

Table 4: Skin Type

Skin Type	Number of Respondents (n)	Percentage (%)
Normal	15	15
Sensitive	20	20
Oily and Normal	10	10
Dry	10	10
Oily	15	15
Have no idea of the skin type	30	30
Total	100	100%

Source: Research Survey, 2016

The table above shows that 30% of the respondents have no idea about their skin type. The 30% represent those uneducated respondents as such they have no idea as to how to identify their skin type. The rest which forms 70% are aware of their skin type.

Table 5: Functions and Structure of the Skin

Knowledge about the Functions of the Skin	Number of Respondents (n)	Percentage (%)
Yes	20	20
No	80	80
Total	100	100%
Knowledge about the Structure of the Skin	Number of Respondents (n)	Percentage (%)
Yes	25	25
No	75	75
Total	100	100%

Source: Research Survey, 2016

The table above indicates respondents' knowledge about the functions and structure of the skin. From the table it is clear that majority of respondents have no clue about the functions and structure of the skin. Whilst 80 out of the 100 respondents are very ignorant about the functions of the skin, 75 out of the 100 respondents know nothing about the structure of the skin. This could have been the reason why most of the respondents take interest in bleaching their skin because they have no idea about how the skin is composed, the various roles the skin plays to help maintain the body and any dangerous effect that can show on the skin as a result of bad handling.

Table 6: Number of Respondents who have bleached their Skin and those who have not

Respondents who have Bleached their Skin	Number of Respondents (n)	Percentage (%)
Those who Have bleached their Skin	90	80
Those who have not bleached	10	10
Total	100	100

Source: Field Survey, 2016

The table reveals the number of respondents who have bleached their skin. It is very clear that majority of respondents (90%) have ever bleached their skins whilst a minimal number of the respondents forming only 10% have never bleached their skin.

Table 7: Parts of the Skin that have been Bleached

Parts of the Body that have been Bleached	Number of Respondents (n)	Percentage (%)
Face	70	77.8
Whole Body	20	22.2
Total	90	100

Source: Field Survey, 2016

It is very clear from the table that majority of the respondents indicating 70 out of the 90 who have ever bleached their skin are interested in bleaching only their faces leaving the rest of the body untouched. This might be due to the fact that they are interested in beautifying only their faces since that is the first part of the body noticed by people before taking a closer look at the rest of the body.

Table 8: Reasons for bleaching the Skin

Reasons for bleaching the Skin	Number of Respondents (n)	Percentage (%)
To follow fashion	5	5
To smoothen the skin	5	5
To make me look fairer brighter and beautiful	70	70
To remove pimples	20	20
Total	100	100

Source: Field Survey, 2016

From the table above, it is very clear that most Ghanaian youthful ladies and women forming 70% bleach their skin because they want to look fairer, brighter and beautiful. The assumed mentality of the target group that presupposes that fairer ladies are more beautiful than black ones is confirmed from the response seen in the table. Few women and youthful ladies according to the table bleach because they want to get rid of pimples, smoothen their skin, and follow fashion. A lot of Ghanaian ladies and women interviewed also confirmed that fairer women and ladies are more beautiful than the dark ones and that, most Ghanaian men prefer them to the dark ones.

Table 9: Some Items used to Bleach the Skin

Items Used by Respondents to bleach the Skin	Number of Respondents (n)	Percentage (%)
Dove soap and Easy white cream	20	22.3
Tura soap and Body white cream	50	55.5
Asepsop soap and Pure white cream	10	11.1
Mixture of Alata soap with bleaching and High Tone cream	10	11.1
Total	90	100

Source: Field Survey, 2016

Some bleaching soaps and creams used by Ghanaian youthful ladies and women for bleaching their skin have been listed in table 9 above. Out of the ninety (90) respondents who have been bleaching, (55.5%) respondents have been using tura soap and body white cream to bleach. (22.3%) respondents have been using dove soap and body white cream to bleach, (11.1%) respondents have been using asepsop soap and pure white cream, and (11.1%) respondents have been using a mixture of alata soap (local Ghanaian soap) with bleaching soap and high tone cream to bleach. According to the respondents, the soap alone does not give a good effect in bleaching so they always use the soap and the cream together to come out with a fair skin. Some of the women interviewed, who were mostly illiterate confirmed that they don't read labels on the creams and soaps before using because they cannot read and write. Some who can read and write said they know those items have dangerous side effects on the skin but they don't care and that they are only concerned about how to make their skin look fair and beautiful.

