The effect of prompting question on students’ worksheet - based on guided inquiry towards students’ learning achievement and activity of class X MIA of MA Negeri 1 Makassar (study on electrolyte and nonelectrolyte solution)

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Abstract. This quasi-experiment research aimed to find the effect of prompting question on students’ worksheet - based on guided inquiry towards students’ learning achievement and activity of class X MIA of MA Negeri 1 Makassar. The research design used was "post-test only control group design". This research population was students of class X MIA of MA Negeri 1 Makassar that consist of six classes. Class random sampling technique was used to choose the samples, so that acquired samples are class X MIA 1 as experiment group and X MIA 2 as control group with number of students 36 and 35, respectively. Independent variable in the research was a prompting question on students’ worksheet based-guided inquiry and dependent variable is students’ learning achievement and activity. Data of students’ activity and students’ learning achievement were analyzed with descriptive and inferential statistic. The results of the analysis for students’ learning achievement shows that the score average of group experiment and control were 72.11 and 66.34. While, the results of the analysis for students’ activity shows that score average of group experiment and control were 81.25 and 78.31. Hypothesis was analyzed by nonparametric test, Mann-Whitney test for learning achievement. The result are $Z_{counted} = 1.69$ and in $\alpha = 0.05$, the $Z_{table}$ is 1.64. Since, $Z_{counted} > Z_{table}$, so $H_1$ was accepted and $H_0$ was rejected. It means that, there was a positive effect of prompting question on students’ worksheet based - guided inquiry toward students’ learning achievement of class X MIA MA Negeri 1 Makassar on electrolyte and nonelectrolyte solution subject matter. While, Hypothesis was analyzed by nonparametric test, Mann-Whitney test for students’ activity. The result are $Z_{counted} = 1.22$ and in $\alpha = 0.05$, the $Z_{table}$ is 1.64. Since, $Z_{counted} < Z_{table}$, so $H_1$ was failed and $H_0$ was accepted. It means that there was not a positive effect of prompting question on students’ worksheet - based on guided inquiry towards students’ learning activity of class X MIA of MA Negeri 1 Makassar on electrolyte and nonelectrolyte solution subject matter.

1. Introduction
The advance of science and technology in the last decade is closely related to the development line in the field of education, including making students who have high intellectual and scientific attitudes. Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control personality, intelligence, noble character and skills needed by themselves, society, nation and country.
To compensate for that rapid progress, the world of education is required to improve and perfect the quality of education, especially the education of Natural Sciences (IPA) and especially chemistry courses that are adapted to the development of science. This is in accordance with one of the objectives of chemistry subjects, namely that students have the ability to understand the concepts, principles, laws and theories of chemistry and their interrelationships and their application to solve problems in everyday life.

In learning process in the classroom, students are often less active in asking questions when the teacher provides an opportunity for students to ask or respond to questions posed by the teacher, so that the learning process appears to be passive. This was seen from observation done in class X X MIA of MAN 1 Makassar. The lack of student activity in the learning process has an impact on students' low learning achievement. Students’ learning achievement showed that there are still many of the students who got score below the minimum completeness criteria (KKM) which is 75.

In the implementation of the 2013 curriculum, students are expected to play an active role in the learning process. Preferred learning model in the implementation of the 2013 curriculum based on Permendikbud Number 65 of 2013 concerning process standards, namely the inquiry learning model, Discovery Learning model, Project Based Learning model, Problem Based Learning model. However, because the learning model is relatively new to students, students have been taught to use direct learning and lecture methods so that in its application the teacher seems to be more active in stimulating students to ask questions than answering questions directly given by students.

One of the learning methods that can be used in implementing the 2013 curriculum and is part of inquiry learning that is guided inquiry learning model where in the learning, the teacher guides students to find a concept by themselves. The purpose of inquiry learning is to develop intellectual abilities as part of mental processes, besides that it is also intended to increase the knowledge, skills and activeness of students by group learning (Suparno, 2007).

