CHAPTER 4 RESULT AND DISCUSSION

4.1 The Result

4.1.1 The Students' Ability In Identifying Independent and Dependent Clauses

The result of this research presented and discussed at this chapter. This research objective was to measure the second semester students' ability in identifying independent and dependent clause at University of Bengkulu academic year 2012/2013. The test was done on May 5th, 2013.

There are five level of students' ability in identifying independent and dependent clause in sentences. According to Nurgiyantoro in Iskandar (2003) very good is category for the students which get score 85-100, score 75–84 which categorized good, score 60–74 which categorized moderate, score 40–59 which categorized low, score 0–39 which categorized failure.

The result of the test done by the students which divided into four categories: identify sentence consisted of double independent, independent-dependent adverb clause, independent-dependent adjective clause, and independent-dependent noun clause.

The students' percentage score in identifying independent and dependent clause was shown in the following chart:

45

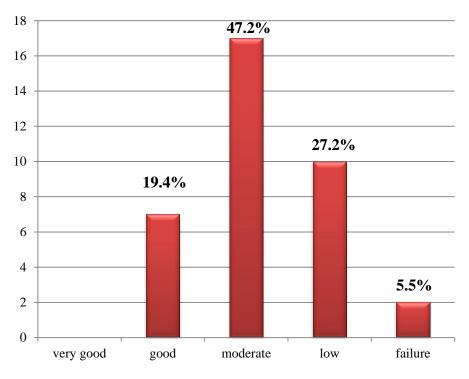


Chart 1: Students' Percentage Score in Identifying Independent and Dependent Clauses

The chart 1 shows the number and percentage of students' ability in identifying independent and dependent clauses in sentences. From 36 students, there were no students that can be categorized on very good category. While, the students who classified in good category were 7 students from 36 students or 19.4%, the students who classified in moderate category was 17 from students or 47.2%, the students who classified low was 10 from 36 students or 27.2% and the students who classified in failure category were 2 students or 5.5%. From the result there found the mean score was 64 which categorized moderate (See Appendix 5).

4.1.2 Double Independent Clause in Sentences

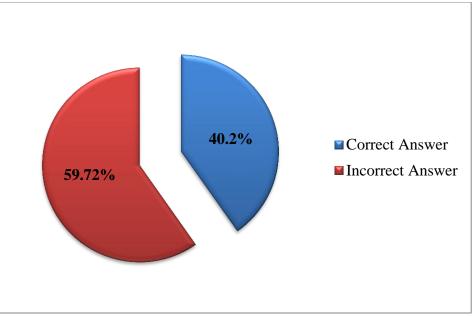


Chart 2: The Students' Result in Identifying Double Independent Clause in Sentences

As can be seen in Chart 2, the percentage of the students' result in identifying double independent clause in sentences was 40.2 % and students' incorrect answer was 66.7 %. It indicated that students' ability at this part was low. It was because the students did not understand that two independent clauses can merge into a sentence by using a semicolon (;) or called as compound sentence. Based on Oshima and Hogue (1997) explained there are three ways to join the independent clauses in compound sentence: using coordinator, using a conjuctive adverb and using semicolon (;).

In the test there were 4 items that students have to identify double independent clauses or compound sentences.

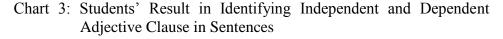
For Example:

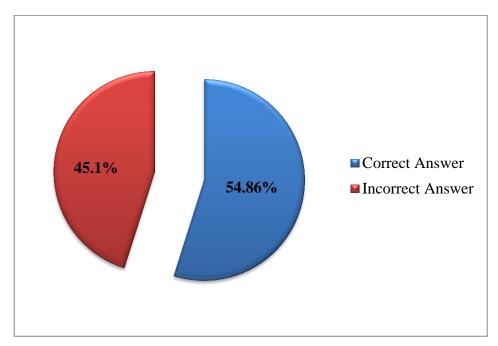
Item Number 49

Students' Answer : My oldest sister is a teacher; my youngest is lawyer.IndependentDependentCorrect Answer: My oldest sister is a teacher; my youngest is lawyer.IndependentIndependent

As the result of the test, most of the students answer the item number 49 consisted of independent-dependent clause. The correct answer was independent-independent clause. The students may not understand that semicolon (;) can unite double independent clauses in a sentence when two independent has closed related in length and meaning.

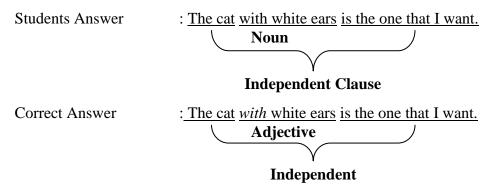
4.1.3 Independent and Dependent Adjective Clause in Sentences





As can be seen on Chart 3, the percentage of the students' result in identifying independent clause and dependent adjective clause in complex sentence was 54.86 % and students' incorrect answer was 45.1 %. It indicated that students' ability at this part was still in low level. The example of the students' incorrect answer was shown in the following sentences:

Test Item Number 33



The example above indicates that the students did not understand enough about dependent adjective clause. According to Azar (2003) adjective clause is a dependent clause that describes, identifies, or gives further information about a noun. A dependent may follow independent clauses, or they may interrupt them just like shown on the example before.

4.1.4 Independent and Dependent Adverb Clause

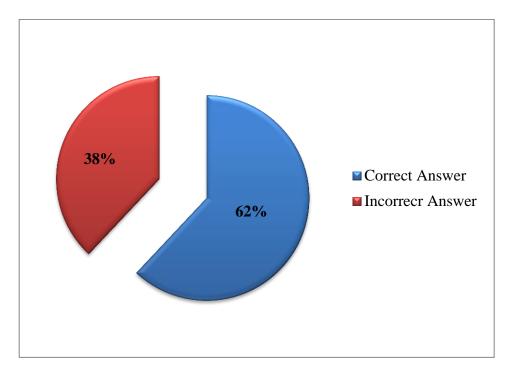


Chart 4: Students' Result in Identifying Independent and Dependent Adverb Clause in Sentences

Chart 4 shows that the percentage of the students' result in identifying independent clause and dependent adverb clause in sentences was 62% and students' incorrect answer was 38%. It indicated that students' ability at this part was moderate. Eventough the result was not in good level, it was still indicates more than a half of students did not have many troubles when they have to identify independent and dependent adeverb clause in a sentence. From the result of the test, they were even able to mention the kinds of the adverb clause that used in a sentence, whether it is adverb of time, place, manner, reason, or etc.

4.1.5 Independent and Dependent Noun Clause

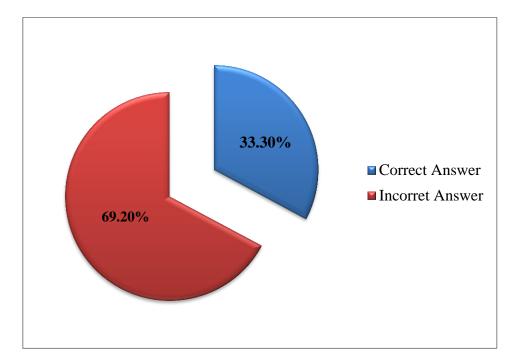


Chart 5: Students' Result in Identifying Independent and Dependent Noun Clause in Sentences

The percentage of the students' result in identifying independent and dependent noun clause in this part was 33.30 % and students' incorrect answer was 69.20 % or in failure category. It is become the highest incorrect score in identifying dependent clause. It indicated that students have many difficulties when they have to deal with sentence which consisted of independent clause and dependent noun clause. Below the example the test item about dependent noun clause:

Item Number 14

I do not remember <u>what time I arrived</u>. Noun Clause Based on the result of test, most of students fail to understanding the sentence. They do not understand if *"what"* in the sentence above as a subordinate conjunction of dependent noun clause. That clause takes the place of nouns in the sentence above.

4.2 Discussion

Based on the result, the ability of the second semester students' English Education Study Program at University of Bengkulu academic year 2012/2013 in identifying independent and dependent clauses in sentences was moderate level. It can be seen from the mean score of the students was 64. From 36 students, there were no students that can be categorized on very good category. While, 7 students or 19.4% classified in good category, 17 students or 47.2% classified in moderate category, 10 students or 27.2% classified low and the students who classified in failure category were 2 students or 5.5%.

There were some reasons why students' ability was moderate based on the finding of this research. First, the students got confuse of the length and complexity of a sentence. So, the students usually got difficulty to decide whether a clause is independent or dependent one. It means that the students fail to understand the meaning of sentence. According to the interviews, they said they still have difficulties in identifying clauses because of length and complexcity of sentences. One of the students in second semester has said in interview that: "I usually confuse to identify independent and dependent clause because I do not understand the meaning of sentence, and there are so many commas in a sentence."

