

Chapter IV

Findings and Discussion

The aim of this study is to evaluate the responsiveness of “reading” teaching and learning activities of MKU BING to Faculty of Technology (FT) students’ learning needs in developing their academic reading skills. The findings and discussion of the study are grouped under four headings: identity of respondents, types of materials, reading activities, and reading skills. The data were collected by means of questionnaire and interview.

A. Identity of Respondents

The respondents of questionnaire are 40 FT students from different fields of study. The distribution of respondents’ fields of study is presented in Chart 1 while the distribution of respondents’ academic year is presented in Chart 2. Most of the respondents are students of academic year 2008 and 2009.

Chart 1. The Distribution of Respondents’ Fields of Study

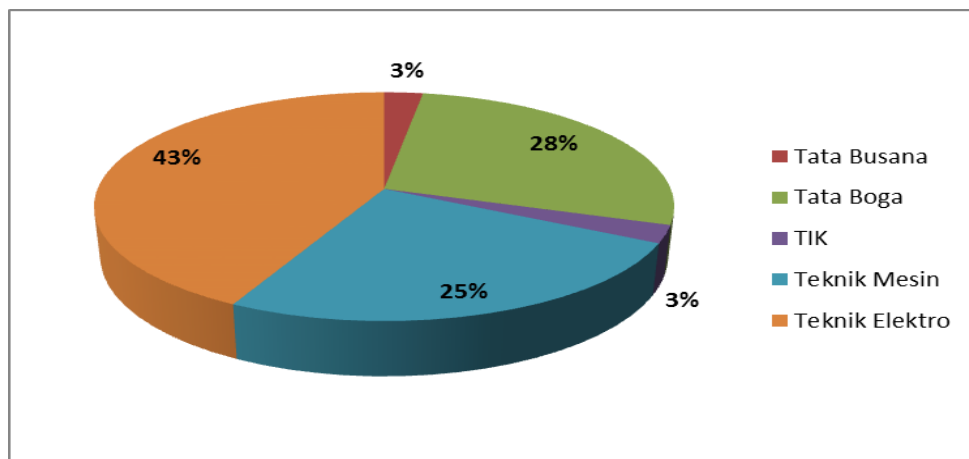
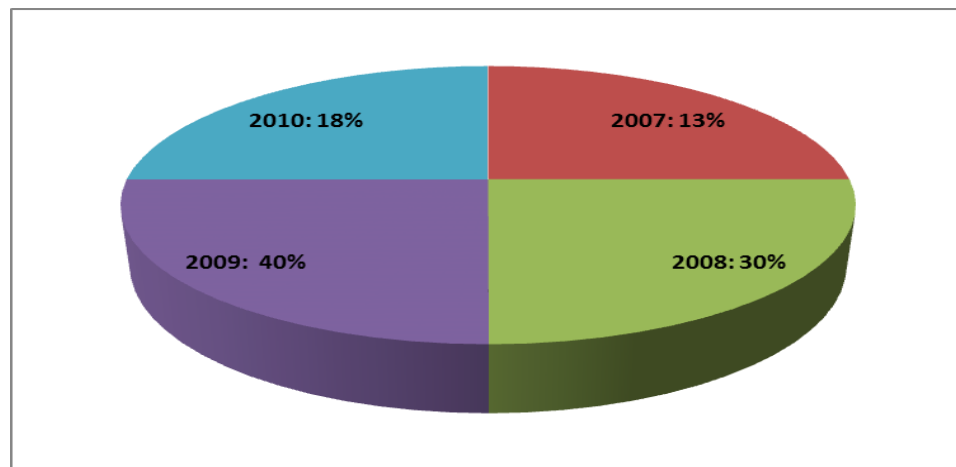
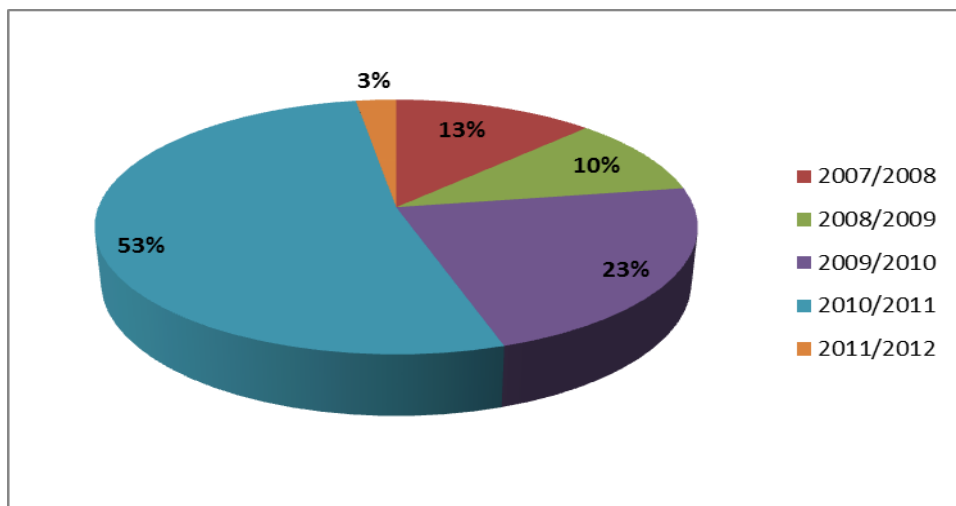