The result of Vlassi’s research (2013) shows that for guided inquiry, the results of males’ test are higher than females, while for traditional method, females’ test results are higher are higher than males’. Other research result report that in comparison to the teacher-directed condition, the students in the guided-inquiry condition demonstrated significant improvements in both conceptual understanding and their levels of explaining the concept of density (S. Almuntasheri, S, 2016). Meanwhile, Evrin Ural (2016) conducted a research on “The Effect of Guided-Inquiry Laboratory Experiments on Science Education Students’ Chemistry Laboratory Attitudes, Anxiety and Achievement”, and concluded that there has been a significant increase in students' attitudes towards chemistry laboratory, and their academic achievement and a decrease in their chemistry laboratory anxiety.

Every subject needs students’ worksheet to support learning. Students’ worksheet will provide benefit for teacher and students. Teacher will have teaching materials that are ready to use, while students will get an independent learning experience and will learn to understand the written assignments contained in the students’ worksheet (Depdiknas, 2007). Therefore, students’ worksheet that is used in learning activities should be based on science approach or based on learning models in curriculum 2013 so it can practice students to work scientifically and develop students’ thinking skill so the students have chances to find concepts, build their own knowledge and be more active in learning process.

One of the students’ worksheets that is based on science approach is students’ worksheet based on guided inquiry. Students’ worksheet – based on guided inquiry is students’ worksheet that is developed based on operational steps in guided inquiry learning.

Students’ worksheet – based on guided inquiry can support learning process and improve students’ achievement and learning activity. As reported by Setiowati, et.al. (2015) that the use of students’ worksheet – based on guided inquiry can improve students’ activity and learning achievement.

Questions posed by teacher in learning process are very varied and there are certain reasons why the teacher asks those questions. The questions can be in the form of questions that explore students’ knowledge or guiding questions that is posed to give direction to the students in thinking process...
(Usman, 2011). The form of questions intended to guide students so that they can find the right answers is a form of prompting questions (Mayasari, 2014). Effective prompting questions to improve the ability to structure the knowledge of students that have an impact on cognitive intelligence and their understanding (Chen dan Bradshaw, 2007).

Electrolyte and non-electrolyte solutions are chemistry teaching materials that have concept to be mastered by students. The importance of concept understanding in learning process is very influence attitude, decision, and ways of solving problems. Reality in the field, students only memorize concepts and less able to use the concepts if they encounter real-life problem related to concepts they have. On this basis, concepts in electrolyte and non-electrolyte solutions materials have to be confirmed by conducting a demonstration in a practicum experiment. The practicum can be done by using guided inquiry learning model.

Based on the background of the above problems, then researchers wanted to conduct a research “The effect of prompting question on students’ worksheet - based on guided inquiry towards students’ learning achievement and activity of class X MIA of MA Negeri 1 Makassar on electrolyte and non-electrolyte solution subject matter.

The objective of this study was to find out whether or not there is an effect of prompting question on students worksheet – based on guided inquiry toward students’ learning achievement and activity of class X MIA of MAN 1 Makassar in the subject matter of electrolyte and non-electrolyte solutions.

2. Research Method
This study was a quasi-experimental research with posttest-only control group design. The population in this study was students of class X MIA of MAN 1 Makassar that consist of nine classes. The sample used in this study consist of two classes namely class X1 as experimental class and class X2 as control class. The sample was decided through simple random sampling that is sample was taken randomly from population.

The technique of collecting data was done by giving test at the end of stoichiometric lesson. The data obtained by each student were in the form of test results, then the test results were changed into score using the following formula:

\[
Score = \frac{Student's\ test\ result}{Maximum\ Score} \times 100
\]  

The instrument used was essay test that consist of eight items to find out students’ learning achievement. The items were about electrolyte and non-electrolyte solution and will be given at the end of the lesson (posttest). The score obtained by each student will be analyzed using descriptive and inferential statistical analysis technique. The descriptive statistical analysis consists of data presentation in the form of table, calculation of the highest score, the lowest score, mean, and standard deviation.

The calculation results obtained were then grouped based on students’ learning completeness score criteria that is used in MA Negeri 1 Makassar. The inferential statistical analysis was used to test the research hypothesis that is there is a significant effect of prompting question on students’ workshes – based on guided inquiry toward students’ learning achievement and students’ learning activity in class X MIA of MAN 1 Makassar on electrolyte and non-electrolyte solution subject matter. Before conducting hypothesis test, prerequisite test was conducted first, that were normality test and homogeneity test. Because hypothesis test for learning achievement didn’t meet the requirements, so the hypothesis test used non-parametric statistic (uji Mann-whitney).

