



HUMANISTIC APPROACHES IN EDUCATION SYSTEM OF THE INDUSTRIAL REVOLUTION 4.0

Haryanto¹, Siti Irene Astuti Dwiningrum²

^{1,2}Faculty of Education Yogyakarta State University Indonesia

haryanto_tp@uny.ac.id

Haryanto, Siti Irene Astuti Dwiningrum. Humanistic Approaches In Humanistic Approaches In Education System Of The Industrial Revolution 4.0-- Palarch's Journal Of Archaralogy Of Egypt/Egyptogy 17(3), 258-274. ISSN 1567-214x

Keywords: Humanistic Approaches, Integrative, Interconnective

ABSTRACT:

The adaptation of humanism theory has become an essential requirement in education system due to the mobility of technology. Hence, it is important develop the students in order to assist them to face the challenges of the Industrial Revolution of 4.0. This research aims to study the application of humanistic approaches (integrative and interconnective) and its effectiveness towards the students. This research is based on qualitative method and the data is collected by using questionnaires, observation, interviews and documentation. The research subjects are teachers and students from SMAN "X" in Yogyakarta, Indonesia. The result shows that: (1) the importance of the teacher's understanding in educating the humanistic approaches to empower the student's potentials in all dimensions, (2) the implementation of humanistic approaches in education to handle the internal and external obstacles, (3) the importance on humanistic approaches in academic field. Therefore, the humanistic approaches should be based on three powers which are: the power to, power with, power within power to enhance the student ability to overcome the challenges of the Industrial Revolution 4.0.

INTRODUCTION

Industrial Revolution 4.0 (IR.4.0) as a social process that begins with the development of an accelerating industry has not been responded proactively by the world of education. Industrial revolution is related to some fundamental changes that occur in the industrial field, ranging from industry 1.0, 2.0, 3.0, to industry 4.0. Industrial revolution 1.0 is marked by the emergence of the mechanization of production to support the effectiveness and efficiency of human activities. Industrial revolution 2.0 occurred at the beginning of the 20th

century which was marked by mass production and quality standardization. This development was followed by the birth of the Industrial revolution 3.0 around 1970 which was marked by mass adjustments and flexibility of automation and robot-based manufacturing. The Industrial Revolution 4.0 then came to replace the existing industry 3.0 marked by cyber and manufacturing collaboration (Hermann et al, 2016).

Education faces severe challenges in the face of the industrial revolution era 4.0 (IR.4.0). Education in Indonesia has not yet reached level 4.0, so education graduates have not met IR.4.0 needs. To deal with IR 4.0 which starts to lead to the use of smart robots that will replace people in certain activity divisions, education utilizes information and related abilities that cannot be replaced by robots (Felicia et al, 2017). Innovation developed in IR 4.0 requires an accelerating movement on the design of education 4.0 that is able to develop learning that is compatible with an intelligent, portable, global and virtual future. Education 4.0 develops skills and advanced development, for example with Artificial intelligence (AI), large information and examinations, distributed computing and portable settings, online networks, Internet of Things (IoT), Virtual Reality (VR) and Augmented Reality (AR) with computerized pleasure in the general sense transforms the flow of education and the teaching landscape of progress into a new type of computerized teaching method and intelligent classroom. (Shahroom, 2018). However, the social reality of education is not yet ready with the demands of the industrial revolution era 4.0.

The social change from IR.4.0 requires developing greater capacity for understanding ethics and interculturalism, placing education, the arts to adapt to specific issues raised by IR.4.0 technology (Penprase, 2018). However, on the other hand, dehumanization is a social phenomenon that continues to occur in the educational environment. Dehumanization roots in education basically arise when education is considered as a tool of indoctrination of various interests, including the interests of educators to learners. However, learning practices in educational institutions in Indonesia are still using the conventional paradigm in which the teacher becomes the center of learning, so that students lose their creativity and critical attitude. This referred to a closed education that does not empower the students as they should. According to Driyarkara, the core of education is the humanization process of young generation, namely education to develop young people to be real mature human being. Ki Hajar Dewantara states that education is a requirement for children's growth. Education demands all the power that is available in the nature of the children so that they act as human, as well as members of the public who can reach safety and happiness in society in the world and in the hereafter (Dewantara, 1977).

To realize this, educators play an important role, since educators should be able to create the process of learning and teaching well by putting himself as someone who is directly involved in the process. Educators must establish cooperation with their students and provide a variety of possible ways of the point of view of the students and the teacher (Rosman et al, 2019). In these circumstances, educators must be able to provide the path leading to important truths with the students (Freire, 2003). In this context, the teacher's role is expected to be more proactive in responding to the demands and challenges of change in the IR 4.0 era by conducting innovative learning. With the current perspective, educators will be important partners of the learners in the learning process. However, what happened at the present time is the dehumanization of

education in the educational process in Indonesia. Even the national education system has not been able to provide opportunities for learners to develop their potentials optimally. The phenomenon of violence, the practice of abortion, pornography, brawl, ethics violations and other social norms which are prevalent among subjects showed it, which, finally, results in the dehumanization of education at almost every level of education. The social phenomenon proves that there has been a change in the orientation of education into a commodity that tends as power and business interests of the capitalist education.