Chart 2. The Distribution of Respondents' Academic Year



The students have passed MKU BING in the first or second semester. Most of them have passed the course in academic year 2010/2011. The percentage is presented in Chart 3.

Chart 3. The Respondents' Academic Year of Passing MKU BING



Some students felt reluctant to be interviewed to express their ideas about MKU BING. Therefore, the researcher selected four respondents who have passed the course to be interviewed. Their fields of study are *pendidikan TIK*, *pendidikan teknik mesin*, *tata boga*, and *teknik mesin*.

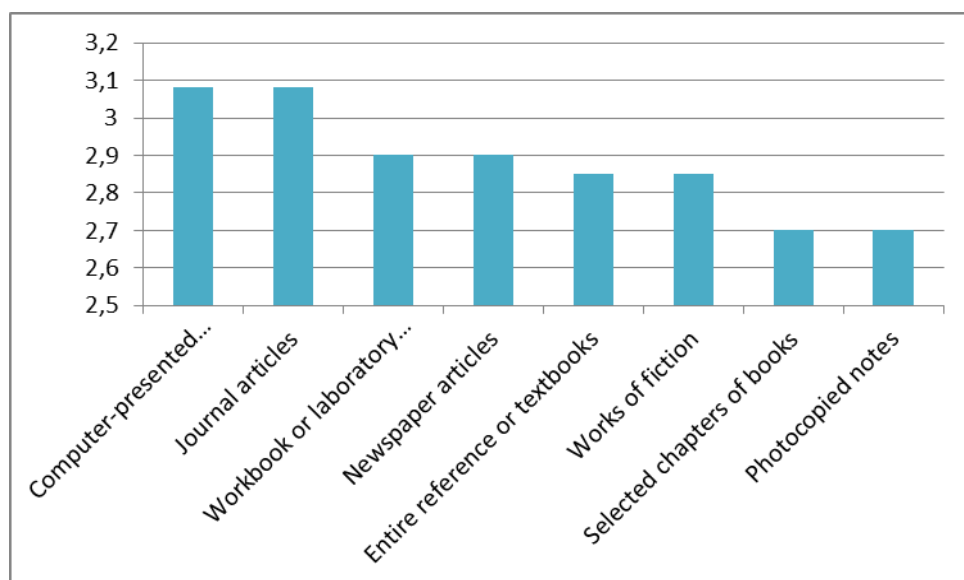
B. Types of Materials

Research questions:

- What types of English reading materials are students expected to process in their S-1 study?
- Do students perceive that their MKU BING course have exposed them to these types of materials?

Chart 4 shows types of materials needed by FT students. **They highly need computer-presented reading materials, journal articles, workbook or laboratory instructions, and newspaper articles to support their academic life.** They are indicated by high mean 1 score of each type.