3. Results And Discussion

3.1. Research results
Descriptive analysis is used to give a general description about students’ learning achievement in experimental and control class. Based on descriptive analysis results of learning achievement test (posttest) the students in class X MIA1 dan X MIA2 of MAN 1 Makassar in even semester, after going
through the learning process using *prompting question* on students’ worksheet based on guided inquiry on experimental class (X MIA\textsubscript{1}) and using students’ worksheet based on guided inquiry on control class (X MIA\textsubscript{2}), statistical data was obtained as in Table 1.

| Table 1. Descriptive Statistic of Learning Achievement on Experimental and Control Class |
|------------------------------------------|---------------------------------|----------------|
| Descript. statistic | Experiment Post-test | Control Post-test |
| Sample | 36 | 35 |
| Lowest Score | 44 | 43 |
| Highest Score | 94 | 87 |
| Average Score | 72.11 | 66.34 |
| Median | 76.07 | 65.25 |
| Modus | 79.1 | 80.38 |
| Standard Deviation | 13.49 | 13.82 |

Statistical analysis result of learning achievement that was taught using *Mind Mapping* media in Quantum Teaching model in experimental class is higher than control class that did not use *Mind Mapping* media in Quantum Teaching model.

The score obtained from experimental class and control class can be categorized in the completeness criteria of the chemistry learning achievement of class X MIA MAN 1 Makassar. The Minimum Completion Standard Criteria (KKM) in chemistry subject class X in X MIA MAN 1 Makassar is 75. The Completeness Criteria can be seen in Table 2.

| Table 2. Completeness Category of Experimental Class and Control Class Learning Achievement |
|------------------------------------------|---------------------------------|----------------|
| Category | Value | Experiment Class | Control Class |
| Frequency | Percentage | Frequency | Percentage |
| Complete | ≥75 | 22 | 61% | 15 | 43% |
| Not Complete | <75 | 14 | 39% | 20 | 57% |

The difference is clearly seen in the frequency of completeness of learning achievement in experimental class and control class. Students who are classified as complete in experimental class are 22 out of 36 students while in control class are 15 out of 35 students. Completeness percentage obtained for experimental was 61% and for control class was 43% which shows that the completeness of students’ learning achievement in the subject matter of electrolyte and non-electrolyte solution for experimental class is higher than control class.

Besides learning achievement, descriptive statistical analysis was also used to give general description about students’ activity in experimental and control class in MA Negeri 1 Makassar that was used as sample in this research. The results of descriptive statistical analysis were processed manually and can be seen in Table 3.

Based on the overall value obtained from observation result that was conducted on experimental and control class students, if students’ activity is classified in students’ learning activity then it is obtained frequency data and percentage as in Table 4.

| Table 3. The Result of Descriptive Analysis of Data of Student’s Activity |
|------------------------------------------|---------------------------------|----------------|
| Descriptive Statistic | Experiment Posttest | Control Posttest |
| Sample | 36 | 35 |
Normality test used in this research was chi square. Based on the inferential statistical analysis result of learning achievement for experimental class was obtained $\chi^2_{count} = 22.46$. The value for $\chi^2_{table}$ at a trust level ($\alpha$) = 0.05 and degree of freedom (dk) = 4 was obtained value $\chi^2_{table} = 9.49$. Therefore, the value of $\chi^2_{count} > \chi^2_{table}$, so it is concluded that learning achievement data in experimental class are not distributed normally. While for control class it is obtained value of $\chi^2_{count} = 26.67$. For $\chi^2_{table}$ at a trust level 0.05 and degree of freedom (dk) = 4 is obtained $\chi^2_{table} = 9.49$. The value of $\chi^2_{count} > \chi^2_{table}$, then it is concluded that learning achievement data on control class is not distributed normally.

Homogeneity test is done to know whether the data studied has homogeneous variance or not. Based on data processing result it is obtained the value of $F_{count}$ at a trust level was 0.05 equal to 0.95 and the value of $F_{table} = 1.80$. Therefore, the value of $F_{count} < F_{table}$, so it can be concluded that variance between experimental class and control class are from a homogeneous population.

Based on prerequisite analysis testing (normality test and homogeneity test), stated that data from experimental and control class are from population that is not distributed normally but both groups come from homogeneous variance, so the hypothesis test by using t-test can not be continued. The other alternative for testing the hypothesis for data that is not distributed normally is by using nonparametric hypothesis test (Mann-Whitney test).

