



## **UNP CHEMISTRY STUDENTS' PERCEPTION OF USING REFERENCES WRITTEN IN ENGLISH**

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### **Abstract**

Chemical Department has used references including some textbooks written in English as the medium of instruction in teaching and learning process. Some students find difficulties to understand textbooks written in English because of some reasons which brings out different perceptions about the use of references in English to the student. This research aims to find out Chemistry students' perception of using references written in English. This research is a quantitative research which used descriptive method. There were 56 Chemistry students as the sample of this research which chosen by using cluster sampling technique. The instrument used in this research is the questionnaire about students' perception which based on three perception indicator; absorption, understanding and evaluation. The findings shows that the students have positive perception toward the use of references written in English viewed from absorption and evaluation indicator, and negative perception viewed from understanding indicator.

**Key words:** students' perception, references written in English

### **A. INTRODUCTION (CAPITAL Times New Roman 12 pt)**

Becoming fluency in English has become a must for both English and non-English Department students in Universitas Negeri Padang since English has been known widely as an international language. For English Department students, proficient in English becomes the primary aspect because it cannot be denied that they should face the learning process which mostly use English language as the instruction in the class and English materials as the sources of learning. For non English Department students, English proficiency is also required since English is an important language for all kinds of professional and personal goals. In addition, all of students in Universitas Negeri Padang should take the Test of English as a Foreign Language (TOEFL) as the graduation requirement. Those are the reasons why the use of English in teaching and learning process is highly needed.

One of the crucial examples about the implementation of using English can be seen at the Faculty of Math and Natural Sciences of Universitas Negeri Padang, especially in Chemical Department. This department is requiring its

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students to use and read references including textbooks and journals written in English during the learning process. The aim of this method is not only to develop students' comprehension about the materials and facilitate them with more authentic materials since almost of the authentic sources about Chemistry are written in English, but also to get them closer with English.

In fact, dealing with references written in English is not the simple thing for the students because of some factors. This condition brings the different perceptions toward the use of references written in English through the Chemistry students. Perception means a process preceded by process of sensing, it is a process of receiving stimulus by individual through the senses or called sensory processes (Walgito, 2005).

Perception as the process of how the information is acquired through the sensory receptors (e.g. eyes, ears, nose, and skin) which is transformed into something of what we think, see, hear, smell, taste, or touch (Mussen as cited in Nursanti, 2016). Furthermore, Nursanti (2016) also defines that perception is the process of selection, organization, and interpretation of stimuli by someone to be a coherent and meaningful picture of the world. In other words, by passing perceptual process, people can interpret their idea meaningfully based on what they see, hear, taste, smell, and touch. Perception involves more process of thinking as a result of the information received from the sensory systems regards certain things or events (Ahen, 2009). It can be conclude that perception means people's responses through the stimuli or events around them that affect the senses. It is a process of receiving, selecting, organising, interpreting, checking and reacting to stimuli.

There are some factors that influence someone's perception. Walgito (2005) reveals some factors that contribute in someone's perception are perceived object, attention, sense and nervous system. Meanwhile Walgito as cited in Nursanti (2016) states that it includes internal and external factors which influence the perception. For internal factor, the perception of an individual will influenced by psychological factor of someone, thought, feeling, motivation, and attention. On the other hand, for the external factor it influenced by outside factors such as stimulus, environment, culture, and believe. It is in line with the statement of Sobur as cited in Nursanti (2016), which argues that there are two factors that influence someone's perception. There are internal and external factors. Internal factor includes psychological needs, personal background, experience, personality, attitude and personal believe, and self acceptance. Furthermore, for external factor, it includes intensity, size, contrast, movement, repetition, intimacy, and novelty.

Walgito (1990) mentions that perception has indicators as follows:

a. Absorption of stimuli

These stimuli or objects are absorbed or received by the five senses, both vision, hearing, touch, smell, and taste, individually or together. From the results of absorption or reception by sensory devices will get a picture, response, or impression in the brain.

b. Understanding

After images or impressions occur in the brain, the picture is organized, classified, compared, interpreted, so that understanding is formed. The process of understanding is very unique and fast.

c. Evaluation

After understanding is formed, there is an assessment of the individual. Individuals compare the knowledge or understanding newly acquired with the criteria or norms that individuals have subjectively. Individual judgments are different even though the object is the same. Therefore perception is individual.