All the negative phenomena that occur due to education tend to no longer honor and respect human dignity and all their human rights. The process of education are less likely to foster human values as self-learners, because the education system forcing learners in cognitive strengths and less developed the optimal development of learners in terms of affection. This is also due to the weakening values of internalizing ethical values and aesthetics in self-learners in the learning process at schools. In addition, students also experience the "violence" with the systematic teaching load which is so heavy. In fact, this phenomenon is triggered by the increasing influence of the development of information and communication technology which are likely to deliver programs that are destructive. The role of the mass media who are less educated also intensified the process of shaping attitudes and behavior of learners. This then makes the process of dehumanization of the learners increasingly complex. As the result, this should be addressed in a comprehensive manner.

To overcome this, there must be an effort to build a humanist education as the foundation of education in the era of Industry 4.0 revolution Indonesia. Basically, there are many humanist educational theories that can be applied, but of course it takes a proper effort so that the results are effective and efficient. Therefore, it takes an integrative and *interconnective* approach that can accommodate and adapt theories of humanism in education. As the result, it can be applied. In order to do that, it takes two things: first, integrative and interconnective understanding of the significance of humanist education or learning in education in Indonesia. Secondly, it takes a more comprehensive competence for the cutting edge of education in Indonesia, namely educators, in order to better understand the significance of this humanist education for the successful establishment of competent learners and character di era revolusi industri 4.0. On the other hand, moral education will succeed if it is built with a process of habituation that is strong and continuous, as the results of Randal Curren's research (2014: 497) which concluded that there are three habituation can prepare the way for, and not seriously inhibit, moral reasoning and progress

METHOD

This study takes the object in SMAN "X" Yogyakarta, Indonesia. The subjects are teachers and students. As such, the core of this paper is how an integrative and *interconnective* approach in terms of the theories of humanist education can be understood and applied in SMAN "X" Yogyakarta. In addition, this paper also aims to see that to what extent the applications of humanist education in SMAN "X" Yogyakarta to get its significances.

The method used is qualitative method with the active participation of the author in the study. Data collection technique is using questionnaires, observation,

interviews, and documentation. While data analysis is to organize, sort, categorize and give a specific code and category. Further, data management aims to find a theme and working hypotheses that will be found on substantive matters related to the application of humanistic education in the research object

RESULTS AND DISCUSSION

The core of humanist education: A theoretical sketch

Education is an important aspect of human life. In the context and scope of the life of a nation, education has a very important and strategic role to ensure the continuity and development of the life of the nation. The nature of education as a humane humanizing process (humanization) is often not realized because it is trapped in the destruction of human values (dehumanisation). This is due to the difference between the concept and the implementation in educational institutions. This gap resulted in the failure of education in achieving its sacred mission to elevate human dignity and dignity. Education has not succeeded in humanizing students. In fact, education should be able to prepare citizens to face their future

According to Zamroni (2007) it is a humanist outlook as part of humanization process, with the intention of humanization as the process of building character in individuals, who respect human dignity as the most perfect creature with a variety of grace and excess. Based on above opinions, the essence of humanist education is a humanization process that aims to shape human character (Siswanto, 2014). Humanist education is a process of humanization developed for students to develop their potentials in a holistic manner in order to become a human being who is independent and creative as well as possessing good character. Humanistic Education refers to an educational philosophy that believes human beings are, by nature, self-developing creatures. An educator's primary responsibility is to create an environment in which students can do their own growing.

Humanistic educators have a broad understanding of the knowledge that children acquire as they grow, and highly value student's affective and social development as well as their intellectual development. The goal of humanistic education is to contribute to the development of energetic, positive, self-respecting, caring human beings who can meet all challenges. (<http://hef.yam.org.tw/english/What%20is%20Humanistic%20Education.htm>). The essence of true humanist education for learners is the character formation. But this time, the provision of education tends to focus on cognitive development, whereas soft skills or non-academic as the main element of character education is not considered optimal, even be ignored. Currently there is a tendency that the academic targets remain a primary goal of education outcomes, which makes the process character education is difficult to employ (Gede Raka, 2006). Otherwise, it is feared that the education will be more systematic dehumanization and crumpled to solve.

Character education is very important, because the character development is one of the keys for successful aspects of humanism in education. This can be seen from the opinion of John Dewey that education is the process of reconstruction and reorganization of experience, and the ability to grow and direct the next experience. Through experience, one will acquire meaning and simultaneously obtain the next experience. Therefore, John Dewey asserted that the concept is the core of the educational experience. In this case, the key to understanding

ourselves and the world is our own experiences. In this context, the experience of life becomes an important aspect of learning that can be programmed by the educational institutions. Dewey also emerged that becoming the principal is the basis of the importance of developing an optimal educational institutions particularly that are able to develop a wide range of knowledge where the students have a variety of experiences in his life.

