Abstract— The Era of Industrial Revolution 4.0 has an impact on the young generation, especially on attitudes and character changes. In this case, we felt that the implementation of education about values, attitudes, and character in the educational institutions, either formal and non-formal education, especially primary education, was very important, and urged to increase its intensity and quality. This research aimed to develop a learning model in the form of a value clarification technique (VCT) based on a role-playing game for improving the value of internalization in the students. The research method used is research and development (R & D). The research subjects were the elementary students of grade V in the Bengkulu Municipality. Data collection was carried out by using attitude observation sheets. Based on the results of the study, it can be concluded that (1) internalization of student character values can be improved through the development of an integrated learning model between technique and games value clarification. (b) the application of learning models by integrating value clarification technique and game was very effective in improving the internalization of character values into students.

Keywords: VCT, role-playing game, internalization of character values

I. INTRODUCTION

The science and technological development, especially in the Era of Industrial Revolution 4.0, have an impact on socio-cultural changes, include attitudes and character. For the impact of this change, especially at this time, there was revolutionary in all aspects of life in the political, economic, social, cultural, behavioral, and other dimensions of life [1]. This change also occurs in both developed and developing countries.

Examples of socio-cultural changes are marked with Indonesian culture that was once known courteous, polite, gentle, caring for others, high social, and high cooperate shifted into a nation that less social sensitivity, and selfish. Reportedly, the learners of the United Kingdom, for instance, that the impact of science and technology causes the increase of harmful behavior, anti-social behavior, indiscipline, underachievement [2], drunkeness, unsafe sex [3], and juvenile delinquency in the community. Even the most remote villages and big cities in Indonesia, the symptoms have come to a very disturbing extent, such as student brawls occur everywhere, a fight mass, parents, kill her child, husband kills his wife and vice versa, fighting between learners and between schools, rampant corruption, social sensitivity barren and various other cases of moral decadence. These symptoms are by Ahmad Mustafa's (criminologist Indonesia University) due to the declining value of social and community life [4].

In line with this, we felt that the implementation of education about values, attitudes, and character of the institutions of either informal, formal, or non-formal education was very important, and urged to increase its intensity and quality. Formal education institutions, especially primary education, as an official container coaching children and young people, are expected to increase their role in shaping the character of learners through increasing the intensity and quality of education on values, attitudes, and character.

In formal educations, a teacher is one of the determiners in the success of every character's educational effort. That is why when there is an education innovation, especially in curriculum and human resource improvement resulted from educational efforts always lead to teacher factor [5] shows how strategic the teachers' role is in the world of character education. Thus, there is a need for teachers who can design instructional process, so the teaching can run well, joyfully, efficiently, and effectively to internalize values into the learners. The achievement of this kind of character education, a teacher, should be designed as an instructional model suit to their goal.

Character education is a specific approach to morals or values education, which is consistently linked with citizenship education [2]. Character education is a teaching method that fosters the development of ethical and responsible individuals by teaching them about the good values that people should
have. It teaches the students the values of caring about other people, honesty, responsibility, and other important traits that make for an upstanding citizen. The goals of character education are thus essentially the goals of raising good children: youth who understand, care about and act upon the core ethical values (such as diligence, compassion, integrity, and fairness) that make for a productive, just, and democratic society [6], while effective character education involves creating the kinds of the classroom and school environments that enable all students, without exception, to realize their potential to achieve these vital goals. So, a good character education program establishes a reinforcing system of positive influences that help youth to deal effectively with life and avoid becoming involved in negative behaviors [6].

In short, The primary argument advanced here is that by having schools focus on comprehensive character education—i.e., promoting the positive development of young people, not just academically but also emotionally, ethically, and socially—they may not only promote students' overall positive development as individuals and citizens but also effectivelly prevent the occurrence of a wide range of current social problems among our youth. Research evidence from many well-designed and conducted studies indicates that this more comprehensive approach could be a much more efficient and cost-effective approach to prevention than the adoption of a multitude of individual programs, each of which is focused on a particular social problem. The scientific evidence in support of this viewpoint is now sufficiently broad and convincing that practitioners and policymakers should seriously consider the merits of this broader approach to helping our youth avoid the many pitfalls of life and to developing their fullest capacities as caring and competent people, and as responsible citizens.