Second, the students' difficulties in identifying among dependent clauses: adverb clause, adjective clause and noun clause. It was because the students fail to recognise subordinate conjunction of each dependent clause. In the test students asked to circle the subordinate conjunction of each dependent clause. But, in fact most of them fail to identify subordinate conjunction of each dependent clause. Additionaly, there was the supported interview result:

"There are so many words (subordinating conjuction) that usually use to sign the clause and they are different for each clause. We often forget about that..."

From the result of the test and interview, it can be concluded that majority of the students said that they still did not understand enough about this material. A dependent clause is introduced by a dependent word (subordinating conjunction). Azar (1999) explained that there are some common subordinating conjunctions using for each dependent clause, such as: Table 4. Subordinating Conjunctions of Dependent Clauses

Dependent Clause	Subordinating Conjuction
Dependent Adjective Clause	Who, whom, which, whose, that
	After, before, when, while, as, once, first,
Dependent Adverb Clause	because, now, since, although, while,
	whereas, if, only, in case, in even that
Dependent Noun Clause	What, where, why, when, who, that

As can be seen in the result sub-chapter before, the students got highest correct score in identifying independent and dependent adjective clause. The percentage for correct point was 62% against 38 of the incorrect percentage. It means that majority of the students did not have difficulties in this clause. The test result also shows that the students even able to mention kinds of the adverb clause used in the sentence, such as: time, place, reason, and manner. It was because the students often use and familiar to this kind of dependent clauses.

In identifying double independent using semicolon, students got 40% correct answer. It indicated that the students' ability in this part is still low. It was because the students did not understand that semicolon (;) can unite double independent clause in a sentence when two independent has closed related in length and meaning.

Students also got low percentage level in identifying sentence which was consisted of independent and adjective clause. The percentage was 54.86% correct answer against 45.1% incorrect one. In other word, more than half of students still had problem in identifying dependent adjective clause. The test result shows that the students' common error in identifying dependent adjective clause was when they have to identify adjective clause which position interrupts the independent clause. For example: Item Number 33

The cat with the white ears is the one that I want.

Adjective

Independent

Item Number 35

Our car, which was in an accident, is being repaired.



This finding was similar to the Anggraini (2008) research. In her report entitled 'An Error Analysis on Using Adjective Clause of the Tenth Student of SMA Negeri 1 Kebakkramat', she found that students still make errors in using dependent adjective clause and they need improvement to develop their skill. The result of the research shows that the students still got low score in using and identifying adjective dependent clause as a subject pronoun, as the object of a verb and as the object of preposition in sentence.

The highest incorrect students' answer was identifying sentence which is consisted of independent and dependent noun clause. It was almost 70% students gave incorrect answer. In other word, most of students still have difficulties in identifying dependent noun clause. According to Parrot (2004), the most typical difficulties for students in identifying dependent noun clause is students may associate question words such as: *what, where, which* so firmly with questions that they are thrown by what initially appears to them to be a questions. It means that most of students unfamiliar with subordinating conjunction common used in dependent noun clause.

It was also happens because the students did not understand about what independent and dependent clause meaning is. Oshima and Hogue (1997) states that independent clause is a group of words which able to stand alone as a sentence. Alhtough, dependent clause is a group of words which can not stand independently by itself as a sentence. In addition, Parrot (2004) states the student difficulties in identifying clauses are they may expect dependent clause always to follow independent clause, but actually sometimes independent clause comes after dependent clause. For example:

Item Number 11

I have a friend whose mother is an archaeologist.

Independent Dependent

Item Number 32

If they practice, Ricardo and Maria will be able to compete better.

Dependent Independent

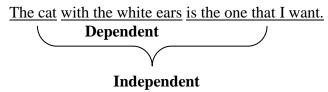
An independent clause even can be separated by dependent clause. For Example:

Item number 22

Uncle Regis, who lover card tricks, taught me a few of them.

Dependent Independent

Item number 33



Based on Liley (2010) there are some ways to identify a clause whether it is an independent or dependent one. First, look for a sentence that forms a complete thought and contains a verb and subject. Second, find the part of a sentence that begins with words like as, if, that, when, what, and similar types of clause subordinating conjunctions in order to find dependent clause in sentence. If a sentence has two or more clauses, separate them to see if they both make sense alone. For example: "They like to swim for an hour before they go to school". "They like to swim for an hour" is the independent clause that can stand by itself. While, "Before they go to school" is a dependent clause that requires connection to another clause to make sense. It also can be seen from the subordinating conjunction "before" that used in the sentence to introduce dependent clause. Third, look for certain sentence contains of punctuation with a comma or a semicolon. When a dependent clause follows an independent clause, it is not set apart with a comma. Otherwise, if the dependent clause introduces the independent clause, however, a comma generally follows it.

In conclusion, the result of this research showed that the majority of the students had moderate level mastered in identifying independent and dependent clauses in sentences. While Yeni (1997) research showed that the problem faced by the students of the English program in understanding English sentences because students got confuse of the length and complexity of a sentence. Students also did not have irrelevant background knowledge about how to identify clauses in sentences so, students had difficult in deciding the independent and dependent clause of sentence. It is why the knowledge of identifying clauses is very important to be learned by students.

CHAPTER 5 CONCLUSION AND SUGGESTION

5.1 Conclusion

Based on the research findings, the researcher concluded that on the average the second semester students of the English Study Program University of Bengkulu in the 2012/2013 academic year had a moderate ability in identifying independent and dependent clauses in sentences. As shown in finding research, the percentage of students who were categorized in good category less than 20%. Meanwhile, the percentage of students who got low score was more than 30%.

From the result of the test and interview, the researcher concluded the student had difficulties in identifying independent and dependent clauses because students got confuse because of the length and complexcity sentence and they also did not know about the coordinating conjunction common use in each dependent clause. It means that the students still lack of knowledge about identifying clauses in sentences.

5.2 Suggestion

Based on conclusion above, the researcher suggest the lectures of English Education Study Program to introduce kinds of clauses clearly, especially for the lectures who teach Structure lesson. By knowing the area of student difficulties in identifying clause, the teacher should predict more effective teaching methods for the next semester. The lecturers need to explain more about how a sentence can be consist of more than one clause, how to identify clauses in sentences and what transition signal or subordinating conjunction common used in the dependent clause. The lectures also need to design teaching metodh and give the students more practice in identifying clauses in sentences. So, the students can identify the clauses correctly.

For the English Education Study Program students, they have to improve their knowledge and practice more, especially in identifying independent and dependent clauses. Because this ability can help them to understand meaning of sentences more effective and avoid them incorrectly using dependent clause as sentence fragments.

REFERENCES

Alwasilah, A. Chaedar. (1993). Linguistik Suatu Pengantar. Bandung: Angkasa

- Anggraini, Ratna Dewi. (2008). An Error Analysis on Using Adjective Clause of the Second Year Student of SMA Negeri 1 Kebakkramat. Published bachelor thesis, Universitas Muhammadiyah Surakarta. Retrived March 1st, 2013 site : <u>http://etd.eprints.ums.ac.id/693/</u>
- Anynoumous. (2008). Oxford Learners's Pocket Dictionary. (4th ed). New York: Oxford University Press
- Arifin, Muhammad. (2011). *Definition and Types of Sentence*. Makassar: English Makassar Course (EMC)
- Arikunto, Suharsimi. (2006). *Prosedur Penelitian Suatu Pendekatan Prakte*k. (4th ed). Jakarta: Rineka Cipta
- Arikunto, Suharsimi. (2011). *Dasar-dasar Evaluasi Pendidikan*. (Rev ed). Jakarta : Bumi Aksara
- Azar, Betty Schrampfer. (2006). *Fundamentals of English Grammar*. (3rd ed). New York : Pearson Education
- Azar, Betty Schrampfer. (1999). Understanding and Using English Grammar. (3rd ed). New York: Pearson Education
- Berry, Chris & Allen Brizee. 2010. *Identifying Independent and Dependent Clauses*: Retrieved January 8th, 2013, from <u>http://www.owl.englisht.purdue.edu.</u>
- Don & Jenny Killgallon. (2008). Story Grammar for Elementary School; A Sentence-Composing Approach-Teacher's Booklet. Heinemann: Portsmouth. Retrieved January 21th, 2013, from <u>http://www.heinemann.com</u>
- Gay, L.R. (1990). Education and Research: Competencies for Analysis and Application. New York: Macmillan Merril Publisher Company.

Heaton, J.B. (1988). Writing Language Test. Hongkong : Longman

Iskandar, Beny. (2003). Students' Mastery in Using Enflish Determiner (A study on the third semester of English Department of University of Bengkulu in academic year 2002/2003). Unpublished A Thesis. Study Program of English Language Education, Universitas Bengkulu.

