APPENDIX A

The Lesson Plan

| School | : SMA Negeri 1Silangkitang |
|----------|----------------------------|
| Subject | : English |
| Class | : XI |
| Material | : Narrative text |
| Meeting | : 1 |

A. Core Competence

- 1. Inspiring and applying the religion study they believe.
- 2. Inspiring and applying behavior of honesty, discipline, responsibility, care, cooperation, tolerance, peace), politeness, responsiveness and pro-activeness, and showing attitude as a part of solutions of any problems in interacting effectively with social and natural environment and also in putting themselves as nation's reflection in world association.
- 3. Comprehending, applying, analyzing the factual, conceptual, procedural, and meta-cognitive knowledge based on their curiosity about science, technology, art, culture, and humanity with insight of humanity, nationality, and civilization due to the cause of phenomena and events, and also applying procedural knowledge in specific study area based on their talent and interest to solve problems.
- 4. Processing, reasoning, and providing in concrete and abstract domain due to the development of what they learn at school independently, acting effectively and creatively, and be able to use methods based on educational rules.

B. Basic Competence

- 1.1 Be grateful of opportunity to study English as International language which is shown in enthusiasm of learning.
- 2.3 Appreciating behavior of responsibility, care, cooperation, peace-loving, in operating functional communication.
- 3.5 Analyzing social function, text structure, and grammatical pattern of narrative text in the form of short story, based on its context of using.
- 4.10 Making Narrative text, by paying attention on correct and context-based social function, text structure, and grammatical pattern.

C. Goal of study

Students seriously, politely, and expertly write narrative text by using correct and accepted grammar in daily live.

D. Indicators

Seriously:

- a. Identifying the generic structure of the narraitve text
- b. Identifying the grammatical features of the narraitve text
- c. Write the narrative text about Snow White

E. Material

Comunicative Purpose

Its function to amuse, entertain people, and to deal with actual or vicarious experience in different ways.

Rhetorical Structure

Rhethorical structure or generic structure is known by text elements which means how steps of a text should be write. Text elements in narrative text are:

- Title
- Orientation
- Complication
- Resolution
- Coda

Language Features

Language features is similar to grammatical patterns. Its contain of grammatical rules used in a written text. A narrative text is specified by the following criteria of grammatical pattern:

- Focus on generic participants,
- Use of relational processes and conjungtion
- Elements of sentence using subject, predicate, object and adverb (simple sentence, past tense, compound sentence and complex sentence)

F. Example of Narrative Text

THE SHEPHERD'S BOY

There was once a young shepherd boy who tended his sheep at the foot of a mountain near a dark forest.

It was rather lonely for him all day, so he thought up a plan by which he could get a little company and some excitements. He rushed down toward the village calling out, "Wolf! Wolf! ". Afterward the villagers came out to meet him and some of them stayed with him for a considerable time.

This pleased the boy so much that a few days afterward he tried the same trick and the villagers came again to help.

But shortly after, a wolf actually did come out to worry the sheep. The boy cried out, "Wolf! Wolf!" so much louder than before. But this time the villagers, who had been fooled twice before, thought the boy was again deceiving them. Consequently, nobody came to help him.

So the wolf made a good meal of the boy's flock and when the boy complained, the wise man of the village said: " A liar will not be believed, even when he speaks the truth."

(Adapted from AESOP'S Fables)

F. Method of learning

Picture Word Inductive Model

G. Source of Learning

- a. Teacher as a model
- b. Text book
- c. Some picture of Narrative

H. Media of learning

- Pictures
- Blackboard
- Pappers

I. The activities of learning

| Teacher | Students |
|---|---|
| Opening | German |
| - Teacher will greet and motivate the students. | - Students will respond to the teacher. |
| - Teacher will check the attendance list | - Students will respond to the teacher. |

Main Activity

Observing

- Teacher will give some text of narrative text.