To do these all, we can begin from the viewpoint of cognitive development theory, which is from Bloom's taxonomy, where students' cognitive abilities start from the knowledge process to create something rational. Through a structured reasoning process by calculating the cause and effect, information can be understood and believed by students. This will affect the effective area of students who must experience coaching towards values. The implementation of value coaching is a teacher's task that must be clever in involving all potential students. Students are trained to be sensitive to values through the process of feeling, living, valuing, and wanting to absorb that value. The next process is clarification, where students will believe that value becomes a need that can be integrated with the values that already exist in students.

When the new value has been received through a clarification process, there will be a process of integrating between the new value and the old value in the student. This means that there has been a process of planting or internalizing values. The internalization of values in students can be seen from the actions or behaviors that they show. The culmination of the achievement of the internalization process is shown in the form of character changes. This change in character signifies the success of the teacher in fostering students through the learning process.

Changes in student character are targets that must be achieved by the teacher formulated in social studies learning goals. Achieving these goals is a contribution of a teacher in creating learning activities by applying learning models that are by the characteristics of students and support the achievement of character changes in these students. According to [7] that character values can be embodied in students, one of them through the Value learning model Clarification Technique (VCT).

The success of applying VCT to achieve learning goals is influenced by one of them by the attitude of the teacher in learning implementation. The teacher must show an attitude of openness and freedom to the child during the learning process. This attitude will influence the desire of children to open their hearts and affections to accept character values that will be internalized within themselves. When the teacher does not show this, then there will appear a false or imitation/fake attitude from the students that they show as a form of character dramatization that aims to please the teacher. This means that the effectiveness of the VCT model without the attitude of openness and freedom of the teacher in the implementation of learning is doubtful.

The same thing is supported by Tanirendja [8] that the emergence of false or false attitudes by students is due to the implementation of VCT, the teacher behaves as if instilling value in students, rather than fostering awareness to clarify new values and old values so that internalization processes occur value automatically in students. The learning process that tends to be stiff will also kill children's self-confidence to show the values that they consider to be true among their peers. They are acting right because of the doctrine of values from the teacher, not arising from trust in that value. So that in the end, the purpose of clarifying values in the child will not occur.

Overcoming this, a teacher must have an attitude of openness and freedom in applying VCT. Besides that, the learning process must be designed with activities that can meet the affective needs of students by motivating and modifying learning activities that are following the characteristics of students at that age. Characteristics of students who are the subject of learning are important elements besides the attitude of the teacher because students will have difficulty following and interpreting learning activities if the teacher designs learning activities that are higher or lower than their age characteristics.

The characteristics of the fifth-grade elementary school students are still in the concrete operational stage. In the age of concrete operations, children have begun to be able to think logically, but must be with concrete media support. In this case, the value is still in the form of abstract, so it has become the task of the teacher as a learning facilitator to concretize the values so that students can absorb them. Students must be interested in participating in each activity in VCT activities. The application of VCT in modifying values into concrete forms, it is wrong to use games in learning activities.

Game-based learning activities will trigger the activity of students in the learning process, given the characteristics of children who enjoy the game. Games can also be used as a tool to dilute the saturation of children when learning. Besides, the
role of children in the game can simplify the values that will be internalized to them, meaning that students indirectly portray themselves the impact of these values when applied to themselves.

Games in VCT are designed as a tool to concretize the abstract form of everyday life values into the classroom by adjusting to the theme of ongoing learning. This means that indirectly student affection will be fostered through game simulation in learning activities. One form of the game that can support the achievement of VCT in internalizing grades in students is role-playing or role-playing.