Chart 4. FT Students' Needs: Types of Materials



In terms of responsiveness, however, the respondents perceive MKU BING as **not responsive to types of materials** needed by FT students. This is indicated by the overall mean 2 (MKU BING

responsiveness) of 2,9 on a 4-point scale which is lower by 0,21 than the overall mean 1 (students' needs). The overall mean 1 and 2 are presented in Figure 1.

Figure 1. The Overall Mean of Types of Materials Needed by FT Students

Types of Materials	overall mean
students' needs	2,89
responsiveness of MKU BING	2,68

The responsiveness of MKU BING to the top 4 types of materials needed by FT students is presented in Figure 2. The respondents perceive MKU BING as **not responsive to top 4 types of materials** highly needed by FT students. They are computer-presented reading materials, journal articles, workbook or laboratory instructions, and newspaper articles.

Figure 2. The Responsiveness of MKU BING to Top 4 Types of Materials Needed by FT Students

	mean 1	mean 2	gap	sd 1	sd 2
1. Computer-presented reading materials	3,08	2,95	0,13	0,81	0,64
2. Journal articles	3,08	2,95	0,13	0,68	0,89
3. Workbook or laboratory instructions	2,9	2,5	0,4	0,98	0,46
4. Newspaper articles	2,9	2,5	0,4	0,66	0,46

The first type of material highly needed by FT students shows that rapid global changes demand them to have 21st-century skills. They need to have information and communication skills, such as media, information and ICT literacy (SmartBean, 2009:3). MKU BING is **not responsive in to the computer-presented reading materials** needed by FT students. This is indicated by mean 2 (MKU BING responsiveness) of 2,95 on a 4-point scale which is lower by 0,13 than the mean 1 (students' needs).

The second type of material highly needed by FT students is **journal articles**. MKU BING is **not responsive** to this need. This is indicated by mean 2 (MKU BING responsiveness) of 2,95 on a 4-point scale which is lower by 0,13 than the mean 1 (students' needs).

The third and fourth types of materials highly needed by FT students is **workbook or laboratory instructions and newspaper articles**. MKU BING is **not responsive** in facilitating them. This is indicated by means 2 (MKU BING responsiveness) of 2,5 on a 4-point scale which are lower by 0,4 than the means 1 (students' needs).

The statistical computation in Figure 3 shows that MKU BING is **not responsive** to other types of materials needed by FT students. For **entire reference or textbooks and work of fictions**, the mean 2 (MKU BING responsiveness) is lower by 0,15 than the mean 1 (students' needs). **Selected chapters of books and photocopied notes** lie at the lowest positions of types of materials needed by FT students. The mean 2 (MKU BING responsiveness) is lower by 0,05 to 0,25 than the mean 1 (students' needs).

Figure 3. The Responsiveness of MKU BING to Types of Materials Needed by FT Students

	mean 1	mean 2	gap	sd 1	sd 2
5. Entire reference or textbooks	2,85	2,7	0,15	0,56	0,5
6. Works of fiction	2,85	2,7	0,15	0,91	0,77
7. Selected chapters of books	2,7	2,45	0,25	1,05	0,99
8. Photocopied notes	2,7	2,65	0,05	0,73	0,64

The questionnaire and interview findings show that the students are in need of other types of materials to support their academic life. Students majoring in *tata boga* (Culinary), for example, are in need of recipe books and culinary magazine, while students majoring in *teknik mesin* are in need of machine modul to support their academic life. In addition, students majoring in *teknik informatika dan komputer* (information and computer technology) are in need of computer-presented reading materials.