The process of developing knowledge, up to bringing the experience is actually the essence of humanist education. In this humanist education, learners become active subject in the learning process that will give them the opportunity to develop themselves and their personal potentials and attitude that will evolve towards a better level more perfectly. The student also needs to be treated as a subject who has its own role, can organize their own activities, not as an object in which everything is determined by the educator (Kuntoro, 2008).

the description of humanist education theories

Carl Rogers' humanistic personality theory emphasizes the importance of the self-actualizing tendency in forming a self-concept. Identify the key points of Rogers' theory, and relate them to the larger humanistic perspective of personality. Carl Rogers was an influential humanistic psychologist who developed a personality theory that emphasized the importance of the self-actualizing tendency in shaping human personalities. Rogers believed that humans are constantly reacting to stimuli with their subjective reality (phenomenal field), which changes continuously. Over time, a person develops a self-concept based on the feedback from this field of reality. In the development of self-concept, positive regard is key. Unconditional positive regard is an environment that is free of preconceived notions of value. Conditional positive regard is full of conditions of worth that must be achieved to be considered successful.

Human beings develop an ideal self and a real self based on the conditional status of positive regard. How closely one's real self matches up with their ideal self is called congruity. Rogers believed that fully functioning people could achieve "the good life," in which they constantly aim to fulfill their potential and allow their personalities to emanate from their experiences. Like Maslow's theories, Rogers' were criticized for their lack of empirical evidence in research. *Freedom to Learn for the 80's* presented his full theory of [experiential learning](#). He believed that the highest levels of significant learning included personal involvement at both the affective and cognitive levels, were self-initiated, were so pervasive they could change attitudes, behavior, and in some cases, even the personality of the learner. Learnings needed to be evaluated by the learner and take on meaning as part of the total experience.

Humanist education is an orientation of education model which consider humans as humans (humanization), namely God's creatures with their state. It also considers human as a living creature, who is able to maintain and develop their life. Therefore, the position of education can build the process of humanization, means to respect human rights, emerges the right to come into force and being treated fairly, having right to distribute the truth, the right to do compassion and so forth (Siswanto, 2014, p. 19). Humanistic education gives freedom for learners to develop from all forms of the potential of each individual. Hence, freedom is seen as the freedom in the learning process which is democratic, cooperative and considering liveliness of activities to be centered

on the learner, so that educators act as a motivator and facilitator in the process of development of students' potentials (Siswanto, 2014, p. 39).

Basically, humanist education is an effort to build a holistic power within the individual. There are three forces that developed in synergy within the individuals. Firstly, individuals need to develop the power to, the creative force that makes a person is able and willing to do something. Secondly, power with, namely to build solidarity on the basis of commitment to the same goal to solve problems and create prosperity together. Thirdly, the power within, which is a spiritual force that exists in order to make students become more humane (Hibana, 2013) The third force is what will be the driving force for the achievement of an effort to develop a human individual in its expression, coexisting, and adapt in the face of life who really need to learn quickly.

The third rule would be very valuable capital for the efforts to foster humanism in education. Humanism is very important in order to give birth to the next generation of character and competence that can then be applied in a positive way for the betterment of the nation. In order to explore the potential of these three powers, it takes an understanding of humanist learning process in educational institutions. Therefore, the teacher as the leader of education must master and understand how to educate and conduct humanist learning in order to educate the next generation with character and competence in a holistic manner.

The application of the humanist theory in the learning process needs to consider some aspects. According to Carl R. Rogers in his theory in the field of education it is stated that the learning facilitator takes three attitudes: 1) Reality in the facilitator of learning; 2) the award, acceptance and trust; and 3) definition of empathy (Siswanto, 2014, p. 44).

Table 1. Three attitudes of learning facilitator

Aspects	Descriptions
Reality of the facilitators	This attitude is an important base. A facilitator has to be himself and do not deny who he is, so that he can enter into a relationship with a student with nothing to cover up.
Award, acceptance and Trust	This attitude is an attitude that always values the opinions, feelings to make the emergence of acceptance between one and another. With the existence of such acceptance, it would appear to be the trust between others.
Understanding and empathy	This attitude was formed to maintain the learning climate on the basis of self-initiative , then the teacher must have a sense of empathy especially regarding the reaction of the pupils . Teachers must have the awareness that is sensitive for the education process without any improper judgement or evaluation . Understanding the educational materials in enlightening other students and not the teacher.

The implications of the theories are shown in the following examples of learning processes (Siswanto, 2014, pp. 46-47): (a) Learning is not just memorizing. Yet,

the students are encouraged to enrich their knowledge. (b) The result of learning is not just to know the cognitive aspects of the students, yet it has to be reflected in the process of thinking and actions. (c) In the process of learning, students have to experience the learning process instead of just accepting others' ideas (teachers'). Therefore, in the learning process, the students must be accustomed with in solving their problems. (d) Learning must encourage students to interact with wider learning sources, which are not limited by the available sources and the classroom itself. (e) Learning process must position the students as the subject who is active to do learning process in which the teacher is as the facilitator of the learning process.

According to Rogers humanist learning, is in which the educator acts as a facilitator and motivator for the students. Both roles are applied in cognitive, affective and psychomotor aspects. An educator should be able to build a learning environment that is conducive to self-learning (self-directed learning). Educators should also be able to make the learning process as self-exploration activities. Galileo asserted that in fact we as teachers cannot teach anything, we just can help learners to find himself and actualize himself. Every human person has a "self-potential /hidden excellence" (hidden talents within themselves), the task of true education is to help students to discover and develop themselves as optimal as possible.