Djahiri, [9] also supports that role-playing simulations are intended to simplify the actual situation through complex scenarios. This means that learning with role-playing can make students feel the dilemma that exists in social worship more simply. Thus role-playing will be able to open the conscience and affection of students in internalizing the values in students. Based on the description above, this research will develop a learning model that is integrating VCT and role-playing games, then we call it as “roleplaying-based VCT models.”

II. RESEARCH METHODS

In developing roleplaying-based VCT models, the type of research called Research and Development (R & D) from [10] was applied in this study. In this study, researchers conducted research and development of the roleplaying based VCT model to internalize the value of collaboration in learning Social Sciences. The level of feasibility of developing the roleplaying based VCT model is obtained through validation by value education experts, teachers, and the results of applying the model to elementary school students.

The model development step is carried out by the researcher through four stages, namely the stage of data collection, planning, product development, and implementation testing in the field.

At the stage of data collection, researchers saw the real conditions of the process of learning social science in public elementary schools 78 of the City of Bengkulu. The researcher collects the data needed as material in the preparation of research plans. These data such as analyzing the needs of students according to the age characteristics of class V students, literature studies by comparing the data in the field with the ideal theoretical data, analyzing previous studies related to similar problems found by researchers in the field, making decisions by considering between the results of the pre-research data analysis on the needs of students in the field ideally are the formulation of a pattern framework for the development of roleplaying based VCT models and analyzing the patterns of research instruments.

In the planning stage, researchers refined the drafting of the development framework for the roleplaying-based VCT model in the previous stage. Furthermore, the researchers conducted: (a) deepening the learning steps that have been developed in order to be able to prepare skills in conducting research; (b) compile a draft syllabus and plan for implementing learning (lesson plan) based on the learning steps adapted to the material at the time of the research; and (c) develop evaluation instruments in the form of observation sheets and determine observers who are worthy to observe the results of the action.

At the product development stage, the researcher made a product for the development of a roleplaying game-based VCT model in the form of a complete implementation of learning plans, including evaluation instruments. The learning implementation plan is adjusted to the model development framework, while the evaluation instrument consists of two models of observation sheets. The first model was carried out by the teacher and the researcher observing the changes in student behavior in the classroom and outside the classroom, while the second model was the observation sheet on changes in the behavior of his friends while in a school filled by students.

At the stage of field implementation tests, researchers conducted a limited model test, namely in class V students, which numbered 25 students. Students are used as subjects when conducting social science learning activities by applying products that have been developed, while teachers are also used as the subject of field implementation test by becoming observers on the implementation of the product and the results achieved in the product.

Data collection techniques in this study were carried out by observing direct participation structured in the form of a checklist on the implementation of trial testing of the roleplaying based VCT model. Observation of student character changes is carried out by researchers and teachers using instruments, which have been compiled based on a complete grid, observing the character of students both inside and outside the classroom. Besides, observations of student character changes were also carried out in the form of character observations between students.

Data from the results of the research, both observations and tests, were processed in a quantitative descriptive manner and then described qualitatively. The following are the research instrument grids, as well as the value aspects that will be observed in this study.

| TABLE I. GRID OF INSTRUMENTS FOR OBSERVING STUDENT BEHAVIOR IN CLASS / OUTSIDE THE CLASSROOM |
|---------------------------------------------|-----------------|----------|----------|----------|
| Aspects of Value observed | No. Indikator | Kategori |
|-------------------------|----------------|----------|
| Religius                 | 1a, 1b         | 5        | 4        | 3        | 2        | 1        |
| Democracy                | 2a, 2b         |          |          |          |          |
| Love peace               | 3a, 3b         |          |          |          |
| Responsible              | 4a, 4b         |          |          |          |
| Hard work                | 5a, 5b         |          |          |

