (Lickona, 2003).

Character education is a lifelong education, as a process of development towards perfect humans. Therefore, character education requires modeling and touch from early to adult. Cultivation of character education can be done if there is cooperation from various parties. Educational institutions consisting of schools, families, and social environments need to be role models or modeling for the learning process and education of students (Mulyatiningsih, E., 2011).

In this regard, it is fitting for all parties to understand their respective roles. In the formal education environment, teachers must be able to catch the signal that when times change more quickly, they must also be balanced with changes in themselves. The model characteristics of Industry 4.0 are a combination of some of the latest technological developments such as physical cyber systems, information and communication technology, communication networks, big data, cloud computing, modeling, virtualization, simulations and equipment to facilitate human interaction with computers (Fauzan, 2018; Wan , J., Cai, H., & Zhou, K., 2015).

Strengthening character education in the era of the industrial revolution 4.0 is urgent to do on a massive scale. If examined, there are three environments that will greatly influence success in strengthening character education, namely the family environment, school environment and community environment (Subianto, J., 2013; Kosim, M., 2012). First is the family environment. The family is the place for the first and foremost education for children, they are in the family from the womb until before marriage. Therefore the role of the family is very important in a child's journey. The family is the first and foremost educational environment. Thus, the role of the family in terms of education for children,can not be replaced even if the child has been educated in formal and non-formal educational institutions.

Second is the formal education environment. Schools must be a comfortable environment for their citizens. Some of the implementation of character education in schools is presented in real terms, either in the form of additional special character education lessons or presented integrated in teaching materials, also manifested in extra-curricular activities (self-development) and included as local content (Jahroh, 2016). Third is the social environment (community). The community is an important partner in the successful implementation of character education. A good community environment will help the formation of a child's character to be good, and vice versa when the community environment is not good it will form the character of children who are not good. Embodiment of synergy between schools, families, and society that runs well can make optimal character development for children. In the end it is hoped that the current and ongoing industrial revolution 4.0 will bring the maximum benefit and contribute the smallest negative impact.

Local wisdom tends to function less as a filter for the rapid flow of globalization, as if it will sink into the current globalization, learning still only strengthens the cognitive of students, this phenomenon is reinforced that today there are six problems faced by the Indonesian people in shaping the nation's character namely disorientation and not being lived Pancasila values as a philosophical and ideological nation, limitations of integrated policy tools in realizing the values of Pancasila essence, the shifting of ethical values in the life of the nation and state, waning awareness of national cultural values, the threat of nation disintegration, and the weakening of independence of the nation nation (Subali, B., Sopyan, A., &Ellianawati, E., 2015; Ilmi, 2015; Fowers, B. J., &Davidov, B. J., 2006).

Economics is one of the disciplines taught at the level of formal education in Indonesia. As a result of the demands that the challenges faced by students are related to global currents, economics teachers in schools are challenged to think about the right questions about what quality human beings want to produce by an educational institution and after they study economic material, so economics teachers need to think about the

value what values should be developed through economic learning. The values of teaching and learning in general must occur in all classes, but the teachers seem to expect most of these values to be implicit in the learning process.

One thing that is currently of concern to the government of West Sumatra Province is how to integrate Minangkabau cultural values into learning, not least economic learning(Armiati, A., Effendi, Z. M., &Efi, A., 2019). This of course adds to the task of teachers to carry out economic learning through culture to improve character education in the era of the industrial revolution 4.0. Therefore, it is possible that the teacher has a limited understanding of what values should be learned in economic material through cultural knowledge. Therefore in this paper we will study cultural-based economic learning and its effects on the character of students in the industrial era 4.0.

