

# INQUIRY BASED ENGLISH LEARNING MODEL TO INCREASE THE STUDENT READING COMPREHENSION FOCUS ON VOCABULARY ENRICHMENT

Sulastri<sup>1</sup>  
Sri Anitah W<sup>2</sup>  
Soetarno Joyoatmojo<sup>3</sup>  
Dewi Rochsantiningsih<sup>4</sup>

Doctoral Degree of Faculty of Teacher Training and Education, Sebelas Maret University, Surakarta,  
Central Java, Indonesia

<sup>1</sup>sulastri.soekarno@gmail.com , <sup>2</sup>sri\_anitah@yahoo.com,<sup>3</sup>strn\_jo@yahoo.co.id,

<sup>4</sup>dewi\_roch@hotmail.com

**Accepted date:** 11 September 2017

**Published date:** 15 July 2018

**To cite this document:** Sulastri, W, S. A., Joyoatmojo, S., & Rochsantiningsih, D. (2018). Inkuiri Based English Learning Model To Increase The Student Reading Comprehension Focus On Vocabulary Enrichment. *International Journal of Education, Psychology and Counseling*, 3(15), 86-94.

---

**Abstract:** *This research is aimed at developing at model of inquiry-based English learning focus on vocabulary to increase the student reading comprehension (Invoread) at Senior High School. This study was oriented to the product development in form of procedural model and was conducted in three main phases, namely (1) the phase of exploration; (2) the phase of development; and (3) the phase of model testing. Thirteen Senior High School throughout Surakarta, twenty six English teachers, and their students have been involved in this research. Observations in depth interviews, and documents analysis were conducted to obtain qualitative data and then validated using member check, and triangulation technique. These data were analyzed by means of interactive model.*

*This research also used content and construct validation to validate the instrument. The quantitative data, were in form of gained score, then analyzed by using One Way ANOVA. SPSS 19.0 version was used to compute the data. T-test was also applied to know each pair of the group variant having significant difference. Findings of the explorative phase and need analysis done focusing on the condition of the English learning at Senior High School show that all the learning components have not synergized optimally. In conducting learning, the teachers use various learning models, namely discussion – based learning model (PBD), presentation- based learning model (PBP), and task-based learning model (PBT), but in the learning process, they don't refer to the syntax of those models completely. They usually teach merely based on their*

style, preference, belief and ability. It gives impacts on the quality of their learning which still needs to be improved.

The findings imply the need to develop inquiry-based learning model (Invoread) model which is suited with the Senior High School –learning context. The learning procedures are done through inquiry cycle consist of **Engagement, Exploration, Elaboration, Confirmation, Evaluation and Reflection**. After three of trial, the draft is feasible to be applied as instructional model for Senior High School.

The result of the experimental study shows that the newly-developed model (Invoread) is significantly more effective in enhancing students' achievement in learning English. It's proven by the output of  $F$  observation  $>$  critical value of  $F$  ( $8,355 > 3,101$ ) and the significance level of  $< 0,05$  ( $0,00 < 0,05$ ), it means that there is a significant difference.  $T$ -test which was applied partly shows that students learning using Invoread model obtain higher achievement compared to those students learning using others model. It's proven by the output of  $t$  observation  $>$  critical value of  $t$  ( $3,193 > 2,045$ ) and the significance level of  $< 0,05$  ( $0,03 < 0,05$ ) and the output of  $t$  observation  $>$  critical value of  $t$  ( $3,531 > 2,045$ ) and the significance level of  $< 0,05$  ( $0,01 < 0,05$ ). Meanwhile, there is no difference for those students critical value of  $t < t$  observation  $<$  critical value of  $t$  ( $-2,045 < 3,193 < 2,045$ ) and the significance level of  $0,05$  ( $0,428 > 0,05$ ). The implementation of Invoread model results both in instructional and nurturant effects. Despite the high value in enhancing the communicative competence, it can also develop the students' critical thinking, encourage students' participation in learning, foster the students' autonomy, and develop students' positive attitude toward English learning especially by using Invoread model, the students increase their reading comprehension skills through vocabulary enrichment.

Based on findings, the researchers draws the conclusion that Invoread model is prove to be more effective in enhancing students' achievement compared to the existing models, which were conducted by discussion and assignment. Therefore teachers are strongly suggested to implement Invoread model in their class to foster the effective learning.