- Liley, Stephen. (2010). How to *Identify Clauses in a Sentence*: Retrieved May 21th, 2013, from <u>http://www.ehow.com.</u>
- Masita, Nofia Dewi. (2011). An Analysis of Grammatical Errors in Adjective Clauses Made by the Tenth Grade Students of SMA Hang Tuah 2, Sidoarjo. Published Thesis. English Education Department, Faculty of Tarbiyah, State Institute for Islamic Studies Sunan Ampel Surabaya.
- Oshima, Alice & Ann Hogue. (1997). *Introduction to Academic Writing*. (2nd ed). New York: Longman
- Oshima, Alice & Ann Hogue.(1997). *Writing Academic English*.(3rd ed). New York : Longman
- Parrot, Martin. (2004). *Grammar for English Language Teachers*. United Kingdom : Cambridge University Press
- Publication Manual of the American Psycological Association. (5th ed.).(2001). Washington, D.C.: American Psychological Association.
- Riduwan. (2007). Belajar Mudah Penelitian untuk Guru, Karyawan dan Peneliti Pemula. Bandung: Alfabeta
- Suryabrata, Sumadi. (2011). Metodologi Penelitian. Jakarta: PT Grafindo Persada
- Warriner, John E & Francis Griffith. (1977). Warriner's English Grammar and Composition; Fourth Course. USA : Harcourt Brace Jovanovich
- Wilson, Misty. (1998). *Sentence*. Retrieved January 21th, 2013, from University of North Carolina : Pembroke Web site : <u>http://www.uncp.edu</u>
- Yeni, Fitri. (1997). The Problems of Sixth Semester Students of English Department of Universitas Bengkulu in Understanding English Complex Sentences. Unpublished A Thesis. Study Program of English Language Education, Universitas Bengkulu.

APPENDICES

$$X = \frac{\sum X}{N}$$
$$X = \frac{669}{50}$$
$$X = 13,38$$

$$SD^{2} = \sum X^{2} - \frac{(\sum X)^{2}}{N}$$

$$= 24341 - \frac{(669)^{2}}{50}$$

$$= 314,07$$

$$\mathbf{r}_{\text{total}} = \frac{(K)(SD^2) - X(K - X)}{(SD^2)(K - 1)}$$
$$\mathbf{r}_{\text{total}} = \frac{(50)(314) - 13,38(50 - 13,38)}{(314,07)(50 - 1)}$$
$$\mathbf{r}_{\text{total}} = \frac{15700 - 489,97}{15389,43}$$

$$\mathbf{r}_{\text{total}} = 0,98$$

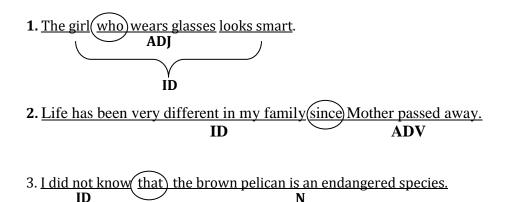
<u>Date</u>

IDENTIFYING INDEPENDENT AND DEPENDENT CLAUSE IN SENTENCES

- An independent clause (also known as the *main clause*) contains a complete idea and can stand alone (independently) as a complete sentence.
- A dependent clause (subordinate clause) is a clause that is not express a complete thought and can not stand by itself as a complete sentence.
- There are three kinds of dependent clause namely : adjective clause, adverb clause and noun clause.
 - 1. An *adjective clause* is a subordinate clause that modifies a noun or a pronoun.
 - 2. An *adverb clause* is a subordinate clause that modifies a verb, an adjective, or an adverb.
 - 3. A *noun clause* is a subordinate clause that is used as a noun.

Underline the independent (ID) and dependent clause in each of the following sentences, and classify it by writing (ADJ) for *adjective clause*, (ADV) for *adverb clause*, or (N) for *noun clause*. Then, circle the subordinating conjunction at the beginning of the clause.

Examples :



- 1. She showed me Lawrence's *Harriet Tubman* series, which includes thirty-one paintings.
- 2. There is good reason why we should prize this liberation.
- 3. If mother, father, and I all pitch in and clean up after dinner, the job gets done much quicker.
- 4. No one can say whether he will tell.
- 5. Guess what my grandparents gave me for my birthday.
- 6. The swimmers compete in meets whenever they are held in the area.
- 7. Scenes from Tubman's life, which show both slavery and freedom, tell a powerful story.
- 8. Alea Milano from Brazil is a Miss Tourism 2011 ; Olla Pilla from India is the runner up.
- As soon as Maria's younger sister is old enough to compete, she will also swim on a relay team.
- 10. We can not go on a picnic if it is cold tomorrow.
- 11. I have a friend whose mother is an archaeologist.

- 12. He is quite a good cook because he is willing to experiment.
- 13. I give my complete attention to whatever game is on TV at the moment.
- 14. I do not remember what time I arrived.
- 15. Many of Lawrence's paintings tell about persons who underwent incredible struggles
- 16. The bill should be paid by whoever broke the window.
- *17.* Did you know that Olajuwon wrote an autobiography, *Living the Dream: My Life and Basketball*?
- 18. According to my teacher, I can write my report about whomever I want.
- 19. They like to swim for an hour before they go to school.
- 20. Maria concentrates on the backstroke so that she can be the best in that event.
- 21. Ricardo likes the butterfly stroke, since it develops his shoulder and arm muscles.
- 22. Today, Uncle Regis, who loves card tricks, taught me a few of them.
- 23. I am nervous about moving to a city whose language is English.
- 24. Naomi worked on the cafe while I painted the garage.

- 25. Lawrence's techniques, which include bold images and vivid colors, communicate strong emotion.
- 26. Tubman, who was a former slave, became an organizer of the Underground Railroad.

27. Amanda speaks with conviction; she is never overbering.

- 28. Naomi acted as though she were reluctant to accept it.
- 29. They chose this sport because they can practice it year-round.
- 30. As World War II ended, Coachman looked forward to entering international competitions
- 31. The teacher showed me how I could better organize the ideas of my research paper.
- 32. If they practice, Ricardo and Maria will be able to compete better.
- 33. The cat with the white ears is the one that I want.
- 34. Andrea is the student whose photographs are on display.
- 35. Our car, which was in an accident, is being repaired.
- 36. The nutritionist explained which vegetables are richest in vitamin C.
- 37. Gold and platinum are two metals that are often used in electronic components.
- 38. Russia was the first country to put a man into space; the United States was second.

- 39. They analyze their performance after each meet is over.
- 40. Although swimming is usually an individual sport, Ricardo and Maria also swim on relay teams with other club members.
- 41. The paintings reflect scenes of African American life that may have been overlooked.
- 42. The last pictures in the series show the Civil War, which brought an end to slavery.
- 43. Ricardo plays jai alai, which is a popular Basque handball game.
- 44. Naomi put the polish down where she could reach it easily.
- 45. Violent images that reflect slavery contrast with images showing quite strength and purpose.
- 46. The car looked as if it really needed polish.
- 47. Wherever you looked, you saw rust on the chrome.
- 48. Maria and Ricardo time themselves on each lap as they practice.
- 49. My oldest sister is a teacher; my youngest is a lawyer.
- 50. The part of the river where we rafted was not too dangerous.

GOOD LUCK ©

References :

Azar, Betty Schrampfer. (1941). *Fundamentals of English Grammar*. (3rd ed). New York : Pearson Education

Azar, Betty Schrampfer. (1999). Understanding and Using English Grammar. (3rd ed). New York : Pearson Education

Warriner, John E & Francis Griffith. (1977). *Warriner's English Grammar and Composition ;* Fourth Course. USA : Harcourt Brace Jovanovich