Generally, in terms of Indonesian education, there is a thought that reflects the core of humanist education genuinely. The figure who tried to emerge the importance of humanist education is Ki Hajar Dewantara. He tried to differentiate the implications of teaching and educating, even though the application of both terms should be synergized each other. Teaching is about creating freedom for people, especially being avoided from poverty and being uneducated. Meanwhile, education frees people and creating autonomy, decision making process, dignity and democratic mentality (Tommy, 2014).

With both of these synergies, Ki Hajar Dewantara propose a system namely *Among* theory which emerges humanist education paradigm. *Among* the system is a method of teaching and education that is based on the teaser, compassion, and care. The word *Among* itself is derived from a term where someone who is *ngemong* (caring) and devoting his soul. The system of *Among* itself is a way to apply the educational concept with the students' nature requiring their existence. The way to educate to be applied is to support or provide guidance and support for the students to grow and develop on his own nature. In this system, teaching means to educate students so they can become independent to the extent of their minds and strength. Teacher or tutor not only provide the necessary knowledge and value, but also to educate students to be able to find and internalize their own value and utilize it in their everyday life and for general charitable purposes. Therefore, the relationship between tutors and students must be based on a sense of love, trust, which is far from being authoritarian and indulgent in any situation. In this system, students are not only objects, but also a subject at the same time. Such this understanding is identical with the theory of quantum teaching in which the learning process requires full attention of the learners and at the same time employing their knowledge, feelings, and body language, and also involves some supporting elements, for example intelligence, attitude and belief towards a particular problem in the future. This has to be well managed in order to result in harmony (DePorter, 2006). Besides, quantum teaching is a teaching-learning process as an attempt to change the learning atmosphere, which results in

convenient by employing physical, psychological and emotional aspects of the students to be integrated one another. Besides, quantum teaching also emerges the principles of effective learning which emphasizes its importance in efficient and progressive learning activities with its learning method to result in astonishing learning achievement during a short period of time.

The principles of quantum teaching also direct the students to learn how to create humanist atmosphere within the classroom. In reference to that, the theory of humanizing classroom as emerged by John P. Miller is considered sophisticated to employ. In regard to this, Miller only focuses on developing affective teaching model, or in other words, a learning process that employs the principles of attitude based teaching. In this theory, in the process of teaching and learning, teachers are encouraged to treat the students in accordance with the students' real condition. This is believed to make the students: (1) realize themselves as part of growth that will always grow and change; (2) look for the concepts of their identity; (3) combine the awareness of their feelings and mind.

In order to do that, active learning theories could be the answer so that learners can be aware of themselves as active learners in the learning process. According to this theory, learning requires mental engagement and actions too. During the learning activities, students do most of learning activities. They also learn how to develop ideas, solve problems, and apply what they learn. According to its founders, Silberman (1996):

'Learning by listening means to forget; by listening and seeing the students will remember a little; by listening, seeing, and discussing with others the students will understand; by listening, viewing, discussion and will acquire the knowledge and skills; and how to master the best lesson is to actively convey what is already understood.'

From those theories, there is an understanding that in order to get a humanistic education, there should be an attempt to apply humanist learning which especially begins in the classroom. Hence, humanist learning is the attempt to enable learners to learn to pull out all the potential in him which, of course, must be supported by teachers who understand this humanist learning.

As the result, the integration and interconnection of the theories as proposed by Ki Hajar Dewantara, particularly in the process of teaching and learning will be an expected combination that is hoped to solve the problems related to education which has been dehumanized systematically. The integration and interconnection of the theories are basically considered as an integral in Ki Hajar Dewantara's principles that has become Indonesian most profound principles of education, namely *ing ngarsa sung tuladha* (teachers have to be the role models of the students), *ing madya mangun karsa* (teachers must inspire and motivate the students), and *tut wuri handayani* (teacher has to be able to appreciate and develop high trust among the teacher and the students).

The implementation of humanist education

From the research, there is linearity between ideals and realities related to the application of humanist education in school. This can be seen from the various variables of the proposed research, which includes the meaning of humanist education, examples of humanist schools, problems related to humanist education problems at school, school's strategies to develop humanist education, how teachers establish humanist education, supporting and inhibiting factors in

implementing humanist educational school, and supporting and inhibiting factors of teachers in implementing humanist learning process.

In the first variable, it is obtained that: humanist education is student-centered education, and according to his needs; humanist education is more concerned with the cooperative and democratic matters for its students; humanist education was also able to see the characters of the students, while the teacher facilitates and empowers students; humanist education is humanizing; humanist education is taught with love and in accordance with the mental development of the students; education that develops human nature as social beings whose noble character; education can foster human values in students; education that promotes religion, character, without much coercion or educate the heart; education that instills a good mentality to produce young generation with good mentality; and education that promote awareness among educators in which learners are not just objects, but subjects who also have opinions, thoughts and expectations (Nashir et al, 2020).