Description: 1 = Very often done; 2 = Often done; 3 = Sometimes done; 4 = Rarely Done and 5 = Never.
TABLE II. GRID OF PEER OBSERVATION INSTRUMENTS

| Name       | Aspects assessed | Kategori |
|------------|------------------|----------|
|            |                  | 5 4 3 2 1 |
| Religious  | Indicator        |          |
| Democracy  | Indicator        |          |
| Love peace | Indicator        |          |
| Responsible| Indicator        |          |
| Hard word  | Indicator        |          |

Description: 1 = Very often done; 2 = Often done; 3 = Sometimes done; 4 = Rarely Done and 5 = Never

Analysis of attitude observation data obtained from the results of the scale of the instrument's validity research uses the rating scale principle where raw data in the form of numbers are then interpreted into a qualitative form.

While the results of class tests were analyzed using t-test analysis and t-test using Microsoft Excel. The T-test in this study was used to see whether or not there was an effect of changes in student behavior due to the adoption of the development of roleplaying based VCT models in students.

III. RESULTS AND DISCUSSION

A. Development of learning models role-playing game-based VCT in internalizing Character Values

The pattern of developing the roleplaying based VCT model of the game consists of twelve learning steps as followings. First, determining this moral dilemma is determined by the teacher who is adjusted by the material discussed during the implementation of learning by applying the development of the role-playing game based VCT model on social science subjects. Second, the teacher informs students about the topic of a verbal moral dilemma. Third, then students freely choose the character they will play in the simulation. This choice is freely chosen and played by students without reason for affection from the conscience of students. Fourth, then students determine the role of the character they have chosen before. Fifth, before playing the simulation, they freely determine and choose the observer themselves who will observe the simulation. Sixth, students play their choices in scenario simulations. Seventh, students determine several attitudes from several alternatives of choice. For the simulation, students freely determine some good attitudes to the simulation results. Students who have felt the situation of moral dilemma in the simulation will choose some attitudes that are considered better on several alternatives than the choice. Eighth, alternative analysis is done by students on the choice of values or new attitudes. Analysis of the consequences and causes that they will get if they choose that value. Ninth, on the results of the analysis, found the benefits they chose, then there will be a sense of pride in their choices so that they maintain their chosen choice of values. Tenth, then the students re-determine the choice to be more confident about the benefits of the choice. Eleventh, evaluation, and feedback on the development of value internalization. This evaluation classically takes place in discussions and sharing experiences between student actors and observer students, and then the teacher also provides these responses and evaluations. Twelfth, the occurrence of value internalization or changes in student behavior. Next is the chart for developing VCT learning steps based on role-playing games.

![Fig. 1. Development of VCT learning steps based on role-playing games](image-url)
C. Implementation Development of Game-Based VCT Models

Conduct pre-action observations of all observers used. The design or the steps of the research conducted; and (f) Submission of validation to expert lecturers on the results of (c) socializing peer evaluations to individual students; (d) values in students; (b) preparation of evaluation instruments; of a game based VCT model that can internalize character by the researchers are as follows: (a) drafting the development research steps

The design or steps of the development research carried out by the researchers are as follows: (a) analysis of the development of game-based VCT models, (b) ability in conducting research, and (c) design or research steps

Preparation of syllabus; (e) a lesson plan development; (f) Submission of validation to expert lecturers on the results of the design or the steps of the research conducted; and (f) Conduct pre-action observations of all observers used.

D. Evaluation of VCT Model Development Based on role-playing games in internalizing Character Values.

The implementation of game-based VCT learning models is carried out by observations by researchers, class teachers, and students. Observations were made on pre-action and post-action in the form of a learning process. Preaction observation was used as a reference for changes in student behavior observed, while post-action observations were compared to conclude from the research results. Observations are made on a different day from the implementation of learning and carried out for one week. It is intended that the results of the observation be carried out as a whole in observing changes in the value of internalization behavior in students.