Questioning

- Teacher will give the students opportunity to ask some questions and then explain them.

- Students will read the texts.
- Students will observe the social function, rhetorical structure and grammatical features of the text.
- Students try to find the main idea and other information from the texts.
- Students will question about any information of the texts such as social function, rhetorical structure and grammatical features of the text.

Experiment

Teacher will ask the students to work in group, displaying the picture on the board, asking the students to identify what they see in the pictures, asking them to elicit the words from the pictures. spelling and pronouncing the words identified, labelling the words identified, writing all the word bank, giving the example of the title, sentences, and a whole narrative writing to the students, asking the students to make writings, guiding the their students to do all the steps of the class, and giving comments and suggestion to the student's writings.

Associating

- Teacher will ask students to analyze the text.
- Teacher will give feedback.

- Students make a group which consist of 5 members. Work in their team and follow the instruction from the teacher. Students get comments and suggestions from teacher and their friends, everyone will be able to give opinion to improve the writing result of each group.

- Students will analyze the text related to social function, rhetorical structure and grammatical features.
- In groups, students share about narrative text, and present their works in front of the class.
- Students will analyze the text related to social function, rhetorical structure and grammatical features.

| Communicating - Teacher will ask the students to present their works. | - In groups, students share about Narrative text, and present their works in front of the class. |
|---|--|
| <u>Closing</u> Teacher will conclude the material. Teacher will greet the students. | With the teacher, students will conclude the material. Students will respond and greet the teacher. |

J. Assessment

Assessment of Social attitude a.

| a. | technique | : peer assessment |
|----|-----------|-------------------|
|----|-----------|-------------------|

| b. | instrument : question | naire |
|-----|-----------------------|-------|
| No. | Attitude | score |
| 1. | Curiosity | 1-2 |
| 2. | Confidence | 3-4 |
| 3. | Cooperation | 5-6 |

- Assessment knowledge a. Technique b.
 - : written text
 - b. Instrument : rubric

| Scoring Aspects | Indicators | Score | Max. Score |
|---------------------------|----------------------|-------|------------|
| Organization | Orientation | 10 | - 40 |
| (The generic structure) | Complication | 20 | 40 |
| TH | Resolution | 15 | |
| Language Features | Elements of sentence | 15 | |
| Language Features | Relational verbs | 10 | 35 |
| (The linguistic features) | Adjectives | 10 | |
| TTA TTA TEL | Preposition | 5 | 1 |
| | Articles | 5 | 6 |
| Mechanics | Capitalization | 5 | 25 |
| | Punctuation | 5 | |
| | Spelling | 5 | |
| Total Score | | | 100 |

The Lesson Plan

School: SMA Negeri 1 SilangkitangSubject: EnglishClass: XIMaterial: Narrative textMeeting: 2

A. Core Competence

- 5. Inspiring and applying the religion study they believe.
- 6. Inspiring and applying behavior of honesty, discipline, responsibility, care, cooperation, tolerance, peace), politeness, responsiveness and pro-activeness, and showing attitude as a part of solutions of any problems in interacting effectively with social and natural environment and also in putting themselves as nation's reflection in world association.
- 7. Comprehending, applying, analyzing the factual, conceptual, procedural, and meta-cognitive knowledge based on their curiosity about science, technology, art, culture, and humanity with insight of humanity, nationality, and civilization due to the cause of phenomena and events, and also applying procedural knowledge in specific study area based on their talent and interest to solve problems.
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B. Basic Competence

- 1.1 Be grateful of opportunity to study English as International language which is shown in enthusiasm of learning.
- 2.3 Appreciating behavior of responsibility, care, cooperation, peace-loving, in operating functional communication.
- 3.5 Analyzing social function, text structure, and grammatical pattern of narrative text in the form of short story, based on its context of using.
- 4.10 Making narrative text, by paying attention on correct and context-based social function, text structure, and grammatical pattern.