The result of hypothesis testing by using Mann-Whitney test for learning achievement is obtained the value is $Z_{count} = 1.69$ and the value of $Z_{table}$ at a trust level 0.05 equal to 1.64. This shows that the value of $Z_{count} > Z_{table}$ which means the proposed hypothesis is accepted. Therefore, it can be concluded that prompting question on students’ worksheet – based on guided inquiry has positive effect on students’ learning achievement in class X MIA of MAN 1 Makassar in the subject matter of electrolyte and non-electrolye solution.

The normality test of inferential statistical analysis of activities in the experimental class was obtained $\chi^2_{count} = 12.60$. The value for $\chi^2_{table}$ at a trust level ($\alpha$) = 0.05 and degree of freedom (dk) = 4 obtained the value of $\chi^2_{table} = 9.49$. Therefore, the value of $\chi^2_{count} > \chi^2_{table}$, then it is concluded that learning achievement data in experimental class are not distributed normally. Whereas, for control class is obtained the value of $\chi^2_{count} = 9.60$. For $\chi^2_{table}$ at a trust level was 0.05 and degree of freedom (dk) = 3 is obtained $\chi^2_{table} = 7.81$. The value of $\chi^2_{count} > \chi^2_{table}$, then it is concluded that data of learning activity in control class are not distributed normally.

| Category          | Value | Frequency Experimental Class | Percentage | Frequency Control Class | Percentage |
|-------------------|-------|-------------------------------|------------|-------------------------|------------|
| Very Active       | 85-100| 15                            | 41,67%     | 7                       | 20%        |
| Active            | 65-84,9| 20                            | 55,55%     | 27                      | 77,14%     |
| Quite Active      | 55-64,5| 1                             | 2,78%      | 1                       | 2,86%      |
| Less Active       | 35-54,5| 0                            | 0%         | 0                       | 0%         |
| Not Active        | 0-34,5| 0                            | 0%         | 0                       | 0%         |

| Table 4. Frequency and Percentage of Students’ Activity |
|--------------------------------------------------------|
| Category     | Value | Frequency Experimental Class | Percentage | Frequency Control Class | Percentage |
|--------------|-------|-------------------------------|------------|-------------------------|------------|
| Very Active  | 85-100| 15                            | 41,67%     | 7                       | 20%        |
| Active       | 65-84,9| 20                            | 55,55%     | 27                      | 77,14%     |
| Quite Active | 55-64,5| 1                             | 2,78%      | 1                       | 2,86%      |
| Less Active  | 35-54,5| 0                            | 0%         | 0                       | 0%         |
| Not Active   | 0-34,5| 0                            | 0%         | 0                       | 0%         |
Homogeneity test was obtained the value of $F_{\text{count}}$ at a trust level 0.05 equals to 0.28 and the value of $F_{\text{table}} = 1.80$. Therefore, the value of $F_{\text{count}} < F_{\text{table}}$, so it can be concluded that variance between experimental class and control class are from a homogeneous population.

Based on prerequisite analysis test (normality test and homogeneity test), it is stated that data from experimental class and control class are from population that is not distributed normally but both groups are from a homogeneous variance, so the hypothesis test by using t-test can not be continued. The other alternative for testing the hypothesis for data that is not distributed normally is by using non-parametric hypothesis test. (Mann-Whitney test).

The result of hypothesis test by using Mann-Whitney test for activity was obtained the value of $Z_{\text{count}} = 1.22$ and the value of $Z_{\text{table}}$ at a trust level 0.05 equal to 1.64. This shows that the value of $Z_{\text{count}} < Z_{\text{table}}$ which means the proposed hypothesis is rejected. Therefore, it can be concluded that $prompting$ $question$ on students’ worksheet – based on guided inquiry does not affect students’ activity in class X MIA MAN 1 Makassar in the subject matter of electrolyte and non-electrolyte solution.

3.2. Discussion

This research is conducted to find out whether or not difference in students’ learning achievement and activity that are taught using $prompting$ $question$ on students’ worksheet – based on guided inquiry in experimental class and using students’ worksheet – based on guided inquiry without $prompting$ $question$ in control class.