Each observer will observe changes in behavior from the research subject every day. Data from observations of researchers, class teachers, and students are then accumulated to obtain reliable data so that it is feasible to be analyzed using the t-test that measures the increase and change in student behavior. Based on the results of the test, researchers can conclude.

The evaluation phase of model development in research is generally dominated by effectiveness tests. In this study, the evaluation phase is described in the form of the process of carrying out the assessment. Research conducted by [12] did not describe the evaluation of model development but only described the transformation process of character values through VCT and examined the effectiveness of the VCT model in transforming character values in students. Evaluation is part of the effectiveness test, which is one step before that stage. Evaluation is more directed at the assessment of data collection, which will be tested for its effectiveness on the subject of the study.

E. Model Development Effectivity Test VCT based role-playing game in Internalizing Character Values

The results of the observation sheet in the form of observations of researchers and teachers and observations between friends are shown as follows:

| Description | Pre-action | Post-action |
|-------------|------------|-------------|
| Highest score | 3,3 | 5 |
| Lowest score | 2 | 3,3 |
| Mean Score | 2,41 | 4,33 |
| Variance | 0,12 | 0,33 |
| Standard deviation | 0,35 | 0,57 |

TABLE III. RECAP OF VALUE OBSERVATION RESULTS CHARACTER
Recap data from observations of student attitudes are carried out by students, teachers, and researchers. Pre-action data were obtained from observations made by students and teachers before the VCT class was given action by applying a game-based VCT learning model that had been developed by researchers. The results of post-action actions based on the results of observations of students, teachers, and researchers were obtained based on the results of observations of students, teachers, and researchers on student attitudes when researchers have taken action against students. The data above shows that there were significant changes before the action and after the action. The following are the results of the t-test analysis data from the observations above:

| Data | Class | Pre-action | Post-action |
|------|-------|------------|-------------|
| Average | 2.41 | 4.33 |
| Variance | 0.12 | 0.33 |
| N | 25 | 25 |
| DF | 48 | 48 |
| T count | | 6.78 |
| T table | 2.01 |
| Conclusion | T count > T table |

Based on the table above, the results of the t-test analysis of observations on changes in student attitudes in pre-action and post-action show that there is an increase in the average results of changes in student observations before giving the action of 2.41 to 4.33. For the calculations that have been analyzed, the t-table shows 6.78, which means t table > than t count, i.e., 2.01.

This shows that there is a significant increase in behavior/character changes after students are given a treatment of character values learning in the form of the role-playing game-based VCT model. This means that the application of the role-playing game-based VCT model has an effective impact on internalizing character values in students. This finding is in line with the results of research by [13], stating that the role-playing games working well be able to help students to explore their differently formed because by adopting new and different roles, students gain proficiency in sympathizing with and articulating the perspective of a different viewpoint, especially in playing the role of a certain character role. The students then, understand rationally and internalize the moral value of character which they have been playing. This means that the use of role-playing in learning processes can contribute to learning outcomes by allowing students to experience ideas coming to life rather than only encountering them passively through reading or listening. In other words, students will learn to practice values such as civility and empathy, and role-playing games are particularly well-positioned to develop these traits.

Role-playing games are not only value-laden (as are all pedagogical methods), but that they are rich in many of the same values, are trying to cultivate: openness to multiple viewpoints, empathy, socialization to proper discourse, and democratic student leadership. [13].

Mark Carnes [14] observes that role-playing games, more than some traditional pedagogies, can teach precisely these skills. In roleplaying games, students are forced to form alliances, debate important issues, and make decisions with significant consequences for the outcome of a game. Mark Carnes [14]. Advances that the most effective pedagogical method that he has encountered for teaching to this outcome is experiential learning, including assignments that require students to meditate or fast [15]. Thomas Martin [15] argues experiential learning is key for aiding students with the integration of their faith commitments and classroom learning, and then role-playing games may offer a particularly effective method of producing I.