C. Reading Activities

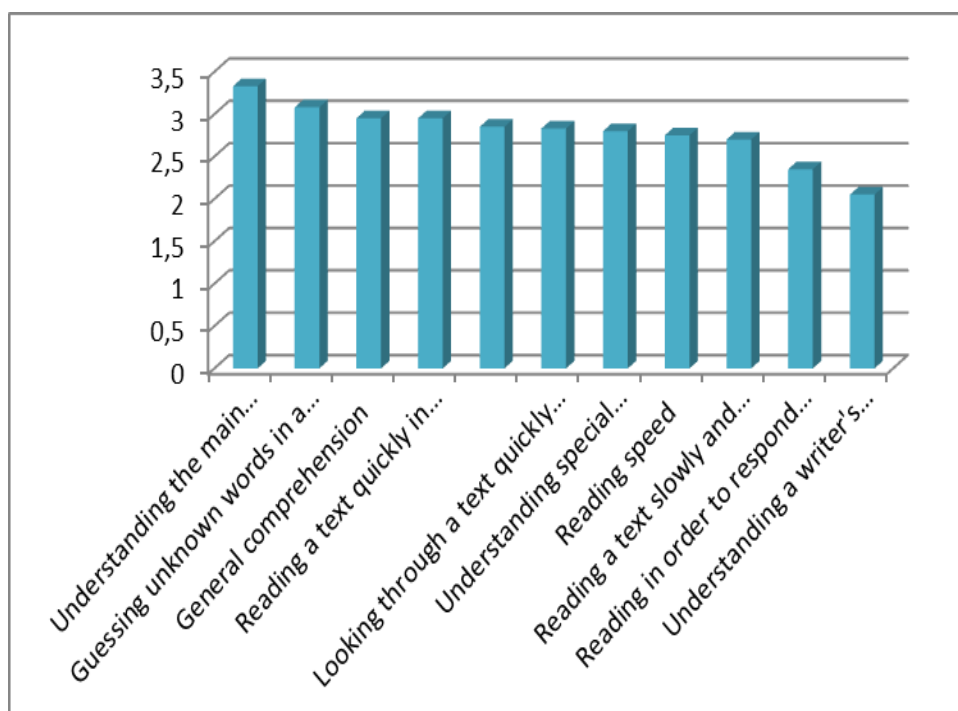
Research questions:

- What types of reading activities are students expected to process in their S-1 study?
- Do students perceive that their MKU BING course have exposed them to these types of tasks?

Chart 5 shows reading activities needed by FT students. **They highly need activities in understanding the main points of text, guessing unknown words in a text, general comprehension, and reading a text quickly in order to establish a general idea in the content.** They are indicated by high mean 1 score of each type.

The interview findings reveal that the students need to understand the main point of the text since they have to read many books to increase their knowledge. They also need to guess unknown words in a text since they often deal with special vocabulary related to their field of study. As stated in the academic, professional, and social competency to be achieved by FT students at the end of S1 program, FT students are expected to be prospective technology-literate teachers. They are also expected to have global knowledge with reference to their field of study.

Chart 5. FT Students' Needs: Reading Activities



In terms of responsiveness, the respondents perceive MKU BING as **responsive to reading activities** needed by FT students. This is indicated by the overall mean 2 (MKU BING responsiveness) of 2,83 on a 4-point scale which is higher by 0,05 than the overall mean 1 (students' needs). The overall mean 1 and 2 are presented in Figure 4.

Figure 4. The Overall Mean of Reading Activities Needed by FT Students

Reading Activities	overall mean
students' needs	2,78
responsiveness of MKU BING	2,83

The responsiveness of MKU BING to the top 4 reading activities needed by FT students is presented in Figure 5.

Figure 5. The Responsiveness of MKU BING to Top 4 Reading Activities Needed by FT Students

	mean 1	mean 2	gap	sd 1	sd 2
1. Understanding the main points of texts	3,33	3,48	0,15	0,69	0,68
2. Guessing unknown words in a text	3,08	2,98	0,1	0,61	0,68
3. General comprehension	2,95	2,98	0,03	0,64	0,73
4. Reading a text quickly in order to establish a general idea in the content	2,95	2,78	0,17	0,67	0,81

The first reading activity highly needed by FT students is **understanding the main points of texts**. MKU BING is **responsive** in facilitating this. This is indicated by mean 2 (MKU BING responsiveness) of 3,48 on a 4-point scale which is higher by 0,15 than the mean 1 (students' needs).

The second reading activity highly needed by FT students is **guessing unknown words in a text**. MKU BING is **not responsive** in facilitating this. This is indicated by mean 2 (MKU BING responsiveness) of 2,98 on a 4-point scale which is lower by 0,1 than the mean 1 (students' needs).