Арр	endi	ix 2							VAI	LID	ITY OF	тн	е ті	EST								
				0	REC	TIID	DED				TOTAL					DEC		WER				TOTAL
NO	1	2	3	4	5	6	7	8	9	10	SCORE	11	12	13	14	15	16	17	18	19	20	SCORE
1	0	0	1	1	1	1	1	1	1	1	8	0	1	0	1	1	1	0	0	1	0	5
2	1	1	1	1	1	1	1	1	1	1	10	0	1	1	1	1	1	1	0	1	0	7
3	1	1	1	1	1	1	1	1	1	1	10	0	1	1	1	1	1	1	1	0	1	8
4	1	1	1	0	1	1	1	1	1	1	9	0	1	1	0	1	0	0	1	1	1	6
5 6	1	1	1	1	1	1	1	1	1	1	10 10	1	1	1	1	1	1	1	1	1	1	10 8
7	1	1	1	1	1	1	1	0	1	1	9	1	1	1	1	1	0	0	0	0	0	5
8	1	1	1	1	1	1	1	1	1	1	10	1	0	1	1	1	0	1	1	1	1	8
9	1	0	1	1	1	0	1	1	1	1	8	0	0	1	1	0	0	1	1	0	1	5
10	1	1	1	1	1	0	1	1	1	1	9	1	1	1	1	0	0	0	1	1	0	6
11 12	1	1	1	1	1	1	0	1	1	1	9 8	1	1	1	1	1	1	1	1	0	0	8
12	1	1	1	1	0	1	1	1	1	0	8	1	1	1	0	0	0	0	0	1	0	4
14	1	1	1	1	1	1	0	1	1	1	9	1	1	1	1	1	1	0	0	0	0	6
15	1	1	1	1	1	1	1	1	0	1	9	1	1	1	1	1	0	0	0	0	0	5
16	1	1	0	1	0	1	1	1	1	1	8	1	1	1	1	0	1	0	0	0	0	5
17	1	1	1	0	1	1	0	0	1	1	7	1	1	0	1	0	0	1	0	0	0	4
18 19	1	1	1	1	1	1	1	1	1	1	10 7	1	1	1	1	1	0	1	0	0	1	7 4
20	1	1	1	0	0	0	1	1	1	0	4	1	0	0	0	1	1	0	1	1	0	3
21	1	1	1	0	1	0	1	1	0	0	6	0	0	0	1	0	0	0	1	1	0	3
22	1	1	1	1	0	1	1	1	1	1	9	1	1	1	1	0	0	0	0	0	1	5
23	0	0	1	0	1	1	1	0	1	0	5	0	0	0	0	0	0	0	0	0	1	1
24 25	1	1	1	1	1	0	1	1	1	1	9	1	0	1	0	1	1	1	0	1	0	6
25 26	1	1	1	1	1	1	1	1	1	1	9	0	1	1	1	1	1	1	0	1	1	6 5
20	1	1	1	0	1	1	1	1	1	0	8	0	0	1	0	1	1	0	0	1	1	5
28	1	1	1	1	1	1	1	1	1	0	9	1	1	1	0	1	0	1	1	0	0	6
29	1	1	0	1	0	0	1	0	0	1	5	1	1	1	1	1	1	1	1	1	1	10
30	1	1	1	0	1	1	1	1	1	1	9	1	0	1	1	1	1	1	0	0	0	6
31 32	1	0	1	1	1	1	0	1	1	1	8	1	1	0	1	0	0	0	1	0	0	4
33	1	1	1	1	1	0	1	1	1	1	9	1	1	0	0	1	1	1	1	1	1	8
34	1	1	1	1	1	1	0	1	1	1	9	0	1	1	1	1	1	1	1	1	1	9
35	1	1	1	1	1	1	0	1	1	1	9	1	1	0	1	0	0	1	1	0	1	6
36	1	1	1	0	1	1	1	0	1	1	8	1	0	1	0	1	0	0	1	1	0	5
37	1	1	1	1	1	1	1	1	1	1	10	1	1	0	1	0	1	1	1	1	1	8
38 39	0	1	0	0	0	0	1	1	1	0	1 9	0	0	0	1	1	1	1	1	0	1	2 6
40	1	1	1	1	1	1	1	1	1	1	10	1	1	1	1	1	1	1	1	1	1	10
41	1	0	0	1	1	1	1	1	1	1	8	1	0	0	0	1	1	0	0	0	1	4
42	1	1	1	1	1	1	1	1	1	1	10	1	1	1	0	0	0	1	1	1	1	7
43	0	1	1	0	1	1	0	1	1	1	7	1	0	1	0	0	1	1	0	0	0	4
44 45	1	1	1	1	1	1	1	1	1	0	9 10	1	0	1	1	0	0	1	0	0	0	4 10
46	1	1	1	1	0	1	1	1	1	1	9	1	1	1	0	1	1	0	1	0	0	6
47	1	1	1	1	1	1	1	1	1	1	10	1	0	1	1	1	1	0	0	0	0	5
48	1	1	1	0	1	1	1	1	1	1	9	0	1	1	0	1	1	1	0	0	1	6
49	1	1	0	0	0	0	1	0	0	0	3	0	1	1	1	1	0	0	0	0	1	5
50 51	0	1	0	0	1	1	0	0	0	0	3	0	1	0	1	0	0	0	0	0	1	3 5
52	1	1	1	0	1	1	1	1	1	0	8	1	0	1	0	1	0	0	0	1	1	5
53	1	1	1	1	1	1	1	1	1	1	10	1	1	0	0	1	1	1	0	0	1	6
54	1	1	0	1	1	0	1	1	0	1	7	1	1	0	1	1	1	1	0	1	1	8
55	1	1	1	1	1	1	0	1	1	1	9	1	1	1	0	0	1	0	1	1	0	6
56 57	1	1	1	1	0	1	0	1	1	1	8	0	0	1	1	0	0	0	1	0	1	4 6
57	1	1	1	1	1	1	0	1	1	1	9	0	1	1	0	1	0	1	0	1	1	6
59	1	1	1	1	1	1	1	1	0	1	9	0	1	0	1	1	0	1	1	0	1	6
60	1	1	1	1	1	1	1	1	1	1	10	1	1	1	0	0	1	1	1	1	0	7
61	1	1	1	1	1	1	1	1	1	0	9	1	1	1	0	1	0	1	0	0	0	5
62 63	1	1	1	1	1	1	1	1	1	1	10 10	1	1	0	1	0	0	1	1	0	1	6 5
63 64	1	1	1	1	1	1	1	1	1	1	10	0	1	0	0	0	0	1	1	0	1	4
65	1	1	0	1	0	1	1	1	0	1	7	0	1	0	1	0	0	0	0	0	1	3
66	1	1	1	1	0	1	0	1	1	1	8	0	1	0	1	0	1	1	1	0	0	5
67	1	1	1	1	1	1	1	1	0	1	9	1	0	1	0	1	0	1	0	0	1	5
68	1	1	1	1	1	1	1	0	1	0	8	0	1	1	0	1	0	0	1	0	1	5
69 70	1	1	1	1	1	1	1	1	1	1	10 6	1	1	1	1	1	1	1	0	1	0	8 5
70	1	1	1	1	1	1	1	1	0	1	6 8	1	1	0	1	1	1	1	1	0	1	5
72	1	1	1	1	0	1	0	1	1	0	7	0	1	1	1	1	1	0	1	1	0	7
73	1	1	1	1	1	0	1	1	1	0	8	0	1	1	0	1	1	0	0	1	0	5
74	1	1	1	1	1	1	1	0	1	1	9	1	0	0	1	1	1	0	1	1	0	6
75	0	0	1	1	1	1	1	1	1	1	8	1	1	0	1	0	0	1	1	0	0	5
76	1	1	1	1	1	1	1	1	1	1	10 8	1	1	1	1	0	1	0	1	0	1	7
77	- 1	_		_	1	1	1	1	1	1	8 10	1	1	1	1	0	1	1	1	1	1	9
77 78	_	1	1	1																		
77 78 79	1	1	1	1	1	1	1	1	1	1	10	1	0	1	0	1	1	1	1	1	1	8
78	1								1	1	10 10						1 1	1 0		1		

