

# The Implementation of Model of Teaching Scientific Attitude in Subject Matter of Science At Junior High School in Indonesia

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**Abstract.** The scientific attitude is important for students developed in schools to support of spiritual and social attitudes that are listed in the curriculum 2013. Scientific attitude of students will not appear suddenly if it is not constructive directly by the teacher. The learning models of scientific Attitude, is done with six steps namely; 1) formatting the Group (group), 2) designing the program activities, 3) producing products, 4) getting an understanding, 5) internalizing the scientific attitude, and 6) conducting an assessment of attitude. The qualitative indicator appears as a lot of the results of the study which is characteristic of the attitude of the scientific domain with objective, systematic, logical and empiric. This learning can build models of thinking patterns (mindset) of students and scientific attitude of the students. However, the average test results scale attitude shows instead that these models did not differ significantly between the experimental and control classes. There needs to be a follow-up study to refine the model of teaching scientific attitude.

**Keywords:** model of learning, scientific attitude, spiritual attitude, social attitudes, and mindset

## VI. INTRODUCTION

Education is the only way of improving intellectual, attitude, awareness and good behavior. During this time the school is less attention to posture as a result of learning, size and assessments including structured learning process as well as the attitude are not the domain of knowledge and skills. Attitude is important, but the attitude of the learning process in the school teachers have received less attention. Therefore, it is natural that various social problems arise in the community. Social problems that arise in the community, largely due to the low intellectual level, attitude, and awareness. The results showed that the intellectual level is closely related to attitude, behavior, and student awareness (Hasan Langgulung 1990; Fishbein & Ajzen 1975; Brehm & Kassim 1990; Sax 1980; Ashaari, 2001; Bruce & Weil 1985; Mar'at 1982; Robert et al. 1995; Hendri in Robert et al. 1995, and Wahidin, 2004).

The phenomenon is considered to be difficult for teachers in curriculum implementation in 2013 was the achievement of Core Competence attitude (spiritual attitude/core competencies (KI.1 and social attitudes / KI.2). Learning this attitude "new thought", because the SBC in 2006 does not explicitly as in 2013. Curriculum Aspects of attitude is believed to be an important part that contributes greatly to the dignity of students in his life. But, how to effectively reach the target? The teachers find it difficult to carry out planning, even the process of evaluation of learning attitude. During this time, teachers implementing the learning attitude as "not programmed" even if teachers know the standards of graduation (SKL) attitudes in the curriculum.

Teachers are not accustomed to "presenting" concepts in integrated subjects for students to accomplish a certain attitude, such a scientific attitude, social attitudes, including the spiritual attitude. Example; how the concept of science can increase the confidence of students against the laws of nature? how teachers improve students' beliefs explanation of the creation of this universe? how to practice honesty and objective train science students? Because attitude is based on the understanding that is the basis of the formation of consciousness and behavior of students (Joice, 2009).

The problem in this research is how the teachers' skills in designing, implementing and evaluating scientific attitude in students learning in school. The target is to optimize the learning achievement of learning outcomes for all learning domains, namely cognitive, affective, psychomotor and creativity. Teachers in the learning process are expected to use the community and the environment as a learning resource effective and touching human dimension. Signs that should be a concern of teachers is the local knowledge (cultural values, religion, and beliefs) and local potentials that exist in society. Finally, teachers are able to analyze the factors that influence the success of learning scientific attitude in science learning in junior high school students one grade 7 Cirebon?

The purpose of this study to reveal the teachers' skills in designing, implementing and evaluating student learning scientific attitude in school. To validate the model of learning scientific attitude in optimizing achievement of learning objectives domain of cognitive, affective, psychomotor and creativity. Revealing the skills of teachers to use the community and the environment as a learning resource that is effective and touching human dimension. Revealing the teachers' skills in using local knowledge (cultural values,

religion, and beliefs) and the local potential that exists in the community.

*A. The concepts of model of teaching scientific attitude in science subjects: some theoretical background*

The essence of education is actually training people to think in accordance with the criteria of the scientific attitude. In the theory of education said that the brain works is based on the concept that goes into the brain then processed to produce an understanding of a particular object, this understanding will shape the attitude to act against the object, eventually this attitude will bring forth awareness to act or take action against the object it continuously. Behavior as a goal of education was established through a scientific attitude, approach.