The third reading activity needed by FT students is **general comprehension**. MKU BING is **responsive** in facilitating this. This is indicated by mean 2 (MKU BING responsiveness) of 2,98 on a 4-point scale which is higher by 0,03 than the mean 1 (students' needs).

The fourth reading activity needed by FT students is **reading a text quickly in order to establish a general idea in the content**. MKU BING is **not responsive** in facilitating this. This is indicated by mean 2 (MKU BING responsiveness) of 2,78 on a 4-point scale which is lower by 0,17 than the mean 1 (students' needs).

The statistical computation in Figure 6 shows the responsiveness of MKU BING to some reading activities needed by FT students.

Figure 6. The Responsiveness of MKU BING to Reading Activities Needed by FT Students

	mean 1	mean 2	gap	sd 1	sd 2
5. Understanding text organization	2,85	2,8	0,05	0,79	0,86
6. Looking through a text quickly in order to locate specific information (scanning)	2,83	2,83	0	0,66	0,76
7. Understanding special vocabulary in a text	2,8	2,83	0,03	0,56	0,38
8. Reading speed	2,75	2,68	0,07	0,54	0,8
9. Reading a text slowly and carefully in order to understand the details of the text	2,7	3	0,3	0,97	0,75

The fifth reading activity needed by FT students is **understanding text organization**. MKU BING is **not responsive** in facilitating this. This is indicated by mean 2 (MKU BING responsiveness) of 2,8 on a 4-point scale which is lower by 0,05 than the mean 1 (students' needs).

The sixth reading activity needed by FT students is **looking through a text quickly in order to locate specific information (scanning)**. MKU BING is **responsive** in facilitating this. This is indicated by mean 2 (MKU BING responsiveness) of 2,83 on a 4-point scale which is similar to the mean 1.

The seventh reading activity needed by FT students is **understanding special vocabulary in a text**. MKU BING is **responsive** to this need. This is indicated by mean 2 (MKU BING responsiveness) of 2,83 on a 4-point scale which is higher by 0,03 than the mean 1 (students' needs).

The eighth reading activity needed by FT students is **reading speed**. MKU BING is **not responsive** in facilitating this. This is indicated by mean 2 (MKU BING responsiveness) of 2,75 on a 4-point scale which is lower by 0,07 than the mean 1 (students' needs).

The ninth reading activity needed by FT students is **reading a text slowly and carefully in order to understand the details of the text**. MKU BING is **responsive** in facilitating this. This is indicated by mean 2 (MKU BING responsiveness) of 3,00 on a 4-point scale which is higher by 0,3 than the mean 1 (students' needs).

Reading in order to respond critically and understanding a writer's attitude and purpose lie at the lowest positions of the list of reading activities needed by FT students as shown in Figure 7. MKU BING is **responsive** to these needs. The means 2 (MKU BING responsiveness) of both activities are 2,35 and 2,05 on a 4-point scale which is higher by 0,23 and 0,2 than the means 1 (students' needs).

Figure 7. The Responsiveness of MKU BING to Reading Activities Needed by FT Students

	mean 1	mean 2	gap	sd 1	sd 2
10. Reading in order to respond critically	2,35	2,58	0,23	0,78	0,9
11. Understanding a writer's attitude and purpose	2,05	2,25	0,2	0,6	0,42

The interesting finding from the interview is that the students are often asked to translate texts since the textbooks used in their courses are mostly in English. MKU BING need to facilitate this need by giving a strategy to translate a text, to guess special vocabulary in a text, and to help students in understanding special vocabulary in a text. In terms of guessing unknown words in a text, MKU BING is not responsive in facilitating this. In fact, it is the second reading activity highly needed by FT students. In terms of understanding special vocabulary in a text, MKU BING is responsive to this need. Meanwhile, MKU BING has not yet given any strategy to translate a text.

Appropriate reading activities and real-life language use is highly needed to create a meaningful learning (Brown, 2004:90-91) This is supported by Florez & Terrill (in Jager-Vanderwal, 2004:10) who assert that learning has to be applicable to adults' lives. Therefore, MKU BING also need to take this principle into account.