Table: 10 Dangerous effects of Skin bleaching

Some Dangerous Effects of Skin bleaching	Number of Respondents (n)	Percentage (%)
Cancer of the skin	11	11
Causes the areas that have been bleached to darken	25	25
Wounds on Skin that have been bleached does not heal fast	14	14
Difficulty in stitching the skin during operation.	30	30
Not aware of any dangerous effect of skin bleaching.	20	20
Total	100	100

Source: Field Survey, 2016

Looking at table 10 above, it is very obvious that all the respondents with the exception of 20 of them, were aware of some dangerous effects of skin bleaching which are; skin cancer, depigmentation of the skin, wounds on bleached skin not healing fast, and difficulty in stitching bleached skin during operation. Despite the fact that most of them are aware of the dangers of skin bleaching, it is surprising to note that they still go ahead to bleach as the table is implying.

FINDINGS AND CONCLUSIONS

The research came out with the following findings and conclusions:

- Skin bleaching is very rampant in Ghana which is a tropical country with a very warm weather.
- People involved in skin bleaching in Ghana are mostly youthful ladies and middle aged women.
- Reasons why they bleach their skin are; to change the colour of their skin from black to fair thereby making them look more beautiful. The reason is because to them, the fairer ladies look more beautiful than dark ladies.
- To clear their skin from pimples, and to make the skin look smooth.
- In most cases, the face is bleached leaving the rest of the body dark.
- On few cases the whole body is bleached.
- Items used in bleaching are; dove soap with easy white, cream, tura soap and body white cream, asepsop soap and pure white creams, mixture of alata soap (local Ghanaian soap) and bleaching soap with high tone cream.
- It was noticed that all the soaps and creams mentioned contained high amounts of hydroquinone that can bleach the skin.
- Dangerous effects of skin bleaching include: Skin cancer, dark patches on the skin called depigmentation, wounds on bleached skin not healing fast, difficulty in stitching the skin during

operation.

Recommendations

In view of the findings and conclusions reached earlier on, the following recommendations were given:

- Bleached creams and soaps must be banned from being sold in Ghana.
- Massive education must go on in schools, churches, on televisions, radios and other social gatherings about the dangers of skin bleaching.
- Ghanaians must be encouraged to appreciate their God given black skin as a beautiful one.

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Plate 1: some effects of skin bleaching

The Effect of Scientific Approach to Students' Geographical Skill and Learning Outcomes of Geography in Senior High School

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Abstract

This research aims to determine the effect of scientific approach to students' geographical skill and learning outcomes of geography. It utilizes quasi-experimental method with quantitative approach. The research subjects are students of X grade State High School 1 Empang. The data is analyzed by using t-test (Independent Samples t - Test). The result shows that; (1) there is a significant effect of scientific approach to the students' geographical skill; (2) there is a significant effect of the scientific approach to students' learning outcomes of geography. Based on the data analysis, it can be concluded that the scientific approach provides a significant positive effect to students' geographical skills and students' learning outcomes of geography in high school. It is influenced by the excellence of the scientific approach which is contained in each stage.

Keywords: Scientific approach, geographical skills, learning outcomes of geography.

Geographical skill need to be instilled in the process of education and learning as it can help in applying knowledge and understanding, as well as to analyze issues. Disclosure ability of geographical skill among students through the process of education and learning can be compatible to students' psychological mental development. Geographical skill can be explored through several indicators as proposed in Geography for Life: National Geography Standards 2nd (2012). The indicators are: asking geographic questions, acquiring geographic information, organizing geographic information, analyzing geographic information, answering questions and designing solutions, and communicating geographic information.

Through the indicators of geographical skill as described above, it is necessary to invest geographical skill among students. The main actor who has the biggest hand and strategy in investing geographical skill among students is a geography teacher. Logayah (2013) summarizes from the whole research result that the teacher's professionalism may contribute significantly to the geographical skill. Geographical skill may train students to think systematically on the problems or environmental and social issues, both locally and globally.

In fact, many instructional practices which are done by the teachers not accustom students to get their own knowledge. Teachers assume that the students were an empty vessel that has to be filled with something important like learning matter that has already planned since the beginning. The impact of this learning condition causes the students do not have any interest and motivation in learning. In the end, learning becomes boring, the creativity of students is shackled, students are not involved in learning activities, and it will ultimately affect the geographical skill and their learning outcomes.