Scientific attitude is based on the scientific thinking process. Scientific thinking is a mental process involving complex brain, heart, and taste to make a decision (Wahidin, 2004). In this study, the theory used in the attitude of reading the reality of what happened in the student activity in conducting the learning process. Attitudes influenced cognitive as understanding the requirements, while the theory of consciousness as behavioral requirements. Therefore, the attitude that appears on the student as a choice himself. Attitude is the result of the brain that is supported by awareness, confidence, empathy, humanity, conviction, and hope for the future as a function of the heart.

Attitude yourself someone influenced by knowledge, beliefs, thoughts, and experiences himself. An attitude which appears also as a result of thinking that he realized was a scientific attitude (Bronowski, 1978; Diederich, 1967; Whaley & Surratt, 1967); in The Grand Rapids Public Schools (Waston; 1961, in Wahidin; 2004, p 76-77).

Individual attitudes can shape the attitudes of the community so that it becomes a permanent culture. Especially Indonesian culture in each region vary. Diversity is supposed to enrich the attitudes, awareness and community wisdom, but that happens sometimes otherwise be a "trigger discord". The reality in society, sometimes the diversity of culture, religion, and ethnicity is a potential conflict. Conflict occurs essentially, due to the different mindset, attitudes, and behaviors of both individuals and groups. Conflicts arise when individual differences arise and strengthened when there is interaction with each other, ultimately attitudes and behavior that might offend one another (Covey, 2002; Ki Hajar Dewantara, 2004).

In the school curriculum, attitude is a required core competency. Because, it determines the behavior and way of thinking, so it is important taught to students in schools (Curriculum 2013). Student performance unhealthy like; how they dress immodestly, not keep self's Health,

communicating to offend others, littering, not wait for the queue, and the various ways of life that do not reflect "good attitude" as a result of learning. In addition, behavior such as defamation, insult, pleased to see others suffer, feeling happy to see other people succeed, do not pray for the success of others, and so forth. Phenomena that exist in our society.

The phenomenon of society which reflects the weakness and fragility of the attitude of the social-cultural cohesiveness shown among others; (1) people easily believe in opinion though it is not axiomatic, (2) the community is weak in the "principle of life" because of poor intellectual level, for example when the election, (3) the difficulty of building self-reliance, especially in thinking, (4) solid stance despite the "wrong" and felt completely alone, for example, a cult (5) conflicts between ethnic, religious, organise, groups, political parties and between the interests of society, (6) occurs unfair competition in society, and so on (Wan Mohd Nor Wan Daud, 2007).

Social reality, behavioral and spiritual attitude of the community above, adding to the burden of external factors of our education. In face to MEA (2016), the external factor is a challenge that requires the power of a good attitude, knowledge, and skills should be brave and competitive. Meanwhile, the current public perception towards education still focuses on cognitive aspects and skills. Aspects of the character (attitudes, awareness, and personality) are necessary but "neglected" in the learning process (Zulkipli Anas, 2013). Actually, the development of knowledge and pedagogic already more advanced, such as neurology, psychology, and observation based [discovery] learning and collaborative learning. So that the school can provide students with the better intake to protect against negative phenomena that arise in the community such as; student fights, drugs, corruption, plagiarism, cheating in examinations (cheating), and the turmoil of society (Curriculum, 2013).

The framework in this study applies the theory learned in the view of Bruner (1960), Gowin (1985), Novak (1980) and Benjamin S Bloom (1956) that attitudes can be formed as a result of learning. The learning process as part of the conventional education system contains elements such as new input, process, learning outcomes, while the outcome may assessment after graduates in the community. Aspects of scientific attitudes formed as a result of education is a series of processes begins with understanding the concept is supported by cognitive factors, skill, creativity, thinking patterns, internal and external factors. That process gave birth to consciousness. Awareness that occur in a person because of his education will display the learned behavior "mature". Behavior then formed the habit in life, and

eventually, in one community will shape the culture. A culture that has shaped human civilization because it was born from a series of educational process that begins with a correct understanding. In this study, its null hypothesis is "There are no significant differences between the averages score of the test results scale scientific attitude grade students taught by learning model with a scientific attitude that is not".

## VII. METHODS

This research was conducted to science teachers and students of Junior High School (SMP) 1 in Cirebon City. Reasons sampling in the city of Cirebon, because Cirebon values cultural unique, historical valuable potential national with various Islamic cultural sites nationally recognized so Cirebon becomes spiritual tourism destinations nationwide.