Based on data of descriptive analysis result by using manual calculation, it is seen that the average value in experimental class is higher that is 72,11 compared to the control class that is 66,34. Besides that, frequency of students who complete in experimental class are 22 students and 15 students in control class with completeness percentage respectively 61% and 43%. This shows that the use of students’ worksheet – based on guided inquiry makes students learning achievement in experimental class superior compared to the control class.

Besides that, based on achievement percentage on each indicator shows experimental class obtain a better indicator of achievement percentage compared to the control class. This is known from the eight indicators that exist, six of six of which are experimental classes that obtain a higher percentage of completeness than the control class, while the control class is only superior in two indicators, that are indicators two and three. In indicators two and three, indicator of completeness percentage of control class is superior respectively 100% and 45,71%. Indicator two explained the definition of strong electrolyte, weak electrolyte and non-electrolyte solution based on their electrical conductivity. While the indicator three mentioned the examples of strong electrolyte, weak electrolyte, and non-electrolyte solution. These indicators were discussed in the first meeting both in the control class and in the experimental class. In the first meeting, at the stage of making conclusions, teacher asked students to conclude the material that have been learned. This stage was not well implemented due to time constraints, from five groups only three groups concluded the material that had been studied. So students do not have strong conclusions about materials that they learned in the first meeting. However, the experimental class is still superior on six indicators.

Based on the prerequisite analysis test (normality test and homogeneity test), stated that data from experimental class and control class is from population that is not distributed normally but both groups are from homogeneous variance, so the hypothesis test did not use t-test but used non-parametric hypothesis test (Mann-Whitney test). The result of hypothesis test using Mann-Whitney test for learning achievement obtained the value of $Z_{\text{count}} = 1.69$ and the value of $Z_{\text{table}}$ at the trust level 0.05 equal to 1.64. This shows that the value of $Z_{\text{count}} > Z_{\text{table}}$ which means hypothesis proposed is accepted. Therefore, it can be concluded that prompting question on students’ worksheets – based on guided inquiry has positive effect toward students’ learning achievement in class X MIA MAN 1 Makassar in the subject matter electrolyte and non-electrolyte solution.

Based on the hypothesis test conducted, it can be concluded that prompting question on students’ worksheet – based on guided inquiry has positive effect toward students’ learning achievement in class X MIA MAN 1 Makassar in the subject matter electrolyte and non-electrolyte solution. This is in line
with the result of research conducted by Mayasari et al. (2014), stated that the application of 
**prompting question** technique in learning can improve students’ mathematical communication ability which affect on the increasing students’ learning achievement.

Students make students’ worksheet – based on guided inquiry as guidance to do learning process. By using prompting question which placed on data analyzing part on students’ worksheet – based on guided inquiry, the students are more directed in finding concept caused by prompting questions in the students’ worksheet help to improve students’ thinking skill.

Prompting questions on students’ worksheet – based on guided inquiry give chance to students to be active in building and understanding learning material through thinking process individually or working together in group discussion. This is consistent with the constructivism theory which requires students to actively build their own knowledge. The knowledge gained from the result of constructing their own knowledge will be a meaningful knowledge for those students because they find it based on ideas and basic knowledge they have that are associated with their new knowledge (Dahar, 2011).

The result of affective and skill learning of students in experimental class and in control class is assessed through direct observation during learning. Based on data obtained, average scores of students affective learning achievement in experimental class and in control class respectively 87,11 and 86,83. If those average scores are categorized then “Very Good” category is obtained for both classes namely experimental class and control class. While the average score students’ skill learning achievement in experimental class is 81,34 and in control class is 79,64. If that average score is categorized then “Good” category is obtained.

This research is also conducted to find out the impact of students’ worksheet – based on guided inquiry toward students’ learning activities. There are five indicators of students’ learning activities measured in this research, namely: visual activities, writing activities, oral activities, listening activities, dan motor activities.

In general, students’ activity during learning in experimental class and control class have high percentage of learning activity compared to before research. On the observation stage before conducting research, during learning process took place, the less reciprocal response between teacher and students in the learning activity made the learning activity to become passive and boring for the students.