Besides, there are some previous researches about students' perception. The study conducted by Asrifan (2017) toward the Educational Technology students at STKIP Muhammadiyah Rampang, Makassar, concluded that the students had positive perception toward bilingual-based materials in English class. The students stated that bilingual-based materials gave certain advantages for them in learning English. The other reserach is conducted by Nugroho (2008) which investigated the Psychology students' responses toward the use of English references at Sanata Dharma University, Yogyakarta. He informed that most of the students had positive perception and believed that using English references is beneficial in learning process eventhough there were some difficulties that arised.

Based on background above, the writer is interested to analyze Chemistry students' perceptions toward use of references written in English. This study is conducted to Chemistry students enrolled in 2016 academic year in Chemical Department.

## B. RESEARCH METHOD

This research was a quantitative descriptive research which described students' perception toward the use of references written in English. Quantitative research is a type of educational research in which the researcher decides what to study, asks specific, narrow questions, collects numeric data from participants, and analyzes these numbers using statistics (Creswell, 2005). Population of this research was all of the Sixth Semester students enrolled in 2016 at Chemical Department of Universitas Negeri Padang. The population contained seven classes. The sample was taken by using cluster sampling. In cluster sampling, the unit of sampling is a naturally occurring group of individuals (Gall, 2007). The sample was the students from NK Kimia A class and Pendidikan Kimia A class with the total numbers are 56 students.

The instrument used in this study was the questionnaire. The questionnaire consisted of 30 statements with four Likert scale (*Selalu, Sering, Jarang, Tidak Pernah*). The quetionnaire was designed based on the three perception indicators (Walgito, 1990) that are; absorption, understanding and evaluation. The questionnaire was made in the Google Form, the link was sent to students through WhatsApp group. The students were required to access the link given then fullfill the questionnaire.

To analyze the data from the questionnaire, the researcher calculated the percentages of students' answers based on the scales categories by using formula from Arikunto (2008) as follow:

$$P = \frac{f}{N} \times 100\%$$

Where:

P = percentage of the students' answer

F = frequency of the students

N = total of the sample

The students' answer was determined as positive or negative perception, it can be seen in the table below:

NO	Range	Perception
1	5 – 4	(+)
2	3,9 – 2,5	(+)
3	2,49 – 1,5	(-)
4	<1,5	(-)

Table above was used to analyze the data of the research. There were some ranges to show students' perception through the use of references written in English. The ranges of the perception are divided into 4 levels: 5 – 4 (+), 3,9 – 2,5 (+), 2,49 – 1,5 (-), and < 1,5 (-)

### C. RESULT AND DISCUSSION

#### 1. Research Finding

- a. The Students' Perception toward the Use of References Written in English viewed from Absorption Indicator.

No	Question	Scale				Range	Perception
		SL	SR	JR	TP		
1	Materi yang terdapat dalam referensi berbahasa Inggris mudah untuk saya serap.	5	27	24	-	2,7	+
2	Materi yang terdapat dalam referensi berbahasa Inggris mudah untuk saya cerna.	4	20	31	1	2,48	-
3	Materi yang terdapat dalam referensi berbahasa Inggris dapat saya serap dengan cepat.	2	16	36	2	2,32	-
4	Materi yang terdapat dalam referensi berbahasa Inggris dapat saya serap dengan jelas.	4	18	33	1	2,45	-
5	Materi yang terdapat dalam referensi berbahasa Inggris dapat saya serap dan tidak mudah lupa.	5	19	31	1	2,5	+
6	Materi yang terdapat dalam referensi berbahasa Inggris dapat saya aplikasikan ketika melakukan praktikum.	5	25	24	2	2,59	+
7	Materi yang terdapat dalam referensi	5	20	29	2	2,5	+



	berbahasa Inggris dapat saya terapkan sesuai dengan kehidupan sehari-hari.						
8	Materi yang terdapat dalam referensi berbahasa Inggris dapat saya kaitkan dengan materi selanjutnya.	5	25	25	1	2,6	+
9	Saya lebih mudah menangkap inti materi pembelajaran dengan membaca referensi berbahasa Inggris.	4	15	36	1	2,4	-
10	Saya lebih cepat menangkap inti materi pembelajaran dengan membaca referensi berbahasa Inggris.	4	14	36	2	2,35	-

b. The Students' Perception toward the Use of References Written in English viewed from Understanding Indicator.