With this understanding, we can see how the opinions of the respondents about the view of the humanist school. According to the research, humanist schools are seen as: firstly, schools that implement "study center" and give examples of approaches rather than applying penalties. Secondly, schools with mutual respect, mutual help, democracy, responsibility, which treat learners as human beings who have spiritual power to create a pleasant atmosphere. Thirdly, schools are able to build the entire school community to create harmony between teachers, students, employees and other school citizens. Fourth, schools are able to build and establish the characteristics of the students to have high intelligences, such as, IQ, EQ and SQ. Fifth, the school that gives color to shape a student's personality to be better. Sixth, schools that uphold the values, ideals, foster human values, and form the character of students. Seventh, the school that has a vision, mission, and objectives for school's purposes. Eighth, schools that have stakeholders that promote the establishment of the students' strong character. Finally, schools that build a sense of comfortable school environment. With an understanding of humanist school, there is variation in a comprehensive understanding of the respondents in SMAN "X" Yogyakarta.

However, the ideals associated with humanist education in these schools will not be optimal if there is a problem in its application, especially in the family environment of the learners. From the research, there are many problems that occur, namely: firstly, disharmony in the family; secondly, a family which experienced *broken home*; Thirdly, the business of parents which finally cause less attention to the children; The fourth factor is the lack of awareness of internalizing religious values at home (worshipping); The fifth factor, supervising the students who stay at school when there are particular activities; the sixth problems is regarding the difficulty of internalizing a sense of discipline in children; and the last problem, the salary which is insufficient, so the family does not focus on the establishment of character.

In addition to the issues raised in the family of learners, humanist education problem also occurs at schools. Firstly, the collision between the student rules and penalties in order to discipline students with humanist education; secondly, being outdated in terms of technology; Thirdly, lack of disciplinary of the students; The fourth, the habit of postponing doing responsibilities; The fifth problem is that, students diminish manners; the sixth, motivation and enthusiasm for learning students who are getting worse; the seventh problem, the learning

outcomes of the students are still low; the eighth factor, students' concentration are questionable; and the last problem is regarding health problems. Those problems are quite complex and require a comprehensive treatment of the stakeholders in the school.

In addition to the home and school environment, the application of humanist education also encounter problems in society. Various problems that can be encountered educational outputs are: firstly, the public demands that are sometimes too high especially regarding cognitive and difficulties in its implementation; secondly, there are families who are not active and contributive to the environment; Thirdly, people who are less familiar with the environment which finally may decrease the level of concern for others; The fourth factor, the limited time for community activities; The fifth factor, there is a personal activity until late; The sixth problem, the forums or meetings that discuss humanist education are rarely conducted. Of the various problems above, it means that environmental factors will greatly affect their communities' humanist education. Of the various problems that exist in school, at home or in a particular community, a strategy that should be done in building a humanist education should begin at schools, considering the school is an educational institution related to the education of the next generation. Based on the research, it was found that the strategy undertaken at schools are as follows: firstly, the teacher should give an example of being discipline; second, teachers and employees should be friendly to people at schools; Thirdly, the teachers implement habits that is habitual and educative; The fourth factor, the teacher is able to develop a religious culture; The fifth, teachers nurture reward and punishment; the sixth strategy is that teachers build confidence of all components; The seventh factor, teachers apply attitudes that reflect responsibility, honesty, and humanity; The eighth factor, the teachers' belief is based on the vision and mission of the school as an affection-based school; the ninth factor is that the teachers transform learning strategies towards the humanist theory; The last factor is that the teachers collaborate with the school community in creating a comfortable and humanist environment.

Not only being able to provide examples of values, educators should also be able to overcome the problem regarding humanist education in the realization of learning in the classroom. From the research, the way teachers implement humanist education are as follows: firstly, providing the opportunity for students to be active and give a friendly appearance; secondly, to approach students as friends so that they do not feel afraid of; Thirdly, utilizing simple technology yet optimal to achieve the goal; The fourth aspect, encourage students to always be honest and able to work together in groups; The next way is that the activities must remind reflect, and indicate the professional competence of teachers; The sixth factor, seeking learning problems and solve them in accordance with the self-learners; the seventh way, giving good advice and give affection to students; the eighth way is giving example regarding the value of modest, polite, and respectful; the ninth factor is to motivate students to be excited in their studies for their success and safety of their life; the tenth, be patient to approach and seek solutions to problems together, especially with the family.

However, in doing anything there must be some supporting as well as inhibiting factors especially in implementing humanist education at schools, particularly in a classroom environment. From the data obtained during the study, the factors supporting the implementation of humane education are as follows. Firstly, the

means and the potentials that are already exist; secondly, the team with a solid charge; Thirdly, school programs that get support from students and parents and with sufficient facilities; The fourth factor, all elements of the schools with the awareness to achieve the same goals in educating students to have a good character; The fifth, the school community that is aware of each task in an attempt to realize the vision and mission and goals of the school; The sixth factor, there is harmony in the environment and also a great support to the school; the seventh factor is worship facility; and finally, the application for a noble

Meanwhile the inhibiting factors that happen in the implementation of humanist education in SMAN "X" Yogyakarta are: firstly, the difficulty of controlling the behavior of students outside of school; secondly, awareness, willingness, sincerity of the students which are difficult to find because of its privacy; Thirdly, inadequate funding which leads to the not maximum application of humanist education; The fourth factor is that there are some people in schools who do not support the implementation of humanist education; The fifth factor was that there are some people who behave as authoritarians at schools; The sixth factor was that their negative impressions and information for the application of humanistic education; Finally, the difficulty to maintain and control the right culture from day to day

In the learning implementation, the teacher also must possess supporting and inhibiting factors. Supporting factors are as follows: firstly, the existence of obedient students; secondly, the ability of students in the successful implementation of humanist education; Thirdly, their cooperativeness between the teacher and the students; The fourth factor is the willingness to be a good person with character; The fifth factor is in which the teachers apply humanistic theories through democratic and cooperative learning activities; the sixth factor is the presence of adequate internet network which provides the access to the information in accordance with the humanist education; Finally, the existence of harmonious school atmosphere and a good interaction between the various components of the school.