This is also corroborated by the findings of research showing that the learning outcomes of Geography at some schools in Indonesia are still far from expectations. This would be a very severe obstacle to develop Geographies in the future. Need serious thinking in order to find a solution to improve the quality of learning Geography so that students feel happy and challenged.

In order to improve the quality of learning, to make students' geography skill and learning outcomes increase, there should be innovation in the method of geography learning. One way that can improve the geographical skill and learning outcomes is to utilize a scientific approach. The scientific approach has scientific phases that can improve the quality of learning. This is supported by the opinion of Varelas and Ford (2009) that: "the scientific approach allows teachers to improve learning process, namely by breaking the process down into steps or stages in detail which contains instructions for the students to do learning activities".

The scientific approach in teaching geography considered as a scientific way to face a problem. The scientific approach is able to prepare critical thinkers and skilled generations. The scientific approach is intended to provide insight to students in identifying, understanding various materials using scientific approach, that information may come from anywhere, at any time, and does not depend on information from teachers (Hosnan, 2014: 34).

In order to achieve the learning objectives optimally, teacher's innovations in delivering the materials and managing the class are needed. Learning method which utilizes scientific approach can be combined with a model or innovative learning approaches in order to achieve the learning objectives maximally. One of the subject matters on the subjects of geography that could use a scientific approach is the subject matter of the hydrosphere. Materials include: (1) water cycle, (2) inland waterways and potential, (3) marine and potential, (4) the use and preservation of inland waterways and the sea in the Watershed unit, and (5) the use and preservation of the marine sustainably.

Researchers conduct learning innovation on geography especially on the material about hydrosphere contextually. Based on the characteristics of the study area (District of Empang, Sumbawa regency), it is traversed by two rivers that flank the location of SMAN 1 Empang. Both of these rivers are only about 100 m from the location of SMAN 1 Empang. Therefore, the hydrosphere material can be contextualized through a scientific approach in which concerns the components observe, ask, associate, try and communicate. Through learning activities we can increase the motivation to learn and, in turn, can increase the skill of geographical and geography student learning outcomes.

Geographical skill development and learning outcomes of geography in the form of absorption material through scientific approach in SMAN 1 Empang Sumbawa has not been part of the efforts to achieve the goal of learning geography, so the geography education goals are not achieved maximally. It is proven from direct observation study conducted on the subjects of geography at SMAN 1 Empang not apply the material through a scientific approach. Learning the scientific approach could overcome the lack of geographical skill and learning outcomes geography because such an approach has several advantages.

The benefit of scientific approach contained in phases, they are: (1) The present stage of observing such an object in a concrete media, making students feel happy and challenged, as well as easy in implementation; (2) ask stage, able to raise students' skills in speaking, asking questions, giving answers in a logical, systematic, and use language that is good and true; (3) phases can associate inculcate scientific attitude and motivation in students regarding the intrinsic values of participatory learning; (4) stages of trying to make the students to use the scientific method and scientific attitude to solve the problems they face every day; and (5) communicating stages make students trained convey their findings to others in both oral and written.

The scientific approach to influence the geographical skill as the stages contained in it include: observe, ask, associate, try and communicate is linked to geographical skills. Besides affect the geographical skill, scientific approach is also a positive impact on student learning outcomes. The scientific process can increase interest and motivation to learn, so give the effect on student learning outcomes. This is supported by research conducted Johari (2014), Sugiyono (2015) and Lubis (2015). Three of the outcome of this research, it can be concluded that the application of scientific approaches to improve learning outcomes of high school students.

Research of the scientific approach in teaching geography had done by Azizah (2014). The research aims to improve the skills of mitigation and social attitudes through the application of scientific approach uncharged characters alert on thematic learning. Specific areas study of geography research on the scientific approach is still rarely performed. Researchers interested in conducting research related scientific approach that is packaged in teaching geography to improve geographical skill and learning outcomes in students of X Grade SMAN 1 Empang Sumbawa.

This research aims to determine the effect of the scientific approach to the geographical skill and learning outcomes of high school geography. The benefits of these theoretical researches are to contribute knowledge about the ability of geographical skill and learning outcomes by using a scientific approach. Practical benefits for teachers can be used as a material consideration in the use of scientific approach in order to develop geographical skills and improve learning outcomes of geography in high school students.