No	Question	Scale				Range	Perception
		SL	SR	JR	TP		
11	Saya tidak terlalu merasa kesulitan ketika membaca referensi berbahasa Inggris.	2	19	34	1	2,4	-
12	Saya dapat memahami materi dengan baik ketika membaca referensi berbahasa Inggris.	4	18	33	1	2,45	-
13	Saya dapat menemukan inti pembelajaran dengan cepat ketika membaca referensi berbahasa Inggris.	2	18	34	2	2,35	-
14	Membaca materi dalam referensi berbahasa Inggris dapat saya pahami dan kuasai secara keseluruhan.	3	14	38	1	2,34	-
15	Saya dapat mengerjakan latihan serta tugas-tugas dengan mudah ketika membaca referensi berbahasa Inggris.	2	16	37	1	2,34	-
16	Saya dapat memahami materi yang diberikan oleh dosen dengan membaca referensi berbahasa Inggris.	3	22	28	3	2,45	-
17	Saya dapat mempresentasikan kembali materi yang telah saya pelajari secara lancar dengan membaca referensi berbahasa Inggris.	5	16	33	2	2,42	-
18	Saya dapat memahami jenis-jenis reaksi kimia dengan jelas ketika membaca referensi berbahasa Inggris.	3	20	31	2	2,42	-

19	Saya dapat melakukan praktikum secara baik dan aman dengan membaca referensi berbahasa Inggris.	3	22	29	2	2,46	-
20	Saya dapat mengklasifikasikan fenomena-fenomena dalam kehidupan sehari-hari dengan teori yang saya baca dalam referensi berbahasa Inggris.	4	16	35	1	2,41	-

c. The Students' Perception toward the Use of References Written in English viewed from Evaluation Indicator.

No	Question	Scale				Range	Perception
		SL	SR	JR	TP		
21	Penggunaan referensi berbahasa Inggris mempermudah saya dalam proses pembelajaran.	3	31	20	2	2,6	+
22	Penggunaan referensi berbahasa Inggris efektif dalam membantu saya mencapai tujuan pembelajaran.	5	33	18	-	2,76	+
23	Penggunaan referensi berbahasa Inggris meningkatkan motivasi saya dalam belajar.	8	30	17	1	2,8	+
24	Penggunaan referensi berbahasa Inggris meningkatkan antusiasme saya untuk lebih memahami dan menguasai materi pembelajaran.	8	27	21	-	2,76	+
25	Penggunaan referensi berbahasa Inggris dapat memperluas pengetahuan saya terkait ilmu kimia.	11	27	17	1	2,85	+
26	Penggunaan referensi berbahasa Inggris memberikan saya informasi-informasi baru tentang materi pembelajaran.	10	31	13	2	2,87	+
27	Penggunaan referensi berbahasa Inggris tidak hanya menambah ilmu saya di bidang kimia, tetapi juga dalam skill Bahasa Inggris.	13	27	15	1	2,9	+
28	Penggunaan referensi berbahasa Inggris tidak menyebabkan saya stress.	5	21	28	2	2,5	+
29	Referensi berbahasa Inggris merupakan sumber bacaan yang paling otentik bagi saya.	3	30	22	1	2,62	+
30	Referensi berbahasa Inggris merupakan sumber bacaan yang paling tepat dan sangat mendukung bagi	7	24	25	-	2,67	+

saya untuk menemukan materi-materi pembelajaran.						
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**2. Discussion**

The findings of this research confirm that there are three perception indicators in order to find out students’ perception about the use of references written in English in the learning process. The first indicator is absorption where the stimuli or objects are absorbed or received by the five senses (Walgito, 1990). The findings reveal that the first item in the first indicator got the positive perception from the students. They give positive response to the statement which means that the students can absorb the material in references written in English. However, the students have negative perception toward the second statement which means that they find difficult to digest the information or material from references written in English. In addition, negative perception is also delivered by the students through the third and fourth item, which means that it is not easy for them to absorb the material contained in references written in English clearly and quickly.

The next four items in the first indicator got the positive perception from the students. They responses demonstrate that they can apply material from references written in English when doing practicum and even in everyday life. Meanwhile, the last two items in this section got the negative perception. The students seem to prefer reading references in Indonesian than English one. It can be concluded that some items in this section get positive perception from the students and other items get negative perception. In other words, the students have positive perception toward the use of references written in English although there are some difficulties they have. This is in line with the findings from a study conducted by Nugroho (2008) about students’ responses through English references. This study found that the Psychology students at Sanata Dharma University have positive perception through the use English references despite there are some obstacles arise.

The second indicator used to find out students’ perception is understanding. This section discusses about students’ perception toward the use of references written in English viewed from their understanding. It is found that students’ perception toward the use of references written in English viewed from understanding indicator is negative. They dominantly give negative answer through the all items in this second section. It means that the students cannot easy to understand the material from references written in English. This is in line with the findings from a research conducted by Nugroho (2008). The findings demonstrate that around 86% students find difficulties when reading references written in English. The students cannot understand easily sentences in English, so that they tend to be hard at understanding material from references written in English.