**Key words:** *Inquiry-Based Learning, Reading Comprehension, Effective Learning, Autonomy*

---

## **Introduction**

One of the performance of a language is vocabulary (Nessel & Dixon, 2008). As one of the four English language components, vocabulary is very important to be mastered. The importance of vocabulary can be observed at the daily activity. The same case with the purpose of science and technology, it must be done and practiced. The effective process of learning English is how to find the meaning and to know the classification of word. By analyzing we will get the knowledge and information especially the meaning, the function, and the usage of words. As much as we learned and get the information, we will absorb the meaning of each word.

Explained by Nessel & Dixon (2008) our vocabulary is the store of words we know. We actually have four kinds of vocabulary: listening, reading, speaking, and writing. These comprise, respectively, the words we understand when we hear them, the words we understand when we see them, the words we use in speaking, and the words we use in writing. Ordinarily, our speaking and writing vocabularies are smaller than our listening and reading vocabularies, that is, we understand more words that we hear or read than we use when we speak and write (Kamil & Hiebert, 2005). In addition, the depth and extent of our knowledge of word meanings varies within and across individuals. For example, we may be able to define a word but not be sure of how to use it effectively in a sentence, or we may use a word but not feel confident that we fully understand its meaning. Furthermore, we invariably know some words that our friends and associates don't know, and vice versa. Such variation in vocabulary is equally true within and across ELLs. In general, however, the larger the student's English vocabulary, the better the student's expressive skills and capacity to comprehend (Baumann, Kame'enui, & Ash, 2003). Students at all levels of English fluency need to increase their English vocabularies while becoming adept at identify (decoding) words when they are reading. These two skill areas develop in tandem with one another and reinforce one another, but to examine them in depth, we consider them separately (Nessel & Dixon, 2008:92).

The problem which is existed at Senior High School, how to comprehend the reading text the students still have difficulties and to answer the questions given, because the student just had the low and poor vocabulary. Based on the result of the National examination of senior high school in Solo in 2011/2012, the average results is too low. Just 7,39 for Science program (IPA), and 7,25 for Social program (IPS) and the language program just reached 6,55 (Depdikbud Kota Surakarta, 2012). Based on the information, actually at senior high school needs a new model or a new strategy how to increase the student reading comprehension.

As we know the inquiry based english learning model focus on vocabulary to increase the student reading comprehension (*Invoread*) at Senior High School, has the possible way to do it excellently. The inquiry based english learning model focus on vocabulary to increase the student reading comprehension can be simplified by **Invoread**. It is an effective approach and it has had considerable success through the years, teaching students to learn and to increase the students vocabulary and it has helped many teachers use *Invoread* method in their own classroom (Nessel & Dixon, 2008). This Approach to be particularly effective with English Language Learners (ELLs) because it is so responsible to the needs of these students including their varying levels of English Particularly and the unique experience and perspective.

Vocabulary and word recognition are integral components of an *Invoread* program. Instruction in these areas is most effective when it relates closely to students' work with dictated stories and other-author texts. To focus on basic principles for students at all levels of English proficiency, we have organized the information in this separate chapter, but we show throughout how the instruction is connected to the work with dictated accounts. (Nessel & Dixon, 2008:91).

There are four classes of vocabulary teaching such as : 1) vocabulary versus word recognition, 2) building vocabulary, 3) building skill in word recognition, and 4) a balanced approach to vocabulary and word recognition (Nessel & Dixon, 2008: 110).

Building vocabulary reports several research-based principles of vocabulary instruction for native speakers of English that are relevant for ELLs. First, students benefit from explicit instruction in vocabulary, especially when it is closely connected to their reading of texts containing the words. Next, students also learn words incidentally (e.g. by hearing words in conversation). In addition, when students see a word many times in different contexts, they are more likely to comprehend and remember it. Finally, active engagement in vocabulary learning yields the most effective results; activities requiring only minimal involvement and response are much less effective. In related research, Pavlenko and Driagina (2007) have found that the extent of “conceptual equivalency” also affects vocabulary learning in a new language. For example, *casa* in Spanish and *house* in English are conceptually equivalent. In contrast, Russian does not have a word for frustration, so Russian-speaking ELLs may have more difficulty understanding and using the word.

Based on the survey at the early stage of this research happened on April 2013, applied on three senior high school in Surakarta (ICER, 2013). We had the results of the students motivation in studying and learning english. Such as 62% of them had high motivation in studying and learning english but only 32% of the students just appreciate and were not be active at the studyng and learning English in their classrooms. So the researcher think, how to motivate the students to be active at studying and learning English at Senior High School.

By absorbing the above information, the researcher offers The Inquiry Based English Learning Model (Invoread) as an effort to increase the student motivation through applying a good method in order to increase and enrich the students vocabulary (Nessel & Dixon, 2008).