This research approach is a mixed method, the data obtained is the data is quantitative assessment attitudes of students as a result of learning, and the data is qualitative namely teachers' perceptions, and behaviors that reflect scientific attitude of students as a result of learning using learning model attitude based on local wisdom and potential local Creswell (2014). Qualitative data analysis reinforces the description of the results of quantitative data analysis to study more meaningful.

Population and sample in this research is a science teacher and students in grade 7 who have implemented the curriculum of 2013. The research sample is determined by purposive sampling SMP 1 Cirebon. Teachers SMP 1 Cirebon already technical guidance curriculum of 2013. The sample class that will be used as a control group and the experimental class is class 7, which randomly assigned simple.

This research was conducted in several stages; (1) Designing learning with teacher preparation through study lesson plan (RPP); (2) Improving the RPP; (3) The testing model for model validation teaching scientific attitude, and (4) Conducting model of teaching scientific attitude. The scientific attitude learning model used in this study adopted the results of the study Wahidin (2015) as follows;

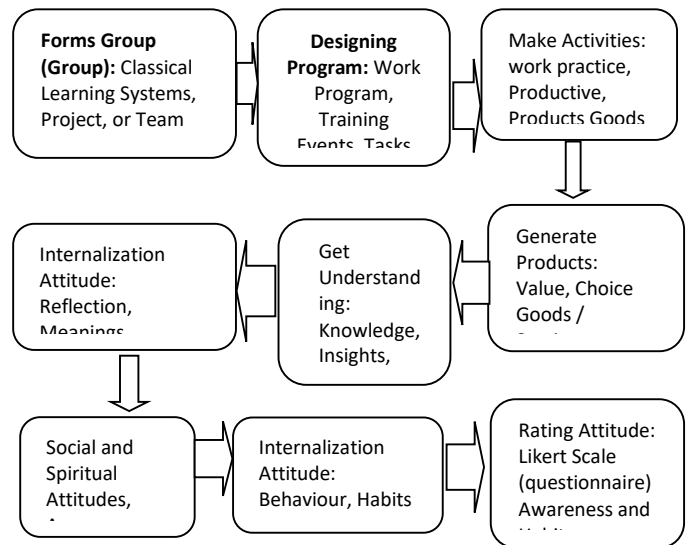


Fig.2 Model of Teaching Science Attitude

[1] The first design is related to quantitative research (Creswell, 1994, James Millan, 2001) as follows;

[2]	Group	[3]	Treatment	[4]	Post Test	[5]	
[6]	Experiment	[7]	Model of Teaching Science Attitude	[8]	X1	[9]	and samplin
[10]	Control	[11]	Conventional	[12]	X2	[13]	and samplin

[14] Note: X1 = Test attitude scale (experimental group)

X2 = Test attitude scale (control group)

The second design is a qualitative study designed to analyze the qualitative data scientific attitude, local knowledge, and local potential. The results of the analysis and description of the quantitative research, qualitative research as a basis perform like; thinking patterns, the factors of taste, a process of internalization attitude, local knowledge, local potential and scientific attitude indicator assessment as learning targets. Setting the research done by considering the condition of the informants in the school environment. Research model of learning scientific attitude in learning science at school related to patterns of interaction, the concept of science, attitude indicator, patterns of thinking, the taste factor, motivation and environmental factors as a learning resource for science teachers and students Creswell (2002) and Bungin (2007). The linkage was integrated into the mindset of an objective, empirical, logical and systematic in accordance with the

characteristics of science. Data collection is used in the table below;

Table 1  
Theory, Data, Informant and Subject

The table above explains that the quantitative data collected through an attitude scale tests. While the qualitative data through observation (video teaching) and the results of in-depth interviews with teachers and qualified students. Techniques to improve the quality and limitations of this study used a model Guba (in Krefting, 1990) using four levels of trust: credibility, transferability, dependability, and confirmability.