During research process, students in experimental class and in control class seemed interested in learning activity and it can be seen from the increasing of students’ response toward every activity conducted in the classroom. Percentage data of students’ activity category shows that students’ activity in experimental class in very active category is 41,67%, in active category is 55,55%, and quite active is 2,78% and for less and not active category respectively are 0%. Not much different from experimental class, control class also showed a good learning activity percentage, it is seen that students’ percentage in the very active category is 20%, active category is 77.14% and quite active is 2.86% while for less and not active category respectively are 0%. This shows that both classes have a high activity percentage, it is seen that on students’ activity percentage on less and not active category is 0% which means there is no student’ that is categorized less and not active in the learning process.

This can be caused by the learning model used on both classes that was guided inquiry learning model which made the students active in learning. This is supported by Yulianti et al, (2017) that learning by implementing guide inquiry learning model can increase students’ activity and learning achievement. This is caused by guided inquiry learning model encourages students to think and work hard on their own initiative so the learning process becomes more active, this can develop individual talent or skill and give freedom to students to learn on their own (Roestiyah, 2008).

Based on the categorization of students’ activity based on the activity observed on each indicator shows that the achievement on indicator of listening, oral and motor activities in experimental class and control class are the same. This shows that in learning process, students’ activities like listening to teacher’s motivation and apperception, listening to the presentation of group discussion results, listening to conclusion delivered by teacher at the end of learning activity, presenting the result of group discussion, responding to the result of other groups discussion, concluding the result of
discussion, asking to the teacher when there is something that is not really understood and answering question when the teacher ask, designing and conducting experiments, and have the same activity on cleaning and tidying tools and materials used in experimental class and control class.

A different result is seen on visual and writing activities indicators. On visual activities indicator difference on result obtained was on activity of students observing lights and gas bubbles on the cathode. In experimental class, that activity is categorized “Very Active” while for control class is categorized “Active”. For writing activities indicator, the differences of result obtained are on two activities observed namely students’ activity in formulating problems on problems in students’ worksheet where in experimental class, that activity is categorized “Very Active”. While for control class is categorized “Active” and for students’ activity in making hypothesis from the problem statement that was written, experimental class is categorized “Active” while for control class is categorized “Quite Active”.

From the 16 observed activities, 13 activities have the same category between experimental class and control class and there is three activities which have a different category. If percentage then it is obtained 81.25% the similarity of category on the observed activity in experimental class and control class. This shows that in experimental class and control class have the same 81.25% activity in the learning process. Beside that if students’ activity score in experimental class and in control class based on the observed activity averaged and categorized than it is obtained the same result that is respectively in the “Active” category.

Based on prerequisite analysis test (normality test and homogeneity test), it is stated that data from experimental class and control class are from population that is not distributed normally but both groups are from homogeneous variance, so hypothesis test by using nonparametric hypothesis test (Mann-Whitney test). The result of hypothesis test by using Mann-Whitney test for activity obtains the value of $Z_{count} = 1.22$ and the value of $Z_{table}$ at a trust level 0.05 equal to 1.64. This shows that the value of $Z_{count} < Z_{table}$ which means the proposed hypothesis is rejected. Therefore, it can be concluded that prompting question on students’ worksheet based on guided inquiry does not have effect toward students’ activity in class X MIA MAN 1 Makassar in the subject matter of electrolyte and non-electrolyte solution.

However, this percentage in control class and in experimental class is a quite significant improvement if it’s compared to the previous learning process, it can be seen by the increasing number of students who responded on every activity given during learning process and students are more confident in expressing their opinion and the learning process becomes more enjoyable.

4. Conclusions and Suggestion

4.1. Conclusions
Based on the data analysis result and discussion, it can be concluded that:

1. There is a positive effect of prompting question on students’ worksheet – based on guided inquiry toward students’ learning achievement in class X MIA MA Negeri 1 Makassar in the subject matter of electrolyte and non-electrolyte solution.

2. There is no effect of prompting question on students’ worksheet – based on guided inquiry toward students’ activity in class X MIA MA Negeri 1 Makassar in the subject matter of electrolyte and non-electrolyte solution.

4.2. Suggestion
Based on the result obtained from this research, then the following suggestions are put forward:

1. To teachers or teaching staff, especially chemistry teachers to use prompting question on students’ worksheet – based on guided inquiry in learning process because it can improve students’ learning achievement.

2. For future research, should be able to develop the use of prompting question on other types of students’ worksheet specifically based on recommended learning model in curriculum 2013.
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