### **Method of the Research**

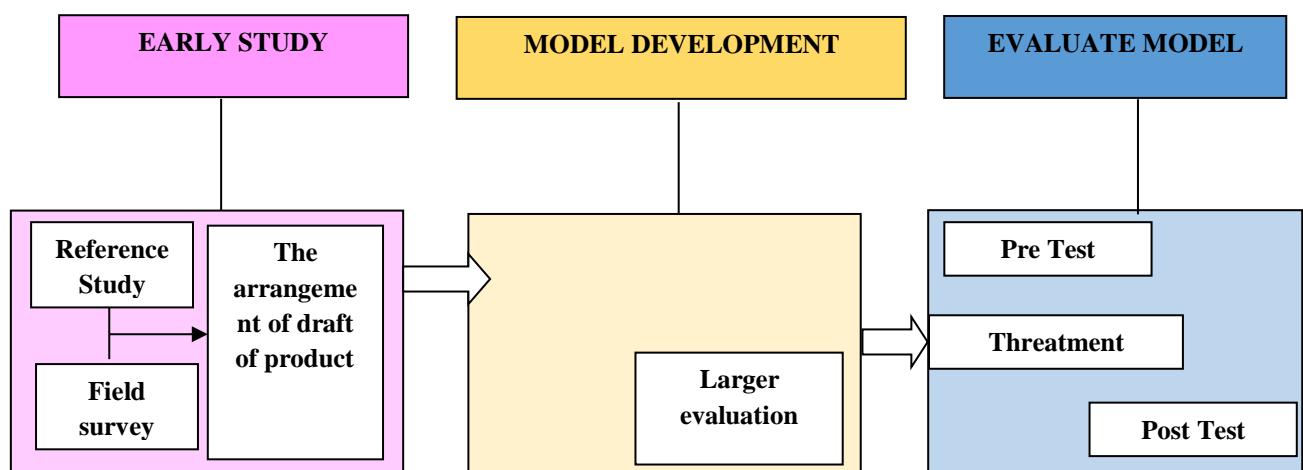
The Design of Research is included as the Research and Development (R & D). The research aims to develop a certain kind of model, although as the hardware also the software (Borg & Gall, 2007) such as:

*Educational Research and Development (Educational R & D) is an industry – based development model in which the findings of the researchare used to design new products and procedures, which then are systematically field-tested, evaluated and refined until they meet specified criteria of effectiveness, quality or similar standards.(page 589)*

Borg and Gall (2007:589) described that product just not only based on the material objects, such as books, texts, film, and etc, but also the process and the procedure such as learning method and methodology of the research, in order to organize the learning process. As far as we know that, Research and Development and certain research which

has the purpose to build and create a model which can be used as the new model which was applied systematically at the field (Senior High School), and the product which was evaluated excellently and revised, so it can fulfill at its effectiveness, qualified and standard. It can be resulted that R and D applied at the reserach is the final result of the new model and specific, different to the others.

The Procedure of This research has 10 steps (Gall and Borg 2007) such as: 1) research and information collecting, 2) planning, 3) develop preliminary form of product, 4) preliminary field testing, 5) main product revision, 6) main field testing, 7) operating product revision, 8) operational field testing, 9) final product revision dan 10) dissemination and implementation. The procedure and the development of this research aims to 1) develop the product, 2) the evaluate the effectiveness of the product and in order to development to create the new model. The procedure can be performed at the following picture:



Picture 1. The steps of research (Nana Syaodih Sukmadinata, 2015)

### The Results

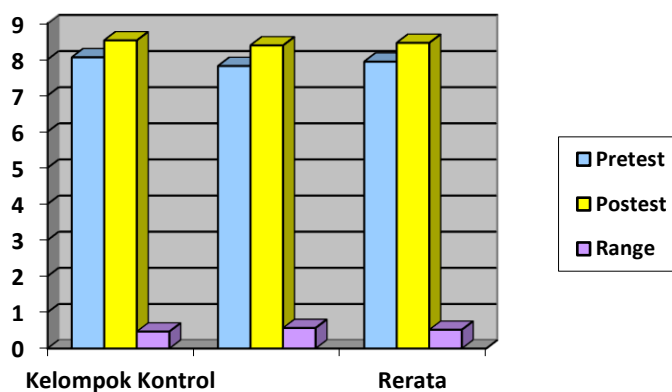
After the limited and the larger evaluation, the researcher did the normality and homogeneity evaluation both at the limited evaluation and also the larger evaluation. The limited evaluation was done four Senior High School in Surakarta the result can be shown at the following tabel Such as :

The following result was taken before the experience based English learning model applied at the classroom, the conventional method was applied at this pre-test activity.