For quantitative data analysis, this research involves the scientific attitude indicator that is logical, empirical, systematic and objective which is the result of learning. Overall the data will be analyzed by using a different test to measure the research hypothesis, the pattern Posttest-Only Control Group Design. In the early stages of pre-testing that is testing the data distribution normality and homogeneity of variance on each cell research. Then the data were analyzed in order to validate the accuracy of information from informants in the form of raw data (transcriptions, images, field data, and so on), process and prepare data for analysis, read the entire data, coding data in the form of themes and descriptions, then connect some predefined theme/descriptions were to do the interpretation and concluded

#### VIII. RESULT AND DISCUSSION

Cultural diversity adds to the wealth of potential students to co-exist and inter-cultural resonance in the process of transforming scientific attitude. Students and teachers are more likely to conduct collaborative scientific attitudes through social interaction and ways of thinking that transformed the teacher to the students. SMP 1 Cirebon, as State schools with capital from the government capital in the form of DIPA and capital potential that exists in it, supported by community conditions Cirebon city with various ethnic groups (Chinese, Javanese, Sundanese) and religion (Muslim, Christian, and Hindu Buda). In addition, the views of parents' backgrounds, quite varied as children's State officials, politicians, businessmen, teachers, professors, traders, chaplain and even ordinary people and laborers.

##### A. Teacher perception toward implementation of curriculum and learning model of teaching science attitude

Teachers' perceptions of the competence of the attitudes of students in the school curriculum is quite diverse, among others; 1) lack of attention, 2) are subjective, and 3) the attitude is not in the exam,

No.	Theory	Data	Informant	Subject
1	Attitude Kaiser 2000; Marzano, 1985; Stonehouse, 1975; Mar'at 1982, Fishbein, M. & Azjen, I. 1975, Bruner, 1960)	Attitude scale test results	junior high school students	Indicator scientific attitude, Curriculum (2013) 54 and 2013, No. 65 and 66 ( 2013)
2	Scientific attitude of local knowledge, local potential, and attitude (Aenon Mohd. & Abdullah. 2000, De Bono, 2000, Kirby, R. & G. Jeffery, R.G. 1999)	Interview result	Science teacher and junior high school students	Indicator : Learning science, patterns of thinking, a sense, the process of internalization, local knowledge, awareness, attitudes, habits, ratings scientific attitude

4) sometimes assessment methods student attitudes enough to see a good student, a good gauge, 5) attention to the student that "rogue" done with counseling and 6) the difficulty assessing the attitude because the number of students is too much. There are some things that need to get an understanding and perceptions of teachers, namely;

- Attitude domain as important as the cognitive, psychomotor and creativity means need to be taught,
- Attitudes taught by teachers in the integration of the subjects, not just nurturant effect so that teachers can intervene to students,
- The assessment must be made to each student (together with other domains),
- Every indicator of attitudes in the curriculum should be measured success,
- Build the same perception among students and teachers when learning took place,
- Building awareness to students in the achievement of learning outcomes
- Perception of students "fuss" when learning is an indicator of the failure of teachers to manage the classroom needs to be revamped,

- Need the synergy of learning attitude at all levels of education from elementary school up to university is the demands of the curriculum, and
- The exemplary attitude in the learning process is important, the attitude is not enough by example as already a perception at this time, but the attitude still taught like the domain of cognitive, behavioral students who demonstrate an attitude indicator is controlled in the process of learning and assessment.

Teachers teach reasoned difficult due to the attitude of "no attitude in the test". This expression is a mindset, a culture of formality is already a part of the life of our society. This is what needs to get the attention of stakeholders on the attitude of students in school education. Although there is no specific exams attitude, the attitude is not the exam requirements, but the attitude is important. The teachers know that there is in the book, the assessment report cards, in the document "good behavior" and attitudes needed in a variety of things included in the determination of one's position. If the attitude of the students obtained naturally, is not conditioned in a planned in the learning process, the student learning outcomes will continue to limp forever.

*B. The achievement of the scientific attitude of students as a result of learning*

Results observation appears on the scientific attitude as a student learning outcomes at each stage of the process/learning activities are as follows;

- Activity groups
  - Open behavior
  - Behavior to accept the realities of life
  - Behavior to accept the facts
  - Behavior to cooperate
  - Behavior to accept differences
  - Behavior to communications with others
  - Behavior to honest
  - Behavior to will do for the common good
- Activities designed the program
  - Responsibility for work
  - The success of the group
  - Compliance with the guide work/student worksheet and books (reference)
  - Bring up the idea of completing a task together
- **Conducting activities program**
  - Attitude cooperation
  - Respect for others and curiosity about the material to be delivered
  - Dare to reveal the attitude of ideas and answer questions

- Acceptance of the current shortage of criticism and suggestions when presenting the results of discussions
- With respect and provide an opportunity for friends to uncover ideas and communicate when a presentation is done
- Attitude meticulous in writing data
- An objective attitude in cooperating