Appendix	x 3												
						ITE	M ANAL	YSI	S				
ITEM	υ	L	(U-L)/N	(U+L)/2N		IARK	ITEM	υ	L	(U-L)/N	(U+L)/2N		1ARK
NUMBER			· "	• •	VALID	INVALID	NUMBER	-				VALID	INVALID
1	8	5	0.3	0.65	\checkmark		21	6	3	0.3	0.45	<u>√</u>	
2	10	7	0.3	0.85		V	22	9	5	0.4	0.7	<u>√</u>	
3	10	8	0.2	0.9	,		23	5	1	0.4	0.3	1	
4	9	6	0.3	0.75			24	9	6	0.3	0.75		
5	10	10	0	1			25	9	6	0.3	0.75		
6	10	8	0.2	0.9			26	7	5	0.2	0.6		\checkmark
7	9	5	0.4	0.7	\checkmark		27	8	5	0.3	0.65	\checkmark	
8	10	8	0.2	0.9			28	9	6	0.3	0.75	\checkmark	
9	8	5	0.3	0.65	\checkmark		29	5	10	-0.5	0.75		\checkmark
10	9	6	0.3	0.75	\checkmark		30	9	6	0.3	0.75		
11	9	8	0.1	0.85		\checkmark	31	8	4	0.4	0.6		
12	8	5	0.3	0.65			32	6	3	0.3	0.45		
13	8	4	0.4	0.6	\checkmark		33	9	8	0.1	0.85		\checkmark
14	9	6	0.3	0.75	\checkmark		34	9	9	0	0.9		
15	9	5	0.4	0.7			35	9	6	0.3	0.75		
16	8	5	0.3	0.65	\checkmark		36	8	5	0.3	0.65		
17	7	4	0.3	0.55			37	10	8	0.2	0.9		
18	10	7	0.3	0.85			38	1	2	-0.1	0.15		V
19	7	4	0.3	0.55	V		39	9	6	0.3	0.75	V	
20	4	3	0.5	0.35	,		40	10	-	0.5	1	,	
20	-	5	0.1	0.55		,				0			,
ITEM	u		(U-L)/N	(U+L)/2N	RFM	IARK	ITEM	U		(U-L)/N	(U+L)/2N	REM	1ARK
	υ	L	(U-L)/N	(U+L)/2N	REN	IARK	ITEM NUMBER	U	L	(U-L)/N	(U+L)/2N		
UMBER		L	• •			1	NUMBER	-				REN VALID √	1
	U 8 10		0.4	0.6	VALID	1		U 9 10	5	(U-L)/N 0.4 0.4	0.7	VALID	
UMBER 41 42	8 10	4	0.4	0.6	VALID √	INVALID	NUMBER 61 62	9	5	0.4	0.7	VALID √	INVALID
41 42 43	8	4	0.4 0.3 0.3	0.6 0.85 0.55	VALID √ √	INVALID	NUMBER 61 62 63	9 10	5 6 5	0.4	0.7 0.8 0.75	VALID V V	INVALID
41 42 43 44	8 10 7 9	4 7 4	0.4 0.3 0.3 0.5	0.6 0.85 0.55 0.65	VALID √	INVALID √	NUMBER 61 62 63 64	9 10 10 10	5 6 5 4	0.4 0.4 0.5 0.6	0.7 0.8 0.75 0.7	VALID √ √ √	INVALID
41 42 43 44 45	8 10 7 9	4 7 4 10	0.4 0.3 0.3 0.5 0	0.6 0.85 0.55 0.65	VALID √ √ √	INVALID	NUMBER 61 62 63 64 65	9 10 10 10 7	5 6 5 4 3	0.4 0.4 0.5 0.6 0.4	0.7 0.8 0.75 0.7 0.7	VALID √ √ √ √	INVALID
41 42 43 44 45 46	8 10 7 9 10 9	4 7 4 10 6	0.4 0.3 0.3 0.5 0 0.3	0.6 0.85 0.55 0.65 1 0.75	VALID √ √ √ √	INVALID √	NUMBER 61 62 63 64 65 66	9 10 10 10 7 8	5 6 5 4 3 5	0.4 0.4 0.5 0.6 0.4 0.3	0.7 0.8 0.75 0.7 0.5 0.65	VALID √ √ √ √ √ √	INVALID
41 42 43 44 45 46 47	8 10 7 9 10 9	4 7 4 10 6 5	0.4 0.3 0.3 0.5 0 0.3 0.5	0.6 0.85 0.55 0.65 1 0.75 0.75	VALID √ √ √ √ √ √ √ √ √ √	INVALID √	NUMBER 61 62 63 64 65 66 66 67	9 10 10 10 7 8 9	5 6 5 4 3 5 5	0.4 0.4 0.5 0.6 0.4 0.3 0.4	0.7 0.8 0.75 0.7 0.5 0.65 0.7	VALID √ √ √ √ √ √ √ √ √ √	INVALID
41 42 43 44 45 46 47 48	8 10 7 9 10 9 10 9	4 7 4 10 6 5 6	0.4 0.3 0.3 0.5 0 0 0.3 0.5 0.3	0.6 0.85 0.55 0.65 1 0.75 0.75 0.75	VALID √ √ √ √	INVALID √ √	NUMBER 61 62 63 64 65 66 67 68	9 10 10 10 7 8 9 8	5 6 5 4 3 5 5 5	0.4 0.4 0.5 0.6 0.4 0.3 0.4 0.3	0.7 0.8 0.75 0.7 0.65 0.7 0.65	VALID √ √ √ √ √ √	
41 42 43 44 45 46 47 48 49	8 10 7 9 10 9 10 9 3	4 7 4 10 6 5 6 5	0.4 0.3 0.3 0.5 0 0 0.3 0.5 0.3 -0.2	0.6 0.85 0.55 0.65 1 0.75 0.75 0.75 0.75 0.75	VALID √ √ √ √ √ √ √ √ √ √	INVALID √ √ √ √	NUMBER 61 62 63 64 65 66 67 68 68 69	9 10 10 10 7 8 9 8 10	5 6 5 4 3 5 5 8	0.4 0.4 0.5 0.6 0.4 0.3 0.4 0.3 0.2	0.7 0.8 0.75 0.7 0.5 0.65 0.7 0.65 0.7 0.65	VALID √ √ √ √ √ √ √ √ √ √	
41 42 43 44 45 46 47 48 49 50	8 10 7 9 10 9 10 9 3 3 3	4 7 4 10 6 5 6 5 3	0.4 0.3 0.5 0 0.3 0.5 0.3 0.5 0.3 -0.2 0	0.6 0.85 0.55 0.65 1 0.75 0.75 0.75 0.75 0.75 0.4 0.3	VALID √ √ √ √ √ √ √ √ √ √	INVALID √ √	NUMBER 61 62 63 64 65 66 67 68 69 70	9 10 10 10 7 8 9 8 10 6	5 6 5 4 3 5 5 8 5 5	0.4 0.4 0.5 0.6 0.4 0.3 0.4 0.3 0.4 0.3 0.2 0.1	0.7 0.8 0.75 0.7 0.5 0.65 0.7 0.65 0.9 0.55	VALID √ √ √ √ √ √ √ √ √ √	
41 42 43 44 45 46 47 48 49 50 51	8 10 7 9 10 9 10 9 3 3 8	4 7 4 10 6 5 6 5 3 5	0.4 0.3 0.3 0.5 0 0 0.3 0.5 0.3 -0.2 0 0 0.3	0.6 0.85 0.55 0.65 1 0.75 0.75 0.75 0.75 0.75 0.4 0.3 0.65	VALID √ √ √ √ √ √ √	INVALID √ √ √ √	NUMBER 61 62 63 64 65 66 67 68 69 70 70 71	9 10 10 10 7 8 9 8 10 6 8	5 6 5 4 3 5 5 5 5 5 5 5	0.4 0.4 0.5 0.6 0.4 0.3 0.4 0.3 0.4 0.3 0.2 0.1 0.3	0.7 0.8 0.75 0.7 0.5 0.65 0.7 0.65 0.9 0.55 0.65	VALID √ √ √ √ √ √ √ √ √ √	INVALID
41 42 43 44 45 46 47 48 49 50 51 52	8 10 7 9 10 9 10 9 3 3 8 8 8	4 7 4 10 6 5 6 5 3 5 5	0.4 0.3 0.3 0.5 0 0 0.3 0.5 0.3 -0.2 0 0 0.3 0.3 0.3	0.6 0.85 0.55 0.65 1 0.75 0.75 0.75 0.75 0.75 0.75 0.4 0.4 0.3 0.65	VALID √ √ √ √ √ √ √ √ √ √	INVALID √ √ √ √ √ √	NUMBER 61 62 63 64 65 66 67 68 69 70 71 71 72	9 10 10 10 7 8 9 8 10 6 8 7	5 6 3 5 5 5 8 5 5 7	0.4 0.4 0.5 0.6 0.4 0.3 0.4 0.3 0.2 0.1 0.3 0.3 0.3	0.7 0.8 0.75 0.7 0.5 0.65 0.7 0.65 0.9 0.55 0.65 0.65	VALID √ √ √ √ √ √ √ √ √ √	