In order to achieve effective reading activities, the lecturers need to apply the reading stages. Grabe and Stoller (as cited in Celce-Murcia, 2001: 191-192) and Brown (2001:315) suggest three reading stages. They are pre-, during-, and post-reading. Pre-reading activities motivate and lead the students to create purpose of reading activities (Brown, 2001:315). During-reading activities help develop students' skills in reading and doing the tasks (Grabe and Stoller, as cited in Celce-Murcia, 2001:191-192). Post-reading activities help students comprehend the main

ideas and supporting details and ease them to use text information in other tasks (Brown, 2001:315).

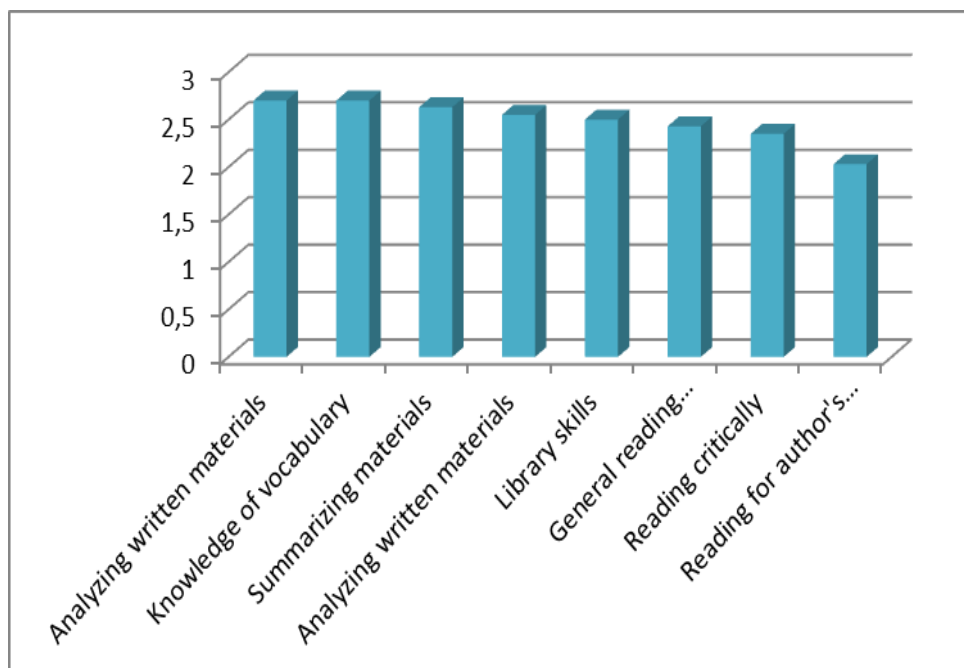
D. Reading Skills

Research questions:

- What types of reading skills are students expected to process in their S-1 study?
- Do students perceive that their MKU BING course have exposed them to these types of skills?

Chart 6 shows reading skills needed by FT students. It can be seen that **the students highly need these skills: analyzing written materials, having knowledge of vocabulary, and summarizing materials.** The mean 1 of those activities are 2,7 2,7 and 2,63.

Chart 6. FT Students' Needs: reading Skills



Findings from the interview show that students highly need mastery of special vocabulary with respect to their field of study. They consider it as highly important since the lecturers of other courses often ask them to translate a text related to their field of study. One respondent want to have MKU BING lecturer who has mastery of special vocabulary or has education background which is similar to his field of the study.

In terms of responsiveness, however, the respondents perceive MKU BING as **not responsive to the reading skills** needed by FT students. This is indicated by the overall mean 2 (MKU BING responsiveness) of 2,49 on a 3-point scale which is lower by 0,43 than the overall mean 1 (students' needs). The overall mean 1 and 2 are presented in Figure 8.

Figure 8. The Overall Mean of Reading Skills Needed by FT Students

Reading skills	overall mean
students' needs	2,49
responsiveness of MKU BING	2,05

Statistical computation in Figure 9 shows that MKU BING is not responsive to the top 3 reading skills needed by FT students. It is indicated by mean 2 which is lower than mean 1.