No	Method	N	Mean	N higher	N lower	Deviation Standard
1	Invoread	30	4.33	8	-4	3.021
2	Discussion	30	3.80	8	-4	2.797
3	Assigment	30	6.67	12	0	2.845

Based on the table of pretest we know that there are three method were use in this research. The first is Invoread, the second focused on discussion and the third the method was focused on assignment. The total number of the students are 30 students for each group of method. Especially for the method of invoread we can find the mean of invoread method is 4.33, the higher can be 8, the lower is -4 and deviation standard 3.021. For the second group used discussion on the method mean is 3.80, the higher is 8, the lower is -4 and deviation standard is 2.797. And the last group of assignment method mean is 6.67, The higher is 12, the lower is 0, and deviation standard is 2.845.

Based on the above table can be shown by the following graphic.



Graphic : the results of pretest, posttest

Based on the graphic shows that the range score between control group (0,47) higher than experience group (0,57). It can be stated that the result of learning at the experiment group is higher than the condition of control group the different range between the control group and the experiment group is less 0,10.

### Discussion

Based on the results of the research can be explained such as the following information: At the pre-test activity which had 416 students, are consisted of the students who get A level and B level is 240 students can be performed by 58% while the students who get C level and D level is 176 students can be performed by 42%. The same case at the post-test activity the students who reached A level and B level is 336 students or 81%. And the students who reached C level and D level is 80 students or 19%. Based on the previous information we can conclude that the increasing of the students result between the pre-test and the post-test activity who get level A and B is 96 students or 23%, and the reducing result between the pre-test and post-test activity who get level C and D is 96 students or 23%. We can conclude that the increasing of the result is significant. The Inquiry Based English Learning Model to increase the students vocabulary through giving examples and increase the student reading comprehension. It can be applied at Senior High School activity. Based on the significantly result of the model is motivating to be used by other teachers, especially to make use of inquiry in stimulating students to learn. This study has

shown that the model can be a promising approach to teach vocabulary as long as the teachers are able to utilise students experiences to active the vocabulary building to support their classroom activity.

### **Conclusion**

The Inquiry Based English Learning Model is an innovative teaching method because it uses experiences in stimulating students to learn. It is timely for us to use The Inquiry Based English Learning Model in our teaching; this is to answer the needs of the Senior High School in Surakarta. Professional teachers and students in the activity of preparing the students to increase the students vocabulary and increasing the student reading comprehension. The major challenge for teachers is how to carefully develop the experiences in order to increase the students vocabulary. Another issue of concern is student capability towards the use of The Inquiry Based English Learning Model in the classroom. This is because students acceptance of The Inquiry Based English Learning Model is still low most of them are still used to the conventional way of learning.

In the newest Curriculum, The Inquiry Based English Learning Model was a new approach to be introduced it to the Senior High School in Surakarta in the first semester, 2016/2017 session. Although a new method, The Inquiry Based English Learning Model seems promising as an effective methodological approach. We came to this conclusion on the basis of our analysis of the results of the students at the end of the semester as well as their feedback about the benefits of the activities in class. In general, the results showed that students in the The Inquiry Based English Learning Model class out-performed the students in a non The Inquiry Based English Learning Model class. By using six step of invoread such as engagement, exploration, elaboration, confirmation, evaluation, and reflection.

From the survey on the perceptions of the students, we found that the students had agreed that The Inquiry Based English Learning Model enhances their presentation, teamwork and vocabulary. Based on the students comments in the open-ended question, we found consistent agreement that The Inquiry Based English Learning Model helps them to improve their soft skills. Most of the students however, felt that although The Inquiry Based English Learning Model offered many benefits, it was a challenging way of learning.

The findings imply the need to develop inquiry-based learning model (*Invoread*) model which is suited with the Senior High School –learning context. The learning procedures are done through inquiry cycle consist of **Engagement, Exploration, Elaboration, Confirmation, Evaluation** and **Reflection**. After three of trial, the draft is feasible to be applied as instructional model for Senior High School.