### IV. CONCLUSIONS

The development of a game-based VCT model was developed into twelve lessons. The twelve learning steps are: determining social dilemmas, information to students, choosing the characters to be played, determining roles, determining observers, acting out, determining some attitudes from several alternatives, analyzing alternatives (consequences of choices), arising pride in choice, rephrase the choice, evaluate and feedback and value internalization occurs.

Planning the development of game-based VCT learning models begins with the preparation of the A LESSON PLAN and syllabus, preparation of the ability to carry out learning, determining space boundary scope of research

The implementation of game-based VCT development that can internalize karate values in students includes the freedom of students to choose each action and value they deem appropriate. The students feel the benefits of that value, so they want themselves to apply these values within themselves.

Evaluation of learning activities that apply the development of game-based VCT learning models is done by observing class teachers and researchers by guiding observation sheets and involves evaluating between students who have a score on the observation sheet between friends. The development of game-based VCT learning models is effective in internalizing character values in students, and this is evidenced by changes in student behavior as indicated by the results of pre-action and post-action attitude t-test analysis.

### V. SUGGESTIONS

Based on the conclusions above, the researchers contributed suggestions in the form of:

- If the teacher intends to apply the game-based VCT learning model in the learning process in class, the initial capital that the teacher must have is to create an open and pleasant atmosphere during the learning process.
- Careful preparation determines the achievement of the objectives of applying the game-based VCT learning model because if time management is not controlled by the teacher, it will be difficult to achieve the expected learning goals.
Use observations between friends to get more realistic observations of students’ attitudes, values, and behavior.

REFERENCES

[1] Badeni, B., & Saparahayuningsih, S. (2016). An Attitude and Character Instructional Development Based on Curriculum 2013 in Elementary School. Creative Education, 7(February), 269–277.

[2] Arthur, James. 2005. (2005). The ReEmergence of Character Education in British Education Policy. British Journal of Educational Studies, 53(3), 239–254. https://doi.org/10.1111/j.1467-8527.2005.00293.x

[3] White, Robert, Michael. (2010). Building Schools of Character: The Development, Implementation, and Evaluation of a School-Based Character Education Programme Designed to Promote Cooperative Learning and Reduce Anti-Social Behavior, Durham theses, Durham University. Available at Durham E-Theses Online: http://etheses.dur.ac.uk/189/, 2010

[4] Koran Sindo, 28 January 2014.

[5] Parmiti, D. P. (2018). The Effect of Value Clarification Technique (VCT) using Contextual Problem Content on Social Attitude and Social Science Learning Achievement of the Elementary School Students. SHS Web of Conferences, 42, 00092.

[6] Battistich, V. (2005). Character Education, Prevention, and Positive Youth Development. Character Education, Prevention, and Positive Youth Development.

[7] Prastowo, Andi. 2013. Pengembangan bahan ajar Tematik. Bandung: Alfabeta.

[8] Taniredja, T., dkk. 2015. Model-model pembelajaran Inovatif dan Efektif. Bandung: Alfabeta

[9] Djahiri, K.A. 1985. Pengembangan Model Pembelajaran Nilai. Bandung: Alfabeta.

[10] Borg, W. R., & Gall, M. D. (2003). Educational Research: Introduction (Seventh edition). Educational Research: An Introduction.

[11] Putra, G. Dkk. 2013. Jurnal Pengembangan Model Internalisasi Nilai Karakter dalam IPS Melalui VCT Se Solo Raya. (Online)

[12] Kunandar, A. (2014). Model Literasi Media Pada Anak Dalam Mencegah Konflik Sosial. Profetik, 7(1), 87–99.

[13] Howard Melanie A. (2018). Role-playing games as an active learning strategy for value information.pdf, 274–287.

[14] Carnes, M. C. (2014). Minds on fire: How role-immersion games transform college. Cambridge, MA: Harvard University Press.

[15] Martin TW. Faith in the Classroom: The Perspective of a Pastor Called to College Teaching. Teach Theol Relig 11(4):213 - 221. 2014;11(4):213-221