Economic Learning, Character Education and Culture

Economic and cultural studies have an interrelated relationship. The economic study contained cultural elements reflected in the economic activities of the Minangkabau people in their daily lives (Armiati, A., Effendi, Z. M., &Efi, A., 2019). Cultural assets are not only in the form of artifacts or historical objects. According to Koentjaraningrat (2009) elements of culture, namely: 1) Language, 2) Knowledge systems, 3) Social organization, 4) Life equipment and technology systems, 5) life livelihood systems, 6) religious systems, and 7) arts. In daily life you can see the local culture of the traditions carried out by the Minangkabau people. The Minang people refer to their area as "nature" or "the realm". The philosophy of "unfolding nature is a teacher" which is the basis of thinking of the Minang people. This expression is a manifestation of the Minang community in running their lives. Parenting and planting customs/internalization is done through oral traditions and written traditions in analog form. Nature with all its contents becomes a discourse of life learning for the people of Minang.

Studying economic material that is integrated with culture, of course also contains character education. Character education is the process of giving guidance to students to become fully human with characteristics in the dimensions of day, mind, body, and taste and intention (Samani and Hariyanto, 2012). This means that character education can be interpreted as an education of moral values, moral values and character. The purpose of implementing character education is to develop students' ability to make decisions based on mature thinking by considering the pros and cons.

Character education in the school environment is integrated into all subjects including economic learning. Character education as a basis for building a more critical nation in responding to the sharing of national issues and problems. Character education needs to be taught in the school environment as a provision in dealing with the changing times. In the era of the industrial revolution 4.0 character education as initial capital in the face of global competition because it requires people who have a soul of responsibility, brave, honest and ready to face various problems and are able to make decisions.

Economic learning becomes a forum in developing national character to face the current era of the industrial revolution 4.0. Message or mandate contained in the economic behavior of the community to build learning that can be used as a guide in life. Economic learning becomes the media in shaping the character of students. Cultural recognition through economic learning is one way to foster a sense of patriotism. The introduction of cultural traditions to students will increase their cultural litera

In principle, the development of national culture and character is not included as a subject but is integrated in subjects, self-development and school culture. Therefore, teachers and schools need to integrate the values developed in cultural education and national character into the existing Curriculum, syllabus and Learning Program Plans.

The learning principle used in the development of cultural and national character education strives for students to recognize and accept cultural values and national character as their own and be responsible for the decisions taken through the stages of recognizing choices, assessing choices, determining choices and then making a value in accordance with self-confidence. With this principle, students learn through the

process of thinking, behaving and acting. The third process is intended to develop the ability of students to carry out social activities and encourage students to see themselves as social creatures.

Character education in schools can be simply defined as, understanding, treatment and practice of virtue (Marsono, M., 2019).Therefore, education in schools refers to the process of instilling values, in the form of understandings, procedures for caring for and supporting them) these values, as well as how students have the opportunity to be able to practice these values in real terms. Performance education, value education, moral education, religious education and citizenship education are five different concepts. In general the five concepts above are equally helping students grow more mature and richer, both as individuals and social beings in the context of the lives of others, what distinguishes the five concepts above is the material and content of education.

The function of culture on the contribution of education to cultural transition and development at different social levels. At the individual level of education helps students to develop their creativity, aesthetic awareness and to socialize with good norms, values, and social beliefs. Educated people are expected to respect or appreciate cultural plurality more so that they have a more open attitude towards cultural diversity. Thus, the more people who are educated are expected to be easier to get cultural acculturation which will then occur national or regional cultural integration (Samo, D. D., 2018; Wuisang, J. R., 2016).Budiwibowo (2016) explains a culture-based education strategy, being able to choose education based on adat will not break away from human principles, human factors, and make humans the subjects at once in every step and change.

Character values that need to be developed include; religious, honest, transformation, discipline, hard work, creative, independent, coordination, curiosity, national spirit, love of the motherland, achievement, friendship, communicative, peace-loving, fond of reading, caring about the environment, caring socially, and responsible (PUSKUR, 2010).