Figure 9. The Responsiveness of MKU BING to Top 3 Reading Skills Needed by FT Students

	mean 1	mean 2	gap	sd 1	sd 2
1. Reading speed	2,7	2,1	0,6	0,51	0,57
2. Knowledge of vocabulary	2,7	2,13	0,57	0,5	0,54
3. Summarizing materials	2,63	2,38	0,25	0,5	0,4

The first reading skill highly needed by FT students is **reading speed**. MKU BING is **not responsive** to this need. This is indicated by mean 2 (MKU BING responsiveness) of 2,1 on a 3-point scale which is lower by 0,6 than the mean 1 (students' needs).

The second reading skill highly needed by FT students is **knowledge of vocabulary**. MKU BING is **not responsive** to this need. This is indicated by mean 2 (MKU BING responsiveness) of 2,13 on a 3-point scale which is lower by 0,57 than the mean 1 (students' needs).

The third reading skill needed by FT students is **summarizing materials**. MKU BING is **not responsive** to this need. This is indicated by mean 2 (MKU BING responsiveness) of 2,63 on a 3-point scale which is higher by 0,25 than the mean 1 (students' needs).

The statistical computation in Figure 10 shows the responsiveness of MKU BING to some reading skills needed by FT students. The fourth reading skill needed by FT students is **analyzing written materials**. This includes identifying generic structure and language features of a text. MKU BING is **not responsive** to this need. This is indicated by mean 2 (MKU BING responsiveness) of 2,13 on a 3-point scale which is lower by 0,42 than the mean 1 (students' needs). The fifth reading skill needed by

FT students is **library skills**. This includes collecting information from many references. MKU BING is **not responsive** to this need. This is indicated by mean 2 (MKU BING responsiveness) of 1,93 on a 3-point scale which is lower by 0,57 than the mean 1 (students' needs).

Figure 10. The Responsiveness of MKU BING to Reading Skills Needed by FT Students

	mean 1	mean 2	gap	sd 1	sd 2
4. Analyzing written materials	2,55	2,13	0,42	0,46	0,6
5. Library skills	2,5	1,93	0,57	0,46	0,66

The statistical computation in Figure 11 shows the responsiveness of MKU BING to some reading skills needed by FT students. The sixth reading skill needed by FT students is **general reading comprehension**. This includes identifying the main idea and supporting details of a text or paragraph. MKU BING is **not responsive** to this need. This is indicated by mean 2 (MKU BING responsiveness) of 2,43 on a 3-point scale which is lower by 0,28 than the mean 1 (students' needs). The seventh reading skill needed by FT students is **reading critically**. MKU BING is **not responsive** to this need. This is indicated by mean 2 (MKU BING responsiveness) of 1,8 on a 3-point scale which is lower by 0,55 than the mean 1 (students' needs).

Figure 11. The Responsiveness of MKU BING to Reading Skills Needed by FT Students

	mean 1	mean 2	gap	sd 1	sd 2
6. General reading comprehension	2,43	2,15	0,28	0,58	0,65
7. Reading critically	2,35	1,8	0,55	0,66	0,65

Reading for author's viewpoint lie at the lowest position in the list of reading skills needed by FT students as shown in Figure 12. MKU BING is **not responsive** to this need. This is indicated by mean 2 (MKU BING responsiveness) of 1,8 on a 3-point scale which is lower by 0,23 than the mean 1 (students' needs). In line with the result of reading activities needed by FT students, reading for author's viewpoints also lie at the lowest position of the list and MKU BING is not responsive to this need.

Figure 12. The Responsiveness of MKU BING to Other Reading Skill Needed by FT Students

	mean 1	mean 2	gap	sd 1	sd 2
8. Reading for author's viewpoint	2,03	1,8	0,23	0,63	0,58

Based on the result of top 3 reading skills highly needed by FT students, it obvious that they need macro-skills of reading comprehension. According to Brown, they refer to understanding the general ideas in the text (e.g., information, gist, argument) while micro skills of reading refer

to recognizing and interpreting the linguistic features of the text (e.g., referents, word meanings, discourse indicators). Furthermore, the interview findings show that the students are also in need of micro skills of reading such as tenses. In order to be successful and efficient readers, students are expected to master those reading comprehension skills.