The result of the experimental study shows that the newly-developed model (*Invoread*) is significantly more effective in enhancing students' achievement in learning English. It's proven by the output of  $F_{\text{observation}} > \text{critical value of } F$  ( $8,355 > 3,101$ ) and the significance level of  $< 0,05$  ( $0,00 < 0,05$ ), it means that three is a significant difference. T-test which was applied partly shows that students learning using *Invoread* model obtain

higher achievement compared to those students learning using others model. It's proven by the output of  $t_{\text{observation}} > \text{critical value of } t$  ( $3,193 > 2,045$ ) and the significance level of  $< 0,05$  ( $0,03 < 0,05$ ) and the output of  $t_{\text{observation}} > \text{critical value of } t$  ( $3,531 > 2,045$ ) and the significance level of  $< 0,05$  ( $0,01 < 0,05$ ). Meanwhile, there is no difference for those students  $\text{critical value of } t \leq t_{\text{observation}} \leq \text{critical value of } t$  ( $-2,045 \leq 3,193 \leq 2,045$ ) and the significance level of  $0,05$  ( $0,428 > 0,05$ ). The implementation of *Invoread* model results both in instructional and nurturant effects. Despite the high value in enhancing the communicative competence, it can also develop the students' critical thinking, encourage students' participation in learning, foster the students' autonomy, and develop students' positive attitude toward English learning especially by using *Invoread* model, the students increase their reading comprehension skills through vocabulary enrichment.

Based on findings, the researchers draws the conclusion that *Invoread* model is prove to be more effective in enhancing students' achievement compared to the existing models, which were conducted by discussion and assignment. Therefore teachers are strongly suggested to implement *Invoread* model in their class to foster the effective learning.

## References

- Alshammari, M.M. (2015). New Developments In Teaching Reading Comprehension Skills To Efl Learners, *International Journal of English Language Teaching Vol.3,No.1, pp. 1-10. ISSN 2055-0820.*
- Antoni, N. (2010). Exploring Efl Teacher's Strategies In Teaching Reading Comprehension. *Jurnal Penelitian Pendidikan Vol. 11, No. 2.*
- Barufaldi, J. 2002. 5E- Inquiry Cycle. *Eisenhower Science Collaborative Conference.* Austin, Texas
- Borg R.W. & Gall M.D. (2007). *Educational Research : An Introduction.The eight edition.*Sydney:Pearson Education, Inc.
- Brown, H. Douglas. (2003). *Principles of Language Learning and Teaching.* Fifth Edition.New York: Pearson Education, Inc.
- Bruner, J. 1994. *Inquiry and Relection.* Albany: State University of New York Press.
- Christensen, Larry, B. (1977). *Eksperimental Metodology.* Boston: Allyn and Bacon Inc.
- Crowley, J & Louis, M. (1995). *Strategies for Guiding Content Reading.* Boston: Allyn and Bacon.
- Depdikbud. (2013). *Salinan Daftar Nilai Ujian Nasional Kota Surakarta Dokumen Negara Ujian Nasional Bahasa Inggris SMA/MA IPA Tahun Ajaran 2015/2016.* Balitbang Kemendikbud Jakarta. ICER. (2013). *The 6<sup>th</sup> International Conference on Educational Research:Challenging Education for Future Change.*Thailand : Khon Kaen University Press
- Joice, B. Marsha Weil, and Emily Calhoun. (2011). *Models of Teaching.* Eight Edition USA: Pearson Education Inc.
- Kirby, JR. (2007). Reading Comprehension: Its Nature and Development Incyclopedia of Language and Literacy Research Network. Diperoleh 5 Januari 2014 dari <http://www.literacyencyclopedia.ca//pdfs/topic,php?topld:227>.
- Mayer, R.E (2008). *Learning and Instruction. Second edition.* Ohio : Pearson Merrill Prentice Hall.



- Mellad, D.F.E., Fall, & Woods, K.L. (2010). A part Analysis of Reading Comprehension for Adult with Low Literacy. *Journal of Learning Disabilities*. Vol 43 (2), 154-165.
- Miles, M BA dan A.M. Huberman (1987). *Qualitative Data Analysis, An Expanded Source Book*. Second Edition. London: Sage.
- Mikulecky, B.S. & Jeffries L. (2003). *More Reading Power*. United States Of America: Longman.
- Nessel, D.D. & Dixon C. N. (2008). *Using The LEA with English Language Learner: Strategies for Engaging Students and Developing Literacy*. Singapore : Corwine press, A Sage Company.
- Nunan, D. (1991). *Language Teaching Methodology; A textbook for Teacher*, London: Prentice Hall.
- Pressley. M. (2016). *Reading Instruction That Works: The Case for Balanced Teaching*. New York: Guilford.
- Sadeghi, S. (2009). *Konsep dan Makna Pembelajaran untuk Membantu Memecahkan Problematika Belajar dan Mengajar*. Bandung: Alfabeta.
- Sukmadinata, Nana Syaodih. (2015). *The Steps of Research*. Journal The Social Sciences : Pakistan Vol 11 (6). ISSN. 1818 – 5800. Hal. 1028 – 1034. 2016