Based on the Government Regulation of the Minister of Education and Culture RI No. 24 of 2016, about Core Competencies and Basic Competencies of Learning in the 2013 Curriculum on Elementary and Secondary Education for High School Economics Lessons can discuss the 3rd Core Competencies that discuss social competence. While the contents of the 3rd Core competence are "Developing behavior, honesty, discipline, responsibility, caring, polite, environmentally friendly, mutual cooperation, cooperation, peace-loving, responsive and pro-active) and showing attitude as part of the solution to various The problem of the nation in an important role with the social and natural environment by placing itself as a nation in the world association ". The competence is through indirect learning, which is through modeling, habituation, and school culture; by paying attention to the characteristics of the subjects, as well as the needs and conditions of students. Competency development and development is carried out throughout the learning process and can be used as a teacher's consideration in developing the character of learners further.

Based on the objectives of economic learning as outlined in the 2013 Curriculum, an analysis of character values might be developed through economic learning.

Table 1. Character values economics subjects

Number	The objective of learning economics	Character Value
1.	To be grateful God's gift to the overflow of resources in order to fulfill the needs of human life and relationships with social and natural environment	Religious
2.	To be understand the economic concept to relate events and Economic problems with daily life, especially those that occur in individual environment, household, community, and country	Curiosity, love to read, social care, perseverance, national spirit
3.	Showing an attitude of curiosity towards a number of economic concepts needed to explore economics	Curiosity, love to read, thorough, diligent, creative

Table Cont…

4.	Develop behaviors that shape wise, rational and responsible attitudes by using knowledge, skills in economics, management, and accounting that benefit self, household, community, and country	honest, discipline, responsibility, caring, polite, environmentally friendly, mutual cooperation, cooperation, peace-loving, responsive and proactive
5.	Make responsible decisions based on socioeconomic values in a pluralistic society, both on a national and international scale	Responsible, social care, national spirit, tolerance, creative, democratic

Character values in Minangkabau Culture

After analyzing the character values contained in the objectives of economic learning, the following can be described the results of the analysis of the relationship between the characteristics of Minangkabau culture and the value of character education. This is consistent with the results of Ilmi's (2015) and Mulyadi, (2016) research which explains that some of the Minangkabau traditional sage idioms related to these character values are as follows:

Table 2. National and Minangkabau Character Values

Number	National Character	Description	Petatah petitih /Minangkabau's Idiom
1.	Religious	Obedient attitudes and behaviors in carrying out religious teachings thatbe hold	*Adat Basandi Syara' Syara' Basandi Kitabullah. Syara' mangato adat mamakai, Alam takabang jadi guru* (Customs based on Shari'a, Shari'a is based on the Book of Allah. Religion says, Customs applies. Unfolding Nature is a teacher)
2.	Honest	Behavior that is based on efforts to make himself as a person who can always be trusted in words, actions, and works.	*Nan Bana ditagakkan* (the truth is upheld)
3.	Tolerance	Attitudes and actions that respect differences in religion, races, ethnicity, opinions, attitudes, and actions of others that are different from him.	*Tenggang Raso* (tolerance)
4.	Discipline	Actions that exhibit orderly behavior and comply with various rules and regulations.	*Taguah* (firm)
5.	Hard Work	Behavior that shows earnest effort in overcoming various learning barriers and assignments, and completing tasks as well as possible.	*Diasak indak layua, dicabuik indak mati* (moved not withered, revoked not dead)