41 42 43 44 45 46 47 48 49 50 51 51 52 53	8 10 7 9 10 9 10 9 3 3 8 8 8 10	4 7 4 10 6 5 5 5 6 5 6	0.4 0.3 0.3 0.5 0 0 0.3 0.5 0.3 -0.2 0 0 0.3 0.3 0.3 0.4	0.6 0.85 0.55 0.65 1 0.75 0.75 0.75 0.75 0.75 0.4 0.3 0.65 0.65 0.8	VALID √ √ √ √ √ √ √	INVALID √ √ √ √ √ √ √ √ √	NUMBER 61 62 63 64 65 66 67 68 69 70 71 71 72 73	9 10 10 10 7 8 9 8 10 6 8 7 7 8	5 6 5 4 3 5 5 8 5 5 7 7 5	0.4 0.4 0.5 0.6 0.4 0.3 0.4 0.3 0.2 0.1 0.3 0.3	0.7 0.8 0.75 0.7 0.65 0.65 0.9 0.55 0.65 0.65 0.7 0.65	VALID \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\	INVALID
AUMBER 41 42 43 44 45 46 47 48 49 50 51 52 53 54	8 10 7 9 10 9 10 9 3 3 3 8 8 8 10 7	4 7 4 10 6 5 5 5 5 5 6 8 8	0.4 0.3 0.3 0.5 0 0 0.3 0.5 0.3 -0.2 0 0 0.3 0.3 0.3 0.4 -0.1	0.6 0.85 0.55 0.65 1 0.75 0.75 0.75 0.75 0.75 0.4 0.3 0.65 0.65 0.8 0.75	VALID √ √ √ √ √ √ √ √ √ √	INVALID √ √ √ √ √ √	NUMBER 61 62 63 64 65 66 67 68 69 70 71 71 72 73 73 74	9 10 10 7 8 9 8 10 6 8 7 8 7 8 9	5 6 5 4 3 5 5 5 5 5 7 5 6	0.4 0.4 0.5 0.6 0.4 0.3 0.4 0.3 0.2 0.1 0.3 0.3 0.3 0.3	0.7 0.8 0.75 0.5 0.65 0.7 0.65 0.9 0.55 0.65 0.65 0.7 0.65 0.75	VALID \lambda \lambda	INVALID
AUMBER 41 42 43 44 45 46 47 48 47 48 49 50 51 52 53 54 55	8 10 7 9 10 9 10 9 3 3 3 8 8 10 7 7 9	4 7 4 10 6 5 6 5 5 6 8 6 8 6	0.4 0.3 0.3 0.5 0 0 0.3 0.5 0.3 -0.2 0 0 0.3 0.3 0.3 0.4 -0.1 0.3	0.6 0.85 0.55 0.65 1 0.75 0.75 0.75 0.75 0.4 0.65 0.65 0.65 0.8 0.75 0.75	VALID √ √ √ √ √ √ √ √ √ √	INVALID √ √ √ √ √ √ √ √ √	NUMBER 61 62 63 64 65 66 67 68 69 70 71 72 73 73 74 75	9 10 10 10 7 8 9 8 10 6 8 7 8 8 9 9 8 8	5 6 3 5 5 5 5 7 5 7 5 6 5 5	0.4 0.4 0.5 0.6 0.4 0.3 0.4 0.3 0.2 0.1 0.3 0.3 0.3 0.3 0.3	0.7 0.8 0.75 0.5 0.65 0.7 0.65 0.9 0.55 0.65 0.7 0.65 0.75 0.65	VALID \[\] \[\] \[\] \[\] \[\] \[\] \[\] \[\	INVALID
AUMBER 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	8 10 7 9 10 9 10 9 3 3 3 8 8 8 10 7 9 8 8	4 7 4 10 6 5 5 5 5 6 8 8 6 4	0.4 0.3 0.3 0.5 0 0.3 0.5 0.3 -0.2 0 0.3 0.3 0.3 0.3 0.4 -0.1 0.3 0.4	0.6 0.85 0.55 0.65 1 0.75 0.75 0.75 0.75 0.4 0.65 0.65 0.8 0.75 0.75 0.75	VALID √ √ √ √ √ √ √ √ √ √	INVALID √ √ √ √ √ √ √ √ √	NUMBER 61 62 63 64 65 66 67 68 69 70 71 72 73 73 74 75 76	9 10 10 10 7 8 9 9 8 10 6 8 7 7 8 9 9 8 8 10	5 6 5 4 3 5 5 5 5 5 7 5 6 5 7 7 7	0.4 0.4 0.5 0.6 0.4 0.3 0.4 0.3 0.4 0.3 0.2 0.1 0.3 0.3 0.3 0.3 0.3	0.7 0.8 0.75 0.5 0.65 0.7 0.65 0.9 0.55 0.65 0.65 0.7 0.65 0.75 0.65 0.75	VALID √	INVALID
AUMBER 41 42 43 44 45 46 47 48 47 48 49 50 51 52 53 54 55	8 10 7 9 10 9 10 9 3 3 8 8 10 7 9 8 8 7	4 7 4 10 6 5 6 8 6 8 6 4 6	0.4 0.3 0.3 0.5 0 0.3 0.5 0.3 -0.2 0 0.3 0.3 0.3 0.4 -0.1 0.3	0.6 0.85 0.55 0.65 1 0.75 0.75 0.75 0.75 0.4 0.65 0.65 0.65 0.75 0.75	VALID √ √ √ √ √ √ √ √ √ √	INVALID √ √ √ √ √ √ √ √ √	NUMBER 61 62 63 64 65 66 67 68 69 70 71 72 73 73 74 75	9 10 10 10 7 8 9 8 10 6 8 7 8 9 8 7 8 9 8 8 10 8 8 10 8	5 6 5 4 3 5 5 5 5 7 5 6 5 7 5 7 5 7 5 5 7 5	0.4 0.4 0.5 0.6 0.4 0.3 0.4 0.3 0.4 0.3 0.2 0.1 0.3 0.3 0.3 0.3 0.3 0.3 0.3	0.7 0.8 0.75 0.5 0.65 0.7 0.65 0.9 0.55 0.65 0.7 0.65 0.75 0.65	VALID \lambda \lambda	INVALIC √ √ √ √ √ √ √ √ √ √
AUMBER 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	8 10 7 9 10 9 10 9 10 9 10 9 3 3 3 8 8 8 10 7 9 9 8 8 7 9	4 7 4 10 6 5 6 5 5 6 8 6 4 6 4 6 6	0.4 0.3 0.3 0.5 0 0 0.3 0.5 0.3 -0.2 0 0 0.3 0.3 0.3 0.4 -0.1 0.3 0.4 0.4 0.1 0.3	0.6 0.85 0.55 0.65 1 0.75 0.75 0.75 0.75 0.65 0.65 0.75 0.75 0.75	VALID √ √ √ √ √ √ √ √ √ √	INVALID √ √ √ √ √ √ √ √ √ √	NUMBER 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 76 77 78	9 10 10 7 8 9 9 8 10 6 8 7 7 8 8 9 9 8 10 8 10 8 10	5 6 5 4 3 5 5 5 5 7 5 6 5 7 5 7 5 9	0.4 0.4 0.5 0.6 0.4 0.3 0.4 0.3 0.3 0.2 0.1 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	0.7 0.8 0.75 0.7 0.65 0.65 0.9 0.55 0.65 0.75 0.65 0.75 0.65 0.85 0.85 0.85 0.85	VALID √	INVALID
41 42 43 44 45 46 47 48 49 50 51 51 52 53 53 54 55 56 57	8 10 7 9 10 9 10 9 3 3 8 8 10 7 9 8 8 7	4 7 4 10 6 5 6 8 6 8 6 4 6	0.4 0.3 0.3 0.5 0 0 0.3 0.5 0.3 -0.2 0 0 0.3 0.3 0.3 0.4 -0.1 0.3 0.4 0.4 0.1 0.3	0.6 0.85 0.55 0.65 1 0.75 0.75 0.75 0.75 0.65 0.65 0.75 0.75 0.75	VALID √ √ √ √ √ √ √ √ √ √	INVALID √ √ √ √ √ √ √ √ √	NUMBER 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 76 77	9 10 10 10 7 8 9 8 10 6 8 7 8 9 8 7 8 9 8 8 10 8 8 10 8	5 6 5 4 3 5 5 5 5 7 5 6 5 7 5 7 5 9	0.4 0.4 0.5 0.6 0.4 0.3 0.4 0.3 0.3 0.2 0.1 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	0.7 0.8 0.75 0.7 0.65 0.65 0.9 0.55 0.65 0.75 0.65 0.75 0.65 0.85 0.85	VALID √	INVALID √ √ √ √ √ √ √ √ √