The third indicator used to find out students’ perception toward the use of references written in English is evaluation. Unlike the previous section, the all items in this section get positive answer from the students. It means that the students demonstrate positive perception in indicator evaluation toward the use of references written in English. This is in line with the findings from a study

conducted by Asrifan (2017). The findings show that the Educational Technology students have positive perception of the use of bilingual-based materials as language instruction in the class.

The positive perception is also due to the reason that the use of references written in English gives some advantages to the students. Chemistry students demonstrate that references written in English are the most trusted sources which can be rewarding for them. This finding is supported by several studies. The study conducted by Asrifan (2017) indicates that bilingual-based materials give certain advantages for the students learning English. In addition, the research conducted by Nugroho (2008) shows that the students have positive perception toward the use of English references since they notice that English references can enrich and broaden their knowledge.

As stated by Devito as cited in Diniah (2013), perception is the process when we become aware of many stimuli that affect our senses. It means that perception is the process which people are aware of objects and events occurred in around them. In this research, the stimulus of students' perception is references written in English. The students give positive perception toward the use of references written in English because they can be beneficial for them in learning. This proves that references written in English are effective to be used as the medium of learning instruction. However, some students have the problem in understanding the materials from references written in English.

#### **D. CONCLUSION AND SUGGESTIONS**

Based on the explanation above, it can be concluded that the use of references written in English get the positive perception from the students. This perception can be viewed from three perception indicators: absorption, understanding and evaluation. However, it is not easy for the students to understand material from references written in English, especially to understand the text. The students need assistance to comprehend the text and to deal with material from references written in English. In short, they need to give more time to learn English.

Based on the conclusions above, some suggestions can be derived as follows. For the next research, it is suggested to conduct an oral interview to get more accurate data about students' perception toward the use of references written in English. For the next research, it is suggested to find out the factors of students' positive or negative perception toward the use of references in English. For Chemical department, it is suggested to give the students more time to learn English. It is not enough to learn English only in MKU (Mata Kuliah Umum) class. The students need to be presented more English class especially English for Science in order to get them easier to deal with English.

#### **BIBLIOGRAPHY**

Ahen, J.A. (2009). *Student's Perception Towards English for Self Expression*. Thesis. Retrieved on January, 17, 2019 from <https://lra.le.ac.uk/bitstream/2381/30871/1/U205059.pdf>



- Arikunto, S. (2008). *Dasar-Dasar Evaluasi Pendidikan*. Jakarta: Bumi Aksara
- Asrifan, A, et all. (2017). *Analysis of Students' Perceptions of Bilingual-Based Materials in English for Educational Technology in Indonesia*. International Journal of English Linguistics. Retrieved on January, 17, 2019 from <http://webcache.googleusercontent.com/search?q=cache:zmVUkY65oM2oJ:www.ccsenet.org/journal/index.php/ijel/article/download/70852/38634+&cd=15&hl=en&ct=clnk&gl=id&client=firefox-b>
- Creswell, J.W. (2005). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. USA: Pearson Education
- Diniah, S.N. (2013). *Teachers' Perceptions Towards the Use of English Textbook in EFL Classrooms*. Journal of English and Education. Retrieved on January, 17, 2019 from <https://media.neliti.com/media/publications/192261-EN-teachers-perceptions-towards-the-use-of.pdf>
- Gall, M.D,et al. (2007). *Educational Research. An Introduction*. New York: Pearson Education
- Nugroho, F.D. (2008). *Tanggapan Mahasiswa Psikologi Universitas Sanata Dharma terhadap Penggunaan Referensi Berbahasa Inggris*. Retrieved on January, 17, 2019, from <https://core.ac.uk/download/pdf/45362001.pdf>
- Nursanti, Y. (2016). *Students' Perception of Teacher's Bilingual Language Use in An English Classroom*. Journal of English and Education. Retrieved on March, 26, 2019, from [bilingua.pdf+&cd=1&hl=id&ct=clnk&gl=id&client=firefox-b-d](http://www.bilingua.pdf+&cd=1&hl=id&ct=clnk&gl=id&client=firefox-b-d)
- Walgito, B. (1990). *Pengantar Psikologi Umum*. Yogyakarta: Andi
- Walgito, B. (2005). *Pengantar Psikologi Umum*. Yogyakarta: Andi