METHOD

This research uses a quasi-experimental method with quantitative approach. The type of research design used was nonequivalent control group design that is part of research methodology quasi-experiment. According to Creswell (2013: 242), the experimental group and the control group were selected without random placement procedure (without random assignment). In both groups are equally given the pretest and posttest. Only the experimental group is given treatment.

The subjects utilized in this research are the students of X Grade at SMA Negeri 1 Empang Sumbawa Regency consisting of two classes. Class X.2 is chosen as experimental class and class X.3 as the control class. An instrument employed in this research is the test. Data collection technique utilizes test of geographical skill and learning outcomes of hydrosphere material. The analysis used to test the hypothesis in this research is SPSS software 16.0 for windows with analysis of independent sample t test.

RESULTS

Geographic Skill Description

In this research found a difference of the average a score the ability early (pretest), the ability the end (posttest), and the gain score skill geographical between the experimental class and class control. Table 1 presented an average ratio of students' geographical skills.

Table 1 Average Value Posttest, Pretest, and Gain Score Geographic Skill Classroom Experiment and Control

Class	Average value posttest	Average value pretest	Average gain score
Experiment	75.03	51.83	23.20
Control	60.40	51.94	8.46

Referring to the table above it can be seen that the average value of the ability early (pretest) experimental class is lower than the control class. The average value of geographical skill pretest for the experimental class is 51.83, while for the control class is 51.91. After learning the scientific approach, the average value posttest experimental class is higher than the control class. The average value posttest for the experimental classes and control classes, respectively, are 75.03 and 60.40.

The increasing in the geographical skill of students obtained from the difference between the value pretest posttest and the experimental class and control called gain score. In the experimental group gained an average gain score of 23.20 while the control class is 8.46.

Students' Geographical Skill as Per Indicator

There are five geographical skill indicators used in this research, namely: asking geographic questions, acquiring geographic information, organizing geographic information, analyzing geographic information, answering questions and designing solutions. The fifth of these indicators have increased both the control and experimental classes. In Table 2 below presents the average data score of geographical skill experimental class and control class on each indicator.

Table 2 Indicators Score Average Pretest and Posttest Geographic Skill Class Experiment and Control

Geographic skill	Maximum score	Class Experiment		Class Control	
		Pretest	Posttest	Pretest	Posttest
1	6	3.37	4.80	2.63	3.51
2	10	4.06	7.06	4.74	5.43
3	12	7.11	9.09	6.71	7.66
4	8	4.37	6.57	4.97	5.23
5	14	7.00	10.00	6.89	8.40
Average		5.18	7.50	5.19	6.05

Annotate:

1. Asking geographic questions
2. Acquiring geographic information
3. Organizing geographic information
4. Analyzing geographic information
5. Answering questions and designing solutions

Based on table 2, it can be seen that there is a highest increase in the indicator acquiring geographic information; answering questions and designing solutions. To acquiring an indicator of geographic information, students' early ability of 4.06 to 7.06, or in other words there is an increasing score of 3.00. The same thing happened on the indicators answering questions and designing a solution that is from 7.00 to 10.00 or there is an increasing score of 3.00. The largest increase occurred in the experimental class, and this is not followed by a control class.

The increases of geographical skill score on each indicator both the experimental class and control is various. To be able to see a big increase in scores from pretest to posttest difference calculation is necessary to do both. For the difference in the average scores between the geographical skill pretest and posttest of each indicator in the experimental class and control can be seen in Table 3.

Table 3 Difference Score Average Pretest Posttest and Geographic Skill Student Class Experiment and Control in Every Indicators

Geographic Skill Indicators	Difference in Average Scores Pretest and Posttest	
	Class Experiment	ClassControl
Asking geographic questions	1.43	0.88
Acquiring geographic information	3.00	0.69
Organizing geographic information	1.98	0.95
Analyzing geographic information	2.20	0.26
Answering questions and designing solutions	3.00	1.51

Geography Learning Outcomes of Experimental Class and Control Class

Comparison of the average result of learning the geography of ability early (pretest), the ability of the end (posttest), and gain score between the experimental class and control class, can be presented in Table 4.

Table 4 Average Score Posttest, Pretest, and Gain score Learning Outcomes of Geography Classroom Experiment and Control

Class	Average value posttest	Average value pretest	Average gain score
Experiment	70.57	46.12	24.45
Control	59.91	46.43	13.49

Geography learning outcomes data obtained from the average score of pretest and posttest. Referring to Table 4, it can be seen that the average value of pretest for the experimental class is 46.12, while the control group is 46.43. The result shows that the ability of the early experimental class is lower than the control class, but the ability of the beginning of the second class is still considered to be equivalent.