- **Products**

- Attitudes to cooperate
- Attitude honest in collecting data
- Respect the work
- The attitude of openness
- The attitude of responsibility
- Respect the opinions of others
- The attitude of togetherness in action do the job
- Attitudes to achieve the target to be obtained
- bold attitude and convey ideas

- **Understanding**

- An open attitude
- Attitude to accept
- Willing to share experiences attitude/demeanor would give
- Attitude to would ask
- Attitude to choose and make decisions
- Curiously
- Courage uncover ideas and concepts (group presentations)

- **Internalization of scientific attitude**

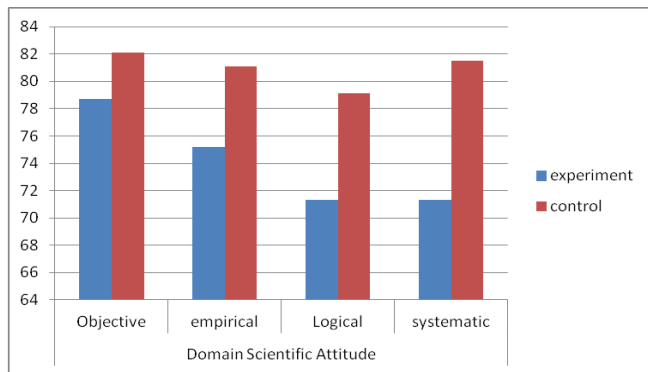
Teachers pay attention to the behavior and attitudes of the students one by one outside the classroom indirectly (be especially difficult with so many reasons students), including the process of teaching attitude;

- Schools implement literacy program (every Saturday) and the Qur'an (Monday up to Friday) morning for all students,
  - student presentations in front of the other students on the book that has been read
  - Some teachers tutor each student group
- The behavior of the students in the cafeteria, during a visit to the teachers' lounge, in the mosque, in parks, and in other places that can be monitored

The above findings appear in the students, although not uniformly carried out by each individual student, but the indicator that appears in the learning activities.

*C. Description achievements of scientific attitude of students*

Comparison of scientific attitude domain obtained as a result of the attitude scale tests, the experimental class, and control class can be described as follows;



Graph 4.1 Comparison Test Result of Scientific Attitude Domain

Based on the chart above 4.1 can be described that in general students acquire scientific attitudes as a result of learning. The attitude of the students there is a difference between the attitude domain objective, empirical, logical and systematic. But, for almost the same control class. Experimental class, it turns out an average of test results obtained attitude highest objective domains than others. While the scientific attitude and systematic logical domain are relatively low. These figures can be explained, that the junior high school students grade 7 is still dominated way of thinking objectively and empirically while the use of conceptual thinking is logical and systematic are still low. At almost the same control class, due to the general students of SMP 1 Cirebon, many extra and intra-curricular who already support the improvement of students' scientific attitude. In addition, students of SMP 1 Cirebon mostly students of upper middle class (from the academic aspect) is the students' choice ". It also includes parental background, only a small portion coming from the village, and classified as disadvantaged families. Student life at home and in the environment already familiar with the life of a heterogeneous, open, working together, in groups in various activities, collide into an argument, and logical thinking, for example in making synopsis of book literacy program every Saturday. Additionally, out bond activities, students are invited to get along and live in a society performance a village camp outside the city a few days. Including participating in inter-school competitions city level so that they become accustomed to competing. Therefore, SMP 1 Cirebon becomes school references several other schools because of the experience, achievement,

and school age was classed as "old school", even school community votes "favorite". Many alumni who already holds merit and holds the State policy to give special attention to the development of schools stretcher

Based on the results of the test, the average score scale attitude control class higher than the experimental class. This shows that the use of models of learning attitude had no effect on students' improvement of scientific attitude. However, qualitatively indicate a change in attitude during the learning process of the behavioral aspects of curiosity, mutual respect among fellow students, uncooperative, and much more as described above.

So, in general, scientific attitude control class is different from the scientific attitude experimental class students (quantitatively). In Qualitative experimental class showed distinct liveliness, and indicator attitude looks of behavior appear more experimental class than the class control. Indeed this is one drawback, quantitative measurement of attitude. There are several indicators that are difficult to measure the attitude scale tests. For example, respect for the opinions of others, being honest in collecting the data, the attitude of responsibility in tasks and so is difficult to measure the attitude scale tests. While going through the observation is very clearly seen when they were discussions in the learning process in the classroom. Therefore, there are differences in the average score of the test results occurred between experimental class control class.