Meanwhile, the inhibiting factors of humanist learning are as follows: firstly, the learning process is not represented by the concept of the curriculum; secondly, colliding with the school target regarding academic achievement; Thirdly, there are students who still adhere to and follow the humanist learning; Fourthly, there are teachers who apply humanist learning when students' behavior is unexpected; and the fifth, there are some teachers who have not mastered the science and technology (Abdullah et al, 2019).

The integration and interconnection of the theories of humanist education

Humanism is the belief that every human being must be respected as a whole human being. Then, humanist education is education that can humanize humans. The teacher can recognize and treat students as subjects or personally. Then, recognition is transformed into a learning process that gives students the opportunity to exist so that they can develop themselves. As a result, their personal potential and attitudes grow towards a better and more perfect ranking. Students need to be treated as subjects who have their own roles, can manage their own activities, not as objects that are all determined by the teacher (Hibana, 2017).

Sastrapratedja adds about the humanist education thoughts. The concept of a humanist education that basically aims to build the three powers in the individual, they are: Power to is the creative power that makes someone

be able and wish to do something. Power also means as power which lies in every human being. Powers in the form of potential and basic capabilities which can be further developed as a form of self actualization. Each person has this power to. Power with, built solidarities based on commitment to a common purpose in order to solve the problems which is faced and creating gether prosperity. Power with is collective power. Power with is a form of unity from Power to. Someone who has the potential and power of the individual and then establish a commitment to work together, it will give birth to new strengths, called power with. Power within, the spiritual power of student to create people to be more human. Power within is inner strength, the spirit that makes people more eager to seek a freedom. Power within create because of the encouragement from power with.

From the above discussion, teachers and school institutions of SMAN “X” Yogyakarta strive to implement humanist learning activities, although the implementation is not optimal yet considering various supporting factors and obstacles that exist. Therefore, to implement the method optimally, humanist learning must be based on three aspects, namely the power to, power with, and power within. For more details, here is a table that can illustrate the importance of those aspects.

Table 2. Humanistic learning process in the classroom

Aspects	Teachers’ roles in the classroom
Power to	<ul style="list-style-type: none"> • Teachers encourage the students to show their ability and talents • Teachers form the students’ character through being a role model. • Teachers motivate the students to behave well. • Teachers adjust their learning strategies. • Teachers try to maintain a good communication with the students. • Teachers try to encourage the students to be active by being good supervisor, motivator and facilitator in the learning process.
Power with	<ul style="list-style-type: none"> • Teachers encourage the student to have good commitment and behavior during the learning process, especially in solving problems related to students’ life. • Teachers maintain polite and clear communication • Teachers motivate the students by being a role model who acts politely and respectfully • Teachers approach the students by in a friendly way • Teachers implement caring and emphatic habit among the students. • Teachers ask the students to be honest and maintain good cooperation through group works. • Teachers become a good advisor for the students
Power with in	<ul style="list-style-type: none"> • Teachers educate students’ character to be humanist as well as religious individuals by involving the students in sufficient religious activities.

	<ul style="list-style-type: none"> • Teachers become the role model in terms of changing habits to be better by approaching them spiritually. • The teacher asks the students to be aware of their religious matters by doing worshipping based on their own religion. • Teachers internalize religious values in the family and social environment.
--	---

Based on the implementation of the three kinds of power to maximize the potential of the students in the learning process humanist basically the teacher has given various efforts to implement humanist education. What do teachers understand and basically implement the Among theory and the principles of *asah, asih, asuh* (teaser, compassionate, and foster) enlightened by Ki Hajar Dewantara and integrate it with the quantum teaching theories which draw on the concept of humanizing the classroom and the concept of active learning that makes the students active persons or be the subject in the learning process.

The theoretical integration and interconnection can be realized when the teacher uses *Among* theory by trying to not only impart knowledge, but also to encourage students to seek their own knowledge actively. In the process, the underlying teacher with a sense of love, trust, and democratic, will see students as not as the object, but also the subject who are active in the learning process. This way is also part of the quantum theory of teaching in which learning becomes a full-contact activity that involves all aspects of the personality of students, such as thoughts, feelings, and body language, as well as knowledge, attitudes, and prior beliefs and perceptions of the future. Thus, the physical, psychological, and emotional students are into one entity in the learning process. In addition, the learning process as illustrated in the explanation above, the teacher also seeks to bring awareness to the students to be aware of themselves in their efforts to find their identity. When they are aware of themselves in the learning process, they will become active students who are able to develop cognitive and mental aspects and character. This is to be achieved in humanizing the classroom theory in its integration with active learning theory.