The other interesting thing revealed from the interview is the students are in need of knowledge of vocabulary skills related to their field of study. They often deal with books with special terminology on them. The students majoring in *teknik mesin*, for example, deals with machine modul in which there are many special terminology. The lecturers often ask them to translate the content of the books.

The overall findings are the evidence of the responsiveness of MKU BING to FT students' needs. MKU BING is not responsive to the types of materials (Table 1) and reading skills needed by FT students (Table 2), on the other hand, MKU BING is responsive to reading activities needed by FT students (Table 3). The interview finding provides an answer for this. The interview findings reveal that this happens because of the incompetent English lecturers provided by UPT MKU UNJ.

This study is conducted for illuminative purpose which tries to provide a deeper understanding to MKU BING stakeholders. The overall findings are indicative of an extensive need for improvement of the MKU BING to be responsive to FT students' needs. One of the interview respondents suggests UPT MKU to provide competent and qualified lecturers who have similar educational

background, if possible. The 2011 UNJ students' Needs Analysis (Sulastini, 2011) shows that 2-credit unit is not enough for the students to master some skills needed. UPT MKU need to add the credit unit of MKU BING.

Table 1. Statistical Computation of the Responsiveness of MKU BING to Types of Materials Needed by FT Students

No	Types of material	mean 1	mean 2	Difference	SD 1	SD 2
1	Computer-presented reading materials	3,08	2,95	-0,13	0,81	0,64
2	Journal articles	3,08	2,95	-0,13	0,68	0,89
3	Workbook or laboratory instructions	2,90	2,50	-0,4	0,98	0,46
4	Newspaper articles	2,9	2,5	-0,4	0,66	0,46
5	Entire reference or textbooks	2,85	2,70	-0,15	0,56	0,5
6	Works of fiction	2,85	2,7	-0,15	0,91	0,77
7	Selected chapters of books	2,70	2,45	-0,25	1,05	0,99
8	Photocopied notes	2,70	2,65	-0,05	0,73	0,64
	Overall mean	2,89	2,68	-0,21		

Table 2. Statistical Computation of the Responsiveness of MKU BING to Reading Activities Needed by FT Students

No	Reading activities	mean 1	mean 2	Difference	SD 1	SD 2
1	Understanding the main points of texts	3,33	3,48	0,15	0,69	0,68
2	Guessing unknown words in a text	3,08	2,98	-0,1	0,61	0,68
3	General comprehension	2,95	2,98	0,03	0,64	0,73
4	Reading a text quickly in order to establish a general idea in the content	2,95	2,78	-0,17	0,67	0,81
5	Understanding text organization	2,85	2,8	-0,05	0,79	0,86
6	Looking through a text quickly in order to locate specific information (scanning)	2,83	2,83	0	0,66	0,76
7	Understanding special vocabulary in a text.	2,8	2,83	0,03	0,56	0,38

8	Reading speed	2,75	2,68	-0,07	0,54	0,8
9	Reading a text slowly and carefully in order to understand the details of the text.	2,7	3	0,3	0,97	0,75
10	Reading in order to respond critically	2,35	2,58	0,23	0,78	0,9
11	Understanding a writer's attitude and purpose	2,05	2,25	0,2	0,6	0,42
	Overall mean	2,79	2,84	0,05		

Table 3. Statistical Computation of the Responsiveness of MKU BING to Reading Skills Needed by FT Students

No	Reading skills needed by students	mean 1	mean 2	difference	SD 1	SD 2
1	Analyzing written materials	2,7	2,1	-0,6	0,51	0,57
2	Knowledge of vocabulary	2,7	2,13	-0,57	0,5	0,54
3	Summarizing materials	2,63	2,38	-0,25	0,5	0,4
4	Analyzing written materials	2,55	2,13	-0,42	0,46	0,6
5	Library skills	2,5	1,93	-0,57	0,46	0,66
6	General reading comprehension	2,43	2,15	-0,28	0,58	0,65
7	Reading critically	2,35	1,8	-0,55	0,66	0,65
8	Reading for author's viewpoint	2,03	1,8	-0,23	0,63	0,58
	Overall mean	2,49	2,05	-0,43		