Activities the students taught conventionally, as ever more dominant teachers in classroom activities, students learn more listening, writing, accept duties of teachers. While the activities of the students taught using model scientific attitude are to work together in groups to design course materials, discussion completed the work program, the presentation together and finally agreed on the cooperation. All processes in the experimental class, it was students dominant compared to the control class, so qualitatively the experimental class did a lot of things that are scaling up of the scientific attitude. At that point, there is a possibility that the statements in the attitude scale test were answered by students to answer more normative than in accordance with reality and self-confidence. Indeed, there is no problem, because that way of thinking and it shows the students' attitude indicator. However, it is recognized that learning model of scientific attitude is necessary to evaluate and revalidate in some way and will be retested again.

#### D. Hypothesis Test

This study uses the null hypothesis that "there are no significant differences in the average score of the test results scale scientific attitude of students between classes taught by learning model with a scientific attitude that is not". 5.11

The data table below shows the results of hypothesis testing analysis of the average score of attitude scale test results show the difference between the scientific attitude of students taught using learning model with no scientific attitude is as follows; Test results null hypothesis (Ho) in the study accepted that there is no difference in the average score of the test results scale scientific attitude of students who are taught by a model of teaching scientific attitude with classes that do not. This means that the use of a model of learning scientific attitude has no influence toward achievement scientific attitude of students.

This finding is very beneficial for the development of future learning model. This means that this model still needs to be refined and adjusted to the frame material and the appropriate syntax. Aspects of improvement start from the skeleton model of learning scientific attitude (syntax or process steps of learning), the improvement of the quantitative aspects of the assessment instrument, including components of students' scientific attitude indicator. In this context, the attitude indicator is difficult to measure quantitatively such as respect for the opinions of others, responsibility, and curiosity is not necessary to test the student attitude scale because the statement did not conform to the activity when the process is done in the learning process. This means that the things that are a qualitative need to be observed and conducted interviews to students.

Several reasons can be concluded that; 1) teachers feel reluctant to pass up the learning model because out of habit, 2) learning model used attitude an effort to empower students; 3) students are not accustomed to work independently and think objectively, critically, with integrated social interactions with subjects; 4) the number of groups of students learns too many 44 people per class, while laboratory equipment, books, worksheets, and other devices are still limited; 4) to develop the students' awareness of self in learning is still low; 5) The teacher has not been used to submit a discussion of teaching materials designed by students, worry even the concept is not achieved; 6) cooperation has not become habitual ways of learning in school, so the teacher concerned materials teaching materials are not achieved; 7) system still dominates in the individual assessment of education in schools; 8) value is still the main goal of learning, not a cultural awareness and knowledge are built; 9) National Examination (UN) is still the target of achieving curriculum while thinking skills are nurturant effect; 10) learning attitude is still the second target, the main concern is the students master the concepts in accordance with the target school exams.

#### *E. Skills teachers use local knowledge and local Potential*

There are three parts that may be done is related to potential local, local cultures and school policies. The third part is an important point that needs to be done with a creative teacher. Why, because not all schools have the complete learning tool. Therefore, these findings can serve as a best practice for other schools, about learning science in school. References of student attitudes acquired through learning in the form of local wisdom. This method may be more touching humanity student. In this study conducted by a science teacher in grade 7 so that both local potentials is concerned with the teaching of science, while the local culture and policy at school are the same for all subjects. Here is an example of the creativity of teachers and students in implementing school policies in SMP 1 Cirebon;

- **Local Potential**
  - Preparing materials practicum students
    - Water, bucket, and glasses
    - Materials that are around the school
  - Enable students themselves
    - Students bring the tools and materials from home
    - Matches, Books, and LKS
  - Equipment using thrift
    - aqua bottle
  - Existing equipment around the school
    - A tool in the lab like the thermometer
    - Infocus, beaker,
  - classrooms and environment
- **Local Culture**
  - “competition of arts” between classes each year
  - Performing arts folk songs
  - Performing clothing area
  - Inter-class sports game
  - There is a space for dialogue with the guidance counselor and the vice principal of student
  - Subjects Languages Cirebon
  - Following the cultural competitions Cirebon
  - The school building colonial era (the city government's policies should not be restored) is part of the cultural heritage
  - Culture working on school assignments
  - All religions in school (as a student)
- **School policy**
  - Reading of Qur'an before entering hour lesson every day (Monday - Friday)
  - Activities literacy students each day (Saturday)
  - The calling parents if there is a problem student
  - Camper (outbound) annually for new students (out bond)
  - Use a different school uniform every day
  - Snack in the school cafeteria without servants, honesty canteen
  - Enrolled at the right time

- Rating attitude of students by every teacher and report to the coordinator teachers
- competition of arts between classes each year
- Send the art team competitions at provincial and district levels with corporate sponsors, such as banking and hospitality.