4 1 1 0 0 1 1 1 1 1 1	1 0 0 1 1 1	6 7 1 1 1 1 1 1 1 1	8 1 1 1	9 1 0 1	0 11			REAE	M	туо)F TI	IE TI	ST																											
1 1 0 0 1 1	1 0 0 1 1 1 1 1	6 7 1 1 1 1 1 1 1 1	1	9 1 0 1	0 11			NO. ITE	M)F 11		51																											
1 1 0 0 1 1	1 0 0 1 1 1 1 1	6 7 1 1 1 1 1 1 1 1	1	9 1 0 1	0 11	12		-	_				_	_																										
1 1 0 0 1 1	1 0 0 1 1 1 1 1	6 7 1 1 1 1 1 1 1 1	1	9 1 0 1	0 11	12		-	_									_		_		-		_	_				_	_						-	-	~		<u> </u>
1 1 0 0 1 1	1 0 0 1 1 1 1 1	6 7 1 1 1 1 1 1 1 1	1	9 1 0 1	1 1	12	13				1 -			1	1	<u> </u>									1	11	_				0. IT				- 1	1.		-	х	X2
1 1	0 1 1 1 1 1	1 1 1 1 1 1	1	0	1		-	_	_	6 17	-	19	_	_	23	24	25	26	27 2	28 29	30	31	32	33 34	4 35	36	37	38 3	9 4	0 41	42	43	44	45	46 43	48	49	50		
1 1	1 1 1	1 1 1 1	-	1	-	1 1	1	-	-	0 1	ι 1	1	_	0 0) 1	1	1	1	1	1	1 1	. 1	1	1	1 1	1	1	1	1	1 1	1	1	1	1	1	1 1	1	1	45	2025
1 1	1 1	1 1	1		1	1 1	1	1	0	1 1	ι 1	1	1	1 1	-	0	1	1	0	0	0 1	. 1	1	1	1 1	1	1	1	1	1 1	1	1	1	1	1	1 1	1	1 1	43	1849
1 1 1 1	1 1	1 1		1	1	1 1	1	1	1	1 1	ι 1	1	1	1 1	ι 1	1	0	1	1	1	1 (1	1	1	1 0	1	1	1	1	1 1	1 0	0	1	1	0	1 1	1	1 1	44	1936
1 1	1 0		1	1	1	1 1	1	1	1	1 1	L O	1	1	0 0	0 0	0	1	0	1	1	0 1	1	0	1	1 1	0	1	1	0	1 1	1 0	1	1	1	0	1 1	1	i 1	38	1444
		1 1	1	1	0	1 1	1	0	1	1 (1	1	1	1 1	L 1	0	1	1	0	1	1 1	1	1	1	0 1	1	1	1	1	1 1	1	1	1	1	1	1 0	1	ί 1	41	1681
1 1	1 1	1 1	1	0	0	1 1	1	1	1	1 1	1	1	1	1 1	L 1	0	1	1	1	1	1 1	1	1	0	0 0	1	1	1	1	1 1	1	1	1	1	1	1 1	1	1 1	44	1936
1 1	1 1	1 0	1	1	1 (0 0	1	0	1	1 1	l 1	1	1	1 1	ι 1	1	1	1	0	1	0 1	. 1	1	1	1 0	1	0	1	0	1 1	1	0	1	1	1	1 1	1	ι 1	39	1521
1 1	1 1	1 0	1	1	1	1 1	1	1	1	1 1	ι 1	1	1	0 1	L O	1	1	1	0	1	1 1	. 1	1	1	1 1	1	1	1	1	1 1	l 1	1	0	1	0	1 1	1	1 1	44	1936
1 1	1 1	1 1	1	1	1	1 1	1	1	1	1 1	ι 1	1	1	1 1	ι 1	1	0	1	1	1	1 1	1	1	1	1 1	1	1	0	1	1 () 1	0	1	1	1	0 1	1	ι 1	45	2025
1 1	1 1	1 1	1	1	1 (0 1	1	1	1	0 1	ι 1	1	1	1 1	ι 1	0	1	0	1	1	1 1	0	1	1	1 0	0	1	1	1	1 1	L 0	1	1	1	0	1 1	1	ι 0	39	1521
0 1	1 1	1 1	1	1	1	1 1	0	1	1	0 1	L O	0	0	0 1	L O	1	1	0	1	1	1 1	1	1	0	0 1	1	0	1	0	1 (0 0	0	0	1	1	1 1	1	ι 1	33	1089
1 1	1 0	1 1	0	1	0	1 1	0	1	1	0 1	ι 1	1	0	1 0) 1	0	0	0	0	1	1 1	0	1	0	1 1	0	0	0	0	0 1	1	1	1	1	1	1 1	1	1 1	32	1024
0 1	1 1	1 1	0	1	0	1 0	1	1	1	1 () 1	1	1	1 1	1 1	1	1	1	1	1	1 1	0	1	1	0 0	0	0	1	0	0 1	1	0	1	0	1	0 1	0	1	34	1156
0 0	0 1	0 1	0	0	0	0 0	1	0	1	1 (0 0	0	0	0 1	L O	0	0	0	1	0	1 (1	0	0	1 1	0	0	1	1	1 1	1	1	1	1	1	1 1	1	1 1	26	676
1 1	1 0	0 0	0	0	1	0 1	0	1	0	1 () 1	0	1	1 () 1	0	0	1	1	0	0 0	1	0	1	1 1	1	1	0	1	0 0) 1	0	1	0	1	1 1	0	1	25	625
	1 1	1 1	0	1	0 1	0 0	1	1	0	0 0) 1	1	1	0 0	0	1	0	0	1	1	D C	0	0	0	0 1	0	0	0	1	0 1	L O	0	1	0	1	1 1	0	0 0	22	484
1 1	0 0	0 1	1	0	0	1 0	0	0	1	0 1	1	0	0	0 0) 1	0	0	0	0	0	0 1	0	0	1	1 0	0	1	0	0	0 1	L O	1	0	0	1	1 1	1	1 0	20	400
1 1 1 0	0 0	0 1	1	0	0	1 0	0	0	1	0 1	1	0	0	0 0) 1	0	0	0	0	0	0 1	0	0	1	1 0	0	1	0	0	0 1	L O	1	0	0	1	1 1	1	1 0		400
1 1 1 0 1 0		1 1	0	1	0	0 0	1	1	0	0 0) 1	1	1	0 0	0	0	0	0	0	1	0 0	0	0	0	0 1	0	0	0	1	0 0	0 0	0	1	0	1	1 0	C	0		324
1 1 1 0 1 0		0 1	1	0	0	1 0	0	0	1	0 1	1	0	_			0	0	0	0	0	0 1	0	0			0	1	0	0	0 1		0	0	0	1	1 1	1	0		289
1 0	1 1		-	~	-		Ű	~	-		-				1		0	Ŭ	-	-				~		, v	-1	2	-	<u> </u>		Ů	0	Ū	-			<u> </u>		24341
-	1	0 0		0 0 0 1 1 0 0 0 1 1 1 1 1 0 0	0 0 1 1 0 0 0 0 1 1 0 1 1 1 0 1	0 0 1 1 0 0 0 0 1 1 0 0 1 1 1 0 1 0	0 0 0 1 1 0 0 1 0 0 0 0 1 1 0 0 1 0 1 1 1 0 1 0 0 1 0 1 1 1 0 1 0 0 0 0	0 0 1 1 0 0 1 0 0 0 0 1 1 0 0 1 0 0 1 1 1 0 1 1 0 0 1 0 0 1 1 1 0 1 0 0 1 1	0 0 1 1 0 0 1 0 0 0 0 0 0 0 0 1 1 0 0 1 0 0 0 0 0 0 0 0 0 0 1 1 0 0 1 1 0 0 1 1 1 1 0 0 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 0 0 1	0 0 1 1 0 0 1 0 0 1 0 0 1 1 0 0 1 0 0 1 1 1 1 0 1 0 0 0 1 1 0	0 0 1 1 0 0 1 0 0 1 0 2 0 0 0 1 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 1 1 0	0 0 1 1 0 0 1 0 0 1 0 0 1 1 1 1 1 0 0 1 1 0 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 1 1 1 0 0 0 1 1 0 1 1 1 1 0 0 0 1 1 0 1 1 1 1 0 1 0 0 1 1 1 1 1 0 0 0 1 1 0 0 1 1 1 1 1 1 0 1	0 0 1 1 0 0 1 0 0 1 0 1 1 0 0 0 1 1 0 0 1 0 0 1 0 1 1 0 1 1 1 0 0 1 0 0 1 1 0 1 1 0 1 1 1 0 1 0 0 0 1 1 0 1 1 0	0 0 1 1 0 0 1 0 0 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 1 1 1 0 1	0 0 1 1 0 0 1 0 0 1 1 1 0 0 0 0 0 1 1 0 0 1 0 0 1 1 0 0 0 0 1 1 1 0 0 1 0 0 1 1 0 0 0 0 1 1 1 0 0 1 1 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0	0 0 1 1 0 0 1 0 1 1 1 0 0 1 0 0 1 1 0 0 1 0 1 1 0 0 1 1 1 0 0 0 1 1 1 0 0 0 1 1 1 0 0 0 1 1 1 0 0 0 1 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 1 1 0	0 0 1 1 0 0 1 0 0 1 1 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0	0 0 1 1 0 0 1 0 0 1 1 0 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0	0 0 1 1 0 0 1 0 0 1 1 1 0 0 0 0 0 1 1 1 0	0 0 1 1 0 0 1 0 0 1 1 1 0	0 0 1 1 0 0 1 0 1 1 1 0	0 0 1 1 0 0 1 0 1 1 0 0 0 1 0 0 1 0 0 0 1 0 0 0 1 1 0 0 0 1 1 1 0 0 0 1 1 1 0 0 0 1 1 1 0 0 0 1 1 1 0 0 0 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0 1 <th1< th=""> <th1< th=""> <th1< th=""> <th1< th=""></th1<></th1<></th1<></th1<>	0 0 1 1 0 0 1 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 0 0 0 1	0 0 1 1 0 0 1 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0	0 0 1 1 0 0 1 0 1 1 0 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 1 0 0 0 1 0 1 1 0 0 1 0 1 1 0 0 1 0 1 1 0 0 1 0 1 1 0 0 1 0 1 1 0 0 1 0 1 1 0 0 1 0 1 0 1 1 0 1 0 1 1	0 0 1 1 0 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 1 1 0 0 0 1 1 0 0 0	0 0 1 1 0 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0	0 0 1 1 0 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0 1 0 0 1 1 0 0 0 1 1 0 0 0 1 0 1 1 0 0 1 0 1 1 0 0 0 0 1 0 1 1 0 0 0 0 1 0 1 0 0 0 0 1 0 1 0 0 0 0 1	0 0 1 1 0 0 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 0 1 0	0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 0 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 1 0 0 1 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0	0 0 1 1 0 0 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0	0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 0 1 0 0 1 0 0 1 1 0 0 1 1 1 1 0 0 1 0 0 1 1 1 1 0 0 0 1 0 0 1 0 0 0 1 0 0 1 1 1 1 1 0 0 0 1 0 0 1 1 1 1 1 0 0 0 1 0 0 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 1 1	0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 1 1 1 0 0 1 1 0 0 1	0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 0 0 1 0 0 1 1 0 0 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 0 0 1 1 0 0 1 1 1 1 0 0 0 1 0 0 1 1 1 1 1 0 0 0 1 0 0 1 1 1 1 1 0 0 0 1 0 0 1 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 0 0 0 1	0 0 1 1 0 0 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 0 0 1 1 0 0 1 1 1 1 0 20 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 1 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 0 0 1 0 0 0 0 1