The results of the average ability posttest at experiment class is 70.57 and control class is 59.91. The data shows an increase in posttest results of experimental class is higher after using a scientific approach than the control class that uses classical learning only.

Hypothesis Testing

After testing a prerequisite in this research, it was found that the data were normally distributed and homogeneous, as data showed the normal and homogeneous then t test. Hypothesis test results for each variable in the order shown in Tables 6 and 7.

Table 5 Hypothesis Testing Geographic Skill

Class	df	Sig. (2-tailed)	Description
Gain Score	68	0,000	H ₀ rejected

Table 5 shows the calculation results of hypothesis testing geographical skill of students with SPSS 16.0 for Windows is known as sig. (2-tailed) is 0.000 < 0.05, so H₀ is rejected. Based on the exposure data, concluded that the scientific approach affect the geographical skill class X SMA Negeri 1 Empang, Sumbawa.

Table 6 Hypothesis Testing Results Learning Geography

Class	df	Sig. (2-tailed)	Description
Gain Score	68	0,000	H ₀ rejected

Table 6 shows the results of calculations with the results of learning outcomes of geography hypothesis test with SPSS 16.0 for Windows is known as sig. (2-tailed) is 0.000 < 0.05, so H₀ is rejected. Based on data, it can be concluded that the scientific approach to study geography affect the results of class X SMA Negeri 1 Empang, Sumbawa.

DISCUSSION

The effects of Scientific Approach on Geographical Skill

Scientific approach influences the geographical skill of students. The achievement of using scientific approach is not independent of benefit at every stage of the approach. **First**, at the present stage can observe objects geography media in real time, making students feel happy and challenged, as well as easy in implementation. Event aims to observe the learning is closely related to the context of real situations encountered in everyday life.

Activity observed in this research, as an object of geography through media images at the first meeting and the second with reference to the student activity sheet. The first meeting of observing pictures water cycle and the main material elements. The second meeting observing picture of flow patterns and stadia river. The third meeting of exploiting the potential of the environment around the school to observe live natural and social phenomena such as water contaminated river trash. Students make observations of river water in the hamlet Bonto village of Labuhan Bontong District Tarano, Sumbawa regency which coincidentally adjacent to the location of SMAN 1 Empang. They collected data on turbidity of river water, garbage piling up, vegetation area and the banks of the river border.

Second, asking the stages can arouse students' skills in speaking, asking questions and giving answers logically, systematically, and use language that is good and true. Ask students to train skilled posing geographic question as a basic indicator geographical skill. Propose activities to develop competencies of creativity, curiosity, the ability to formulate questions to form the critical mind in developing geographical skill.

Propose activities in this research arouse the curiosity of students to the geography objects or phenomenon that has been observed. Questions related to the water cycle materials, various types of inland waters, and the utilization and conservation of inland water in the unit Watershed. Based on the question to on ask stage, teachers views that still a lot of students who less understand about cycle water, evaporation, ground water, pattern the river, stadia river, and the preservation of land waters in the unit of a watershed. Therefore, teachers conduct guidance and explanations to the students through the stages of associate for connecting between phenomenon.

Third, the stages of trying to make the students to use the scientific method and scientific attitude to

solve the problems they face every day. To get a real learning, students should experiment or conduct experiments on matter hydrosphere. These matters must be understood by students as it relates to daily life. Students must have the skills to develop the knowledge of the geographical environment, as well as being able to use the scientific method to solve problems or environmental issues they face every day.

Try activities of the student in this research is to conduct experiments on the evaporation as one of the main elements of the water cycle. Besides trying to prove evaporation in plants, this study also trying to determine the flow pattern of the river and stadia, as well as trying to measure the pH of the river water in the murky circumstances.

Fourth, on associate stage had scientific attitude and motivation to their students with regard to values intrinsic of learning participatory. A few examples of the activities associated in this research the following:

- Students are assigned to gather on the hydrological cycle and its elements through images.
- Students are required to analyze the image stream-flow patterns, why it can form flow patterns like the images.
- Students are given duty to analyze the relationship between people's behavior toward watershed damage that has been observed.