C. Goal of study

Students seriously, politely, and expertly write narrative text by using correct and accepted grammar in daily live.

D. Indicators

Seriously:

- a. identifying the generic structure of the narrative text
- b. Identifying the grammatical features of the narrative text

c. Write the narrative text about places

E. Material

Comunicative Purpose

Its function to amuse, entertain people, and to deal with actual or vicarious experience in different ways.

Rhetorical Structure

Rhethorical structure or generic structure is known by text elements which means how steps of a text should be write. Text elements in narrative text are:

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following criteria of grammatical pattern:

- Focus on generic participants,
- Use of relational processes and conjungtion
- Elements of sentence using subject, predicate, object and adverb (simple

sentence, past tense, compound sentence and complex sentence)

Example of Narrative Text

THE SHEPHERD'S BOY

There was once a young shepherd boy who tended his sheep at the foot of a mountain near a dark forest.

It was rather lonely for him all day, so he thought up a plan by which he could get a little company and some excitements. He rushed down toward the village calling out, "Wolf! Wolf! ". Afterward the villagers came out to meet him and some of them stayed with him for a considerable time.

This pleased the boy so much that a few days afterward he tried the same trick and the villagers came again to help.

But shortly after, a wolf actually did come out to worry the sheep. The boy cried out, "Wolf! Wolf!" so much louder than before. But this time the villagers, who had been fooled twice before, thought the boy was again deceiving them. Consequently, nobody came to help him.

So the wolf made a good meal of the boy's flock and when the boy complained, the wise man of the village said: " A liar will not be believed, even when he speaks the truth."

(Adapted from AESOP'S Fables)

F. Method of learning

Picture Word Inductive Model

G. Source of Learning

- a. Teacher as a model
- b. Some pictures of Narrative
- c. Pasti Bisa! Teaching Genre-Based Writing

H. Media of learning

- Pictures
- Blackboard
- Pappers

I. The activities of learning

| Teacher | Students | |
|--|---|--|
| Opening | MD.D. | |
| - Teacher will greet and motivate the students. | - Students will respond to the teacher. | |
| - Teacher will check the attendance list. | - Students will respond to the teacher. | |
| Main Activity | | |
| Observing | | |
| - Teacher will give some text of narrative text. | - Students will read the texts. | |

| | Feacher will review about narrative text. | - Students try to find the main idea and other information from the texts. |
|---------------------------|--|---|
| Questio | ning | EG |
| | Feacher will give the students opportunity to ask some questions and then explain hem. | - Students will question about any information of the texts such as social function, rhetorical structure and grammatical features of the text. |
| Experin | nent | 57 |
| | Feacher will distribute picture of the story to student groups. | - In groups, students will find important information from the picture. |
| Associa | ting | |
| 6 | Feacher will ask students to analyze the text. Feacher will give feedback. | - With that information, students will make a narrative text by paying attention on the social function, rhetorical structure and grammatical features of the text. |
| Commu | inicating | 8 |
| | Feacher will ask the students to present their works | - Students will analyze the text related to social function, rhetorical structure and grammatical features. |
| Closing | | |
| Closing | | |
| - | Feacher will conclude the naterial. will greet the students | - Together with the teacher make a conclusion |
| Teacher | naterial. will greet the students | |
| Teacher | naterial. will greet the students Assessment essment of Social attitude | conclusion |
| Teacher | naterial. will greet the students Assessment | conclusion : peer assessment |
| - Teacher J. J. Ass | naterial. will greet the students Assessment essment of Social attitude a. technique | conclusion |
| J. A Ass | material. will greet the students Assessment essment of Social attitude a. technique b. instrument o. Attitude Curiosity | conclusion : peer assessment : questionnaire I-2 |
| J. Ass | material. will greet the students Assessment essment of Social attitude a. technique b. instrument o. Attitude | conclusion : peer assessment : questionnaire Score |

| Assessment | knowl | edge |
|------------|-------|------|
|------------|-------|------|