Based on the school's ability to use the environment in the form of local wisdom that is interesting to be used as reference material for other schools. Especially the potential of cultural and school policies that support the development of a scientific attitude of students. Attitude domain scientific objectivity, highly supported by aspects of local potential, local cultures, and school policies as a learning resource. Junior high school students are still dominant thinking concrete that objective domains still dominate. For example, the school's policy of literacy activities students every Saturday strongly supports the improvement of students' knowledge and understanding.

#### *F. Skills teachers develop the capacity of students in learning science*

An educational intervention in the form of policy development attitude and creativity of teachers. Improvement of educational services was done in collaboration with parents, all teachers in schools and local governments. These programs are made because the target schools that support government policy. Program improvements were made to curriculum development, teacher resources and technical policy of the school. Teachers feel heavy with this condition because of the number of teaching hours should be 24 hours, daily attendance, the number of students up to 44 people per class, so do not have time to do a good learning process to students individually.

The development of a scientific attitude is very necessary, not only the attitude of spiritual and social attitudes that have been evident in the curriculum in 2013 is also difficult to implement. The response he thought teachers scientific attitude is in addition to the second position in the 2013 curriculum, whereas scientific attitude is part of the attitude in the curriculum. No need to feel burdened again by a scientific attitude. The response of teachers to term scientific attitude just seemed at the originally was feeling heavy, so he said that "demands maximum learning results is a lot, so now it's tired teacher" including the attitude of this.

Religion and discipline have become an integral part of the school program. In the town of Cirebon, religious education has been entered into in the regulation of local

government. So the school is not too heavy, even junior high school as one Cirebon is already included in the school development program through lectures every day for all students. So if students do not follow him including undisciplined.

Some teachers said that aspects of skills and attitudes deemed it "not so important". This right is shown with their lessons to students. Assessment and learning processes challenge the skills and attitudes are not integrated manner according to the demands of the curriculum. In other words, the implementation of the curriculum related to the domain attitudes remains underemphasized compared to the cognitive domain.

## IX. DISCUSSION

The results showed no difference in the average score of the test results attitudinal scales between the experimental class and control class. In qualitative learning process show many behavioral attitudes in the experimental class. However, quantitative analysis results showed the train turns control class average score of attitude scale test results higher than the experimental class. So the null hypothesis is accepted, then the use of the model of learning scientific attitude had no effect on students' attitudes significantly. However, the reality of students from the observation and recording of students conveniently indicates many things related to the students' attitudes. This is in line with the views of Allen (1980) that the formation of attitudes in a person, it can happen very diverse and with different dimensions, both perceptions, beliefs, responses, and habits. As the findings in this study, that the scientific attitude of students emerged as a result of learning gained by observation. Each syntax performed on the learning process of students exhibiting behavior that characterizes the scientific attitude. This is consistent with the view Fisbein and Ajzen (1975) that the behavior is directly proportional to the attitude and some other variables that support it. Syntax student behavior at first form a group that is "open, except the reality of life, accept the facts, cooperation, accept differences, communication, honest and willing to do something for the common good 'is good manners are important. The success in increasing the skills and behavior of students towards subjects and cognitive aspects of students depending on the attitude of students.

Syntax second is designing program activities of the student and the teacher shows the behavior of "responsibility in work, motivation success of the group, adjusting to guide the work, and gave rise to the idea of completing a common task" is a form of acceptance of the received message the students. The attitude of the students

affected by this form of communication teachers and students during the learning process is done.

Syntax next activity program, students in this stage of the cooperation of teachers and students in groups. The above findings relevant also with a view Schiffman and Kanuk (2008) that attitude is a tendency to learn to behave in a way that is favorable or unfavorable to a particular object. Attitudes appear, in syntax supporting the scientific attitude indicator is difficult to measure in a quantitative method.