Fifth, the communicate stages makes students train to convey their findings to others in the form of oral and written. Some examples of activities to communicate in this research among others the following:

- Students are asked to convey orally and in writing about the findings related to the process of evaporation in plants/vegetation.
- Students assigned to pass oral and written about how is the potential for their economic activities in various stream-flow patterns.
- Students are asked to submit oral and written problem solving ideas on watershed damage that has been observed.

The whole activity of learning geography with a scientific approach, as described above contributed to increasing the geographical skill of students. The scientific approach learning will work well and conducive through careful planning and accompanied with careful management class. Therefore, before implementing a student-centered learning must ensure classroom management plan.

The effect of Scientific Approach on Geography Learning Outcomes

Based on the data analysis, showed that the scientific approach to studying geography affects the outcome. This is proven by the gain score differences between the experimental and control classes. The average gain score is 24.45 experimental class and control class is 13.49 with a difference both at 10.96. The scientific approach is thought to have an influence on the result of learning geography for excellence at every stage of the approach as described in the influence of the scientific approach to geographical skill.

The scientific approach affects the outcome of geography study because the approach allows students to participate actively in learning. This was confirmed by Hosnan (2014) "The results of the scientific approach to studying gave birth to a productive, creative, innovative, and affective student" The scientific approach can integrate a wide variety of innovative teaching methods and learning resources that vary in their implementation involve students directly.

Learning geography with a scientific approach can guide students to use a variety of learning resources in order to find the concept, learn, and solve actual problems in the surrounding neighborhood. Learning resources used by students include the environment around them, the Student Worksheet, geography books for X grade high school second semester, and enrichment matter provided by the teacher. Through a scientific approach the teacher can do multi methods, among other things: debriefing, lectures, group work, experiments outside the classroom, presentations, and field surveys.

Learning-based scientific approaches have more effective results than traditional learning. Results of research have proven that the traditional learning, retention of information of teachers by 10 percent after 15 minutes and the acquisition of contextual understanding by 25 percent (Daryanto, 2014: 55). In the scientific approach based learning, information retention of teachers by more than 90 percent after two days and the acquisition of contextual understanding by 50-70 percent.

The scientific approach ever undertaken in the field of Psychology by Hass (2011) with the title of "*Scientific Approach to Transpersonal Psychology*" The results showed that the scientific approach can provide a successful interpretation and more powerful than the standard view of psychology. The scientific approach had also applied in teaching Biology by Ekawatin (2014). Further research by Lubis (2015) shows the influence of the scientific approach to the results of learning of X grade high school students.

The result of this theory consolidates the theory of constructivism which is a new theory in educational psychology. Constructivist theory states that students must find their own and transform complex information, check the new information with the old rules and revise them if the rules were no longer appropriate (Trianto, 2007: 13). Constructivism became the foundation that students acquire knowledge because of the liveliness of

the students themselves (Sukardjo and Komaruddin, 2014: 54). Constructivist theory evolved from the work of Piaget, Vygotsky, theories of information processing, and other cognitive psychological theories, such as the theory of Bruner (Slavin in Nur, 2002: 8).

According to constructivist theory of learning must be designed and managed in such a way so as to encourage students to organize his experiences themselves into meaningful knowledge. Thus, in the view of the crucial role of constructivism, it is very important for students' to build constructive habits of mind so that students have the habit of thinking, we need freedom and learning attitude (Sukardjo and komaruddin, 2009: 56).

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the analysis and discussion of the research, the conclusion can be stated as follows:

1. The scientific approach provides a significant positive effect on the geographical skill of high school students. Students learn to use a scientific approach to obtain a higher geographical skill than students who studied classical. Difference in average scores geographical skill gained highest increases in skill acquiring geographic information, answering questions and designing solutions; while the lowest increase occurred in the skill to analyze geographic information.
2. The scientific approach provides significant positive impact on learning outcomes of high school geography. It is influenced by the benefit of the scientific approach contained in each stage.

Recommendations

Based on the research findings, it is proposed the following suggestions:

1. To develop the students' geographical skill of high school, geography teachers are suggested using a scientific approach to design lesson plans and worksheets contextually and properly to obtain a better geographical skill than before.
2. To increase the result of high school students' learning geography, geography teacher and researcher are suggested using advanced scientific approach with a good and conducive learning through careful planning and accompanied with careful management class. Therefore, before implementing a student-centered learning with the scientific stage must be ensured a good classroom management plan for all stages in the scientific approach which can improve high school students' learning outcomes of geography.

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