| c.Technique | | : written text |
|-------------|------------|----------------|
| d. | Instrument | : rubric |

| Scoring Aspects | Indicators | Score | Max. Score |
|-------------------------|----------------------|-------|------------|
| Organization | Orientation | 10 | |
| (The generic structure) | Complication | 20 | 40 |
| 10 M | Resolution | 15 | |
| Language Features | Elements of sentence | 15 | |
| (The linguistic | Relational verbs | 10 | 35 |
| features) | Adjectives | 10 | |
| | Preposition | 5 | 800 |
| Mechanics | Articles | 5 | |
| | Capitalization | 5 | 25 |
| | Punctuation | 5 | |
| | Spelling | 5 | |
| Total Score | | | 100 |

Performance Technique : Presentation Instrument : Student presents the result of their narrative text in front of the class

| No. | Aspect of assessment | Score |
|---------|----------------------|---------|
| | Behavior | |
| 1. | Confidence | |
| 2. | Seriousness | |
| - | Knowledge | |
| 1. | Pronunciation | |
| 2. | Fluency | Ruillin |
| 3. | Intonation | Janan |
| Total | VED SITV | \sim |
| Average | | |

1. Confidence

3 = Confidence

2 = Less Confident

1 = Not Confident

- 5. Intonation
- 3 = Almost perfect
- 2 = There is a mistake
- 1 = Too many mistake

2. Seriousness

- 3 = serious
- 2 = Less Serious
- 1 = not serious

3. Pronunciation

- 3 =Almost perfect
- 2 = There is mistake
- 1 = Too many mistakes so it is difficult to understand

4. Fluency

- 3 = Fluent
- 2 = Less fluent
- 1 = Not fluent

Attachment 1.

Assessment of social attitude

Assess every people in your group

Give grade from 0 up to 10, where 0 is the worst and 10 is the best Sum the results of your assessment to obtain the value of each member in your group!

| No. | Name | No. | Aspect of assessment | | | | | | |
|-----|------|--------------|----------------------|-----|---|-----|----|---|-------|
| | | Presentation | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| 1. | | 1 I VI | | | | - (| | | |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | THE | | | | ~ | _ | | | |
| 5. | | / | 1 | 0.2 | 0 | | ./ | | |

The Lesson Plan

School: SMA Negeri 1 SilangkitangSubject: EnglishClass: XIMaterial: Narrative textMeeting: 3

A. Core Competence

- 9. Inspiring and applying the religion study they believe.
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Students seriously, politely, and expertly write descriptive text by using correct and accepted grammar in daily live.

D. Indicators

Seriously:

- e. Identifying the generic structure of the narrative text
- f. Identifying the grammatical features of the narrative text

g. Write the narrative text about places

E. Material **Comunicative Purpose** Its function to amuse, entertain people, and to deal with actual or vicarious experience in different ways. **Rhetorical Structure** Rhethorical structure or generic structure is known by text elements which means how steps of a text should be write. Text elements in narrative text are: Title Orientation Complication Resolution Coda Language Features Language features is similar to grammatical patterns. Its contain of grammatical rules used in a written text. . A narrative text is specified by the following criteria of grammatical pattern: - Focus on generic participants, - Use of relational processes and conjungtion Elements of sentence using subject, predicate, object and adverb (simple

Example of Narrative Text

THE SHEPHERD'S BOY

sentence, past tense, compound sentence and complex sentence)

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It was rather lonely for him all day, so he thought up a plan by which he could get a little company and some excitements. He rushed down toward the village calling out, "Wolf! Wolf! ". Afterward the villagers came out to meet him and some of them stayed with him for a considerable time. This pleased the boy so much that a few days afterward he tried the same trick and the villagers came again to help.

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H. Media of learning

- Pictures
- Blackboard
- Pappers
- I. The activities of learning

| Teacher | Students |
|---|---|