Table Cont…

6.	Creative	Think and do something to produce a new way or result from something that already have.	*Ndak Rotan Aka pun jadi* (no rattan, roots just fine), can take advantage of all the opportunities that exist
7.	Mandiri	Attitudes and behaviors that are not easy to be depend on others in completing tasks.	*Sawuak aia mandikan diri, indak maangok kalau badan* (take your own bath water, do not breathe out of the body) means not expecting help from others
8.	Democracy	The way of thinking, behaving, and acting that values the rights and obligations of himself and others are the same.	*Saciok bak ayam sadanciang bak basi,Saiyo sakato, duduk samo randah, tagak samo tinggi* (squeaking like a chicken, jingling like iron, yes in one word, sitting in the same low, standing in the same height)
9.	Curiosity	Attitudes and actions that always strive to find out more deeply and extensively from something that is learned, seen, and heard.	*Tau dinan ampek, alun takilek lah takalam takilek ikan dalam ayia lah tantu jantan dan batinonyo* ((know the four, Not shiny (seen) already intended (written), see the fish in the water already know the male or female)
10.	National Spirit	A way of thinking, acting and having insight that places the interests of the nation and the state above on self and group interests.	*Suku ndak dapek diasak gala ndak dapek diagiah, Kampuang ndak dapek dituka* (tribes cannot be shifted, titles cannot be given, villages cannot be exchanged
11.	Love the Country	Ways to think, behave and act that show loyalty, care, and high respect for the language, physical environment, social, cultural, economic, and political nation.	*Cinto ka nagari* (love to the country)
12.	Appreciate Achievement	Attitudes and actions that encourage him to produce something that is useful for society, and acknowledge also respect the success of others.	*Kok manang jan manapuak dado, kok kalah jan manyasa, nan cadiak tampek batanyo, nan bijak tampek baiyo* (if you win don't pat your chest, if you lose don't regret, the clever place to ask, the wise place to negotiate)
13.	Friendly/ Communicative	Actions that show pleasure in talking, socializing, and working with others.	*Nan tuo dihormati, nan ketek disayangi* (the old be respected old, the small beloved)
14.	Love Peace	Attitudes, words, and actions that cause others happy and safe for his presence.	*Saiyo sakato*(be agree)

Table Cont…

15.	Like to Read	The habit of providing time to read various readings that provide virtue for him.	*Alam takambang jadi guru* (unfolding nature is a teacher)
16.	Social Care	Attitudes and actions that always want to provide assistance to other people and communities in need.	*Dapek musibah bahambauan, mandapek kebaikan bahimbauan* (get disasters spread, get fortune gathered)
17.	Environmental Care	Attitudes and actions that always try to prevent damage to the surrounding natural environment, and develop efforts to repair natural damage that has already occurred.	*Jago nagari jan binaso, Baso Basi, Raso jo Pareso* (keep the country not to perish, make small talk, taste and check)
18.	Responsibility	The attitude and behavior of a person to carry out tasks and his obligations, which he ought to do, to himself, society, the environment (natural, social and cultural), the state and God Almighty.	*Tangan mancancang Bahu mamikua, anak dipangku kamankan dibimbiang, urang kampuang dipatenggangkan* (hands tightened, shoulders shouldered, children carried nephews guided, villagers tolerated)

Source: The Processed Primary Data (2019)

Based on the table, it can be seen that petatahpetitih or Minangkabau idioms are related to character values. By integrating cultural values in economic learning, especially petatahpetitih or the Minangkabau expression above, it certainly can foster the character of students. The growth and development of character values can be carried out throughout the learning process and can be used as a teacher's consideration in developing the character of students further.

To find out whether the developed character values have been seen in students during the learning process, the teacher must make observations. Observations can be made using observation sheets, self-reports (in the form of personal notes, journals), assignments and so on. From the observations, the teacher can provide the conclusions / considerations stated in the qualitative statements as follows.

BT : Not yet Visible (if students have not shown the first signs of behavior stated in the indicator).

MT : Starting Visible (if students have started to show there are initial signs of behavior that are stated in the indicator but are not yet consistent)

MB : Start Developing (if students have shown various signs of behavior that are stated in the indicators and are starting to be consistent)

MK : Cultivate (if students continuously show the behavior expressed in the indicator consistently)

Conclusions

Local culture, especially through the wise idioms of the Minangkabau, has values as a reference for character education that is being developed in the national education system. Local wisdom in the Minangkabau tradition with its philosophical "AdatBasandiSyara', Syara "BasandiKitabullah" philosophically gives color to character education, so that the embodiment of the character of this nation can be achieved.

Character needs to be improved in the era of the industrial revolution 4.0 as a form of readiness in facing the demands of the changing times. The form of character education can be in the form of responsibility,

brave, creative, destabilizing the nation's culture, and proud of Indonesian language which is the basis for carrying out international competition. 4.0 industrial revolution as a form of development that refers to the free economy. Character based on culture to equip people to face changing times in various joints of social life.

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