The views RK Merton (1957) emphasizes to importance for formulating a development pattern education institutions oriented to the development of a scientific attitude that is commonly used by scientists. Such as objectivity, open-mindedness, not bias, curiosity, suspend judgment, critical thinking, and rationality is commonly used by scientists. In syntax produce products found there are several indicators that show that the scientific attitude; uncooperative attitude, honesty in collecting data, respect for the work, an attitude of openness, an attitude of responsibility, respect for the opinions of others, togetherness in action doing the work, attitude to achieve the target to be obtained, bold attitude and convey ideas.

The view that the scientific attitude that is required for the development of scientific behavior of a person, have an impact on productive behavior. Scientific thinking of students of the scientific attitude, then the result is a success in learning. Cognitive, affective and psychomotor needed in the framework of developing a scientific attitude. For example, scientific attitude is diligent (not bored conduct an investigation, is willing to repeat the experiment results are dubious, will not stop doing activities if not yet finished, the things he wanted to know he was trying to work carefully). Then open attitude (open attitude is seen in the habit of going to listen to opinions, arguments, criticism and statements of others, although ultimately opinions, arguments, criticism, and testimony of others is not acceptable because it did not agree or are not appropriate. This kind of attitude is capital for the development of a permanent understanding and skills in students.

Observation of the scientific attitude of students is concerned with understanding can be described its findings in syntax get an understanding that; being open, receptive attitude, attitude, willing to share experience / attitude willing to give, willing to ask attitude, attitude to choose and make decisions, curiosity, and courage to uncover ideas and ideas (group presentations). This is consistent with the view Schiffman and Kanuk (2008) that attitude is a tendency to learn to behave in a way that is favorable or unfavorable to a particular object.

As a conclusion that the attitude to learning outcomes influence each other, as revealed that attitudes

have a strong influence on behavior and student learning. That attitude helps students feel what happened and provide guidance to the behavior itself so that it can help explain what happened. Therefore, the learning process oriented attitude formation there should be a phase that is doing internalizes attitude. When teacher observations of the scientific attitude of the student, the student attitudes internalization process. The phenomenon showed that;

- Teachers find it difficult to pay attention to individual students, including in the process of teaching attitude
- Schools make literacy and the Qur'an every morning for all students
- Students presentation in front of the other students on the book that has been read
- There is a teacher tutor each student group that coaching students in extracurricular activities
- Observing the behavior of students in the classroom and outside the school environment

This phenomenon shows that the need for improvements to programs relating to learning outcomes, especially the attitude that is the field of curriculum development, student capacity, the competence of teachers and school culture.

## X. CONCLUSIONS

- A. Teachers understand the need for local culture (values, religious norms, customs and local knowledge) is good to be protected, conserved and transformed to the students in learning at school. Teachers recognize and understand that students need to have a scientific attitude, minimal gesture contained in the curriculum in 2013 (spiritual attitudes and social attitudes). But the teacher felt the difficulty of implementing the learning attitude in school because of many factors that influence it. Family and community environment is more dominant than the school, in addition to the difficulty is the number of students is too much and the obligation to teach 24 hours per week was it was quite tired.
- B. Potential students are high enough to receive learning including scientific attitude, motivation, academic potential, parental background, local government policy support, financial support, and society, in general, is very high. The present challenge is the environmental community and social media, making it difficult for the student's educational process. Through learner teacher, MGMPs, and in-house training, the teacher is the ability to prepare teaching materials and make the learning process.
- C. The findings of this study, there was no significant different average score attitude scale test results between students who are taught by learning model with the attitude that no junior high school students one grade 7 Cirebon. But qualitatively scientific attitude indicator shows the number of students going on. Needs

improvement model (syntax) that simplify the learning process

- D. Implementation internalization scientific attitude in the SMP environment is very varied and is fundamental to the development of students' attitudes. The shape is a regular activity of the Koran every day, every Saturday literacy, arts, and sports games each semester and the use of school uniforms with 4 different models every week so as to build together a school culture.
- E. Factors affecting the learning success of scientific attitude is first learning model that is used in accordance with the needs of students, according to the material the material taught, involving students as subjects, neighborhood support as part of the internalization of attitudes, the availability and utilization of local potential, potential students, and time used. In addition the appropriate evaluation tools and teacher who wants to carry out in a responsible manner. Then a common perception among teachers and parents of the need attitude taught directly

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