Interaction and interconnection in humanist education itself in the theory of *Among* and the quantum theory of teaching, humanizing the classroom, and active learning becomes essentially constructive for the character formation of the students who experienced dehumanization at this time. In order to stop dehumanization, the role of educators is very important, and this is targeted in the process of humanist education. This is because the role of the teacher as the “spearhead” of education that deals directly with learners who become the nation is next generation.

Important roles of educators can be realized by implementing three systems introduced by Ki Hajar Dewantara, namely *ing ngarsa sung tuladha, ing Madya Mangun Karsa*, and *tut wuri handayani*. Here are three things valued as noble value of education in Indonesia that could be implemented in the form of characters in a humanist education. Those three things are also the embodiment of the three powers of humanist education, namely the power to, power with, and power within. Thus, there is interaction and interconnection between the various theories that have been mentioned above, on which the purpose is how to implement humanist education so that the next generation is not experiencing

dehumanization and as the result, they can be educated figures with character to be proud of.

If it is associated with educational theory can be concluded that the teaching practices applied by SMA N "X" Yogyakarta inseparably linked with the principle of progressive theory. This is consistent with the characteristics of progressive education as described by Kneller (1971), among others : a) Education should be life not preparation, b) Learning should directly related to the interest of the child; c) Learning problem solving should take precedence over the inculcating; d) The teacher's role not direct but to advice; e) The schools should encourage cooperation rather than competition; d) Only democracy permits, indeed encourage, the free interplay of idea and personalities that is necessary conditions of true growth. These principles illustrate that the process of applied learning in high school tend to apply progressive. This is supported by the data observations of learning behavior and learning progressive for educational practices already implemented in schools. For example, to design the extracurricular activities of students to be fully involved in designing the program-program activities are favored and preferred by students as well: Japanese language learning program, create animations are examples of creative programs of students, in addition to flagship programs related to the formation of student character. If it is associated with the view Kneller then what students develop illustrate that the concept of education is not to prepare a person to face the future, or to meet the next life, as understood by the traditional. However, education is the actual life of the child (Ali, 2015: 64). The learning process of children experience life with all problems, including in solving the problem. School learning climate and atmosphere like this encourage the growth of culture democracy. In line with Kneller Knight said six principles of progressive education with a different focus. Attention Knight (1982: 82-86) as follows:

The process of education finds its genesis and purpose in the child

- a. Pupils are active rather passive
- b. The teacher's role is that of advisor, guide, and fellow traveller rather than that of authoritarian and classroom director.
- c. The school is microcosm of the larger society
- d. Classroom activity should focus on problem solving rather than an artificial methods of teaching subject matter.
- e. The social atmosphere of the school should be cooperative and democratic.

Knight emphasizes that children are personally active, not passive. Thus, in the analysis of integration and interconnection can be understood that in the application of learning humanist, further illustrate how the role of the teacher in the learning process that is capable of managing a class without having showed his power, but the teacher is able to establish a situation of social life in a smaller scale the school and classes in accordance with principles of progressive education that are contextually can refer to basic education Ki Hajar Dewantara that substantively of teaching of humanis values are quite applicable.

Based on the results of these studies it can be assumed that learning undertaken by schools with a humanist approach becomes the basis for the development of student competencies in facing the era of the industrial revolution 4.0, as evidenced by the ability to apply progressive education. Progressive education is based on progressivism which assumes that education must be based on the

nature of human beings as social creatures who are best at learning when they are in real life situations with others. This school of education believes that children learn to use the same method as scientists, following a process similar to John Dewey's learning model, which is 1) aware of a problem; 2) formulating the problem; 3) propose a hypothesis of the solution; 4) evaluating the consequences of hypotheses based on their past experience; and 5) test the most possible solution.

CONCLUSION

Based on the explanation above it can be concluded that the theoretical integration and interconnection in relation to humanist education is needed to establish the character of the students especially by applying humanist education and learning at schools, especially in SMAN "X" Yogyakarta. Links between nation's noble values combined with the theory of Western scientists would facilitate its application at the level of educational institutions. From the explanation above, the theory and application of humanist education in SMAN "X" Yogyakarta are proven in several variables: firstly, the meaning of humanist education for teachers. In this case, the teacher understand the meaning of humanist education as education that is able to move all dimensions and human potential in the process to be meaningful to life, family, community, and nation. Secondly, an overview of the humanist school, in which, the teacher illustrates the humanist schools as schools that instill character values, have the advantages, especially in developing the potential of students, educators' character, comfortable and fun environment to learn. Thirdly, the issue of the application of humanist education, in which, the teacher considers that the implementation of humanist learning experience that is comprehensive are faced with obstacles both external and internal. The next, building humanist learning strategies, in which, schools and teachers are encouraged to implement humanist education based on humanist educational theories not optimally with various problems. Therefore, to be optimal, humanist education should be based on the three powers, namely the *power to*, *power with*, and *power with in*. In addition, it takes the integration and interconnection of theories in relation to this humanist education so that it can easily be elaborated and applied in its praxis, namely the humanist learning education in the classroom.