Students Number	Score	Students Number	Score
1	64	19	54
2	66	20	68
3	70	20	72
4	70	21	62
5	80	23	80
6	68	23	54
7	60	25	50
8	54	26	74
9	66	27	68
10	56	28	64
11	76	29	58
12	50	30	70
13	68	31	68
14	62	32	70
15	44	33	72
16	48	34	68
17	76	35	82
18	36	36	58
Total	2310	1	<u>.</u>
Mean	64.16		
Category	Moderate		

Students' Score in Identifying Independent and Dependent Clauses

	Frequency Correct Answer (%) Incorrect Answer								
No. Item	Correct Answer	(%)	Incorrect Answer	(%)					
1	33	91.6	3	8.3					
2	15	41.6	21	58.3					
3	33	91.6	3	8.3					
4	9	25	27	75					
5	12	33.3	24	66.6					
6	25	16.6	11	30.5					
7	18	50	18	50					
8	18	50	18	50					
9	19	52.7	17	47.2					
10	21	58.3	15	41.6					
11	30	83.3	6	16.6					
12	36	100	0	0					
13	10	27.7	26	72.2					
14	11	30.5	25	69.4					
15	25	69.4	11	30.5					
16	18	50	18	50					
17	8	22.2	28	77.7					
18	15	41.6	21	58.3					
19	10	27.7	26	72.2					
20	28	77.7	8	22.2					
21	26	72.2	10	27.7					
22	10	27.7	26	72.2					
23	17	47.2	19	52.7					
24	20	55.5	16	44.4					
25	11	30.5	25	69.4					
26	25	69.4	11	30.5					
27	12	33.3	24	66.6					
28	18	50	18	50					
29	30	83.3	6	16.6					
30	28	77.7	14	38.8					
31	12	33.3	24	66.6					
32	25	69.4	11	30.5					
33	20	55.5	16	44.4					
34	18	50	18	50					
35	8	22.2	28	77.7					

The Students Percentage Correct and Incorrect in Identifying Independent and Dependent Clauses

36	10	27.7	26	72.7
37	18	50	18	50
38	10	27.7	26	72.7
39	15	41.6	21	58.3
40	17	47.2	19	52.7
41	22	61.1	14	38.8
42	15	41.6	21	58.3
43	21	58.3	15	41.6
44	21	58.3	15	41.6
45	25	69.4	11	30.5
46	28	77.7	14	38.8
47	13	36.1	23	63.8
48	16	44.4	20	55.5
49	18	50	18	50
50	18	50	18	50

Interview List

- 1. What do you think about the test before?
- 2. Do you understand about independent and dependent clause?
- 3. How do you differentiate among independent and dependent clause?
- 4. What is your difficulty in identifying independent and dependent clause?
- 5. Do you know what subordinating conjunctions common use for each dependent clause (adjective, adverb and noun)?

Interview Transcription

Student 1

- Researcher : "I have done check your class test that I held for my thesis yesterday"
- Student : "So? How about the result?"
- Researcher : "The result is not good enough. There are so many students got low score"
- Student : "How about me?"
- Researcher : " I do not know which one yours, because all of you didn't put your name in the worksheet"
- Student : "Okay. That's right"
- Researcher : "Could you differentiate among independent and dependent clause?"
- Student : "If only identify simple sentence, I can identify it. Especially in Bahasa Indonesia hehehehe"
- Researcher : "How about the test that I gave to you yesterday?"
- Student : "Just a little bit, only for uncomplicated sentences. The difficulty is when we have to identify long sentence which consist of many commas. I can't do that.
- Researcher : "How about differentiate among dependent clauses?"
- Student : "I only know about adverb clause such as: adverb of place, adverb of time, adverb of reason.
- Researcher : So, can you explain what is your difficulty in identify clauses?
- Student : First, I don't know what characteristics of independent and dependent clauses. Second, I don't understand the meaning of sentence that I have to identify and also I can't find the subordinating conjuctions in dependent clause
- Researcher : Ok, I see. Thank you very much.
- Student : Okay

Student 2

- Researcher : "I want to ask you. Do you understand about the test material yesterday?
- Student : "Yes, I do. The test that students have to decide independent and dependent clause, isn't?"
- Researcher : "Yes, it is". In your opinion, what is your difficulty?"
- Student : "I don't know how to identify independent and dependent clauses in sentences. I got confuse.
- Researcher : "Confuse? What did makes you confuse?"
- Student : "I don't understand about subordinating conjunctions common use in clauses. In test before, we have to identify clause conjunctions, and I forget about subordinating conjunctions for each dependent clauses. In addition, the test consisted of so many items"
- Researcher : Hmm, So you don't understand about clause conjunction. Have you ever learned about that?"
- Student : "Yes, I have. We learn about clause in this semester but I don't understand enough about that"
- Researcher : "Okay. Thank you"
- Student : "Okay. You are welcome"

Student 3

Researcher : "I want to ask you. Can you finish the test yesterday?"

Student : "Yes, I can."

- Researcher : "Is the test difficulty?"
- Student : "difficulty enough, but I can finish it"

Researcher : "But, most of you got low score. In your opinion, why?

- Student : "It may happen because they are not done the best in test. Then, it perhaps the students do not understand how to identify clauses"
- Researcher : Don't understand? Which part?
- Student : Hmm, not understanding. They don't understand what independent and dependent clauses meaning is. Then, how to differentiate subordinating conjunctions among dependent clauses. There are so many of them.
- Researcher : "Oh, I see"
- Student : "Okay"
- Researcher : "Thank you very much"
- Student : "You are welcome"

Student 4

Researcher : "I want to ask you. Do you understand test about clauses yesterday?"

Student : "Yes, I do"

- Researcher : "In your opinion, how about the test yesterday, is that difficult?"
- Student : "Not really, I can finish test if it just only decides whether clause is independent or dependent ones"
- Researcher : "But, do you have difficulty in test?"
- Student : "Hmm, of course there are". The difficulty is sometimes in dependent clauses there is same subordinating conjunctions for each others. So, I get confuse when I have to identify them. And also the sentence which we have to identify is a very long sentence.
- Researcher : So, how do you differentiate among independent and dependent clause?
- Student : I just separate the clauses and look if they make their sense itself. If clause is able to make sense by itself it means the clause is main clause. But, if clause is broken so that's dependent.

Researcher : "Hmm, okay. Thank you"

Student : "Ok"

Students 5

- Researcher : "Ok. I would like to ask you. Do you understand about the test that I give to your class?"
- Student : "The test which about identify the clauses, isn't?"
- Researcher : "Yes. Don't you understand?"
- Student : "Yes. I do. But, hmm ... just a little bit"
- Researcher : "Can you give more explanation?"
- Student : "Look, "There are so many words (subordinating conjunctions) that usually use to sign the clause and they are different for each clause.
 We often forget about that. Then, even there are clauses which position in middle and separated sentences"
- Researcher : "Okay. So, you don't understand about that. Any else?
- Student : "I usually confuse to identify independent and dependent clause because I do not understand the meaning of sentence, and there are so many commas in a sentence."
- Researcher : "The length and complexity sentences. Then, is there any difficulty?"
- Student : "Hmm, no. I think that's all"
- Researcher : "Okay. Thanks a lot"
- Student : "You're welcome"