REFERENCES

- Abdullah, R. N., Abdul Muait, J., & Ganefri, G. (2019). Students' perception towards modern technology as teaching Aids. *Asian Journal of Assessment in Teaching and Learning*, 9(2), 37-42.
- Curren, Randall (2014). "Motivational aspects of moral learning". *The Journal Moral Education*, volume 43. No 4.
- DePorter, Bobbi, et al. (2000). *Quantum teaching*. Bandung: Kaifa.
- Dewantara, K. H. (1977). *Bagian pertama pendidikan [First section of education]*. Yogyakarta: MLTS.
- Driyarkara. (1980). *Driyarkara tentang pendidikan [Driyarkara about education]*. Yogyakarta: Yayasan Kanisius.
- Dewey, J. (1963). *Experience and education*. New York: Collier Books, a Division of Macmillan Publishing Co., Inc.

- Driyarkara, N. (1980). *Hominisasi dan humanisasi, telaah filsafat pendidikan*. Yogyakarta: Sanata Darma Universitas.
- Felicia, A., Sha'rif, S., Wong, W., & Mariappan, M. (2017). Computational Thinking and Tinkering: Exploration Study of Primary School Students' in Robotic and Graphical Programming. *Asian Journal of Assessment in Teaching and Learning*, 7, 44-54.
- Freire, P. (2003). *Pendidikan masyarakat kota [Urban society education]* (Trans. Agung Prihantono). Yogyakarta: LKiS.
- John Dewey's New Humanism and Liberal Education for the 21st Century Janean Stallman *Education and Culture* Fall, 2003 Vol. XX No. 2
- Hibana. (2013). *Pengembangan pendidikan humanis religius di sekolah Madrasah [Religious humanist educational development in Madrasah schools]*. Yogyakarta: Pascasarjana UNY.
- Hibana. (2017). "The development of religious humanist education in elementary school-Islamic Primary School". *International Journal on Islamic Educational Research (SKIJIER)*, vol. 1, No. 1, 2017.
- Hermann, M., Pentek, T., & Otto, B. (2016). *Design Principles for Industry 4.0 Scenarios*. Presented at the 49th Hawaiian International Conference on Systems Science. 6-7 January 2016.
- Kuntoro, S. A. (2008). *Sketsa pendidikan humanis religius [Religious humanist educational sketch]*. Yogyakarta: Pascasarjana UNY.
- Miller, J. P. (1967). *Humanizing the classroom: Models of teaching in affective education [Menghumaniskan kelas: Model-model pengajaran dalam pendidikan afektif]*. New York: Praeger Publishers.
- Nashir, I. M., Esti, D., Ma'arof, N. N. M. I., Azman, M. N. A., & Khairudin, M. (2020). The Future of Leadership Framework in Malaysia Education Systems. *International Journal of Psychosocial Rehabilitation*, 24 (3), 1475-7192.
- Penprase, Bryan Edward (2018). *The Fourth Industrial Revolution and Higher Education*, June 2018. DOI: 10.1007/978-981-13-0194-0_9
- Paulo, Freire. *Pedagogy of the Oppressed*, terj. Myra Bergman Ramos (New York: Penguin Books, 1972), h. 20.
- Sastrapratedja. (2001). *Pendidikan sebagai humanisasi*. Yogyakarta: Published Sanata Dharma University.
- Sastrapratedja. (2012) *Humanisme sebagai prinsip pendidikan menurut Driyarkara*, The Research Paper delivered in Education Congress, Teaching, and Culture in, Balai Senat UGM
- Raka, G. 10 November 2006. *Guru transformasional dalam pembangunan karakter dan pembangunan bangsa [Transformational teachers in the development of character and nation]*. Paper presented in the 'Orasi Dosen Berprestasi Tingkat Poltekkes dan Tingkat Nasional' ['Oration of Outstanding Lecturers in the Health Polytechnics and National Levels], Jakarta.

- Rogers, Carl (1980). Rogers' Humanistic Theory of Personality." *Boundless Psychology*. Boundless, 20 Aug. 2015. Retrieved 11 Jan. 2016 from <https://www.boundless.com/psychology/textbooks/boundless-psychology-textbook/personality-16/humanistic-perspectives-on-personality-78/rogers-humanistic-theory-of-personality-308-12843>.
- Rogers, C.R. & Freiberg, H.J. (1994). *Freedom to Learn* (3rd Ed). Columbus, OH: Merrill/Macmillan.
- Rosman, R. N., Omar, M. K., & Zahari, Z. (2019). The integration of Education for Sustainable Development (ESD) in design and technology subject: through teacher's perspective. *Asian Journal of Assessment in Teaching and Learning*, 9(2), 29-36.
- Silberman, M. L. (1996). *Active learning: 101 Strategies to teach any subject*. USA: Allyn & Bacon.
- Suswanto. (2014). *Pendidikan humanis berbasis kultur Sekolah Dasar Tumbuh 1 Yogyakarta* [Culture-based humanist education in Tumbuh 1 Yogyakarta Elementary School] (Unpublished doctoral dissertation). Educational Science Study Program of the Graduate School of Yogyakarta State University (UNY), Yogyakarta.
- Tomy, A. S. (2014). *Pemahaman siswa terhadap pemikiran pendidikan Ki Hajar Dewantara di SMA Taman Madya se-kota Yogyakarta* [Students' understanding on Ki Hajar Dewantara's educational thought in the Senior High School of Taman Madya in the whole municipality of Yogyakarta] (Unpublished undergraduate thesis). Faculty of 6 Education of Yogyakarta State University (UNY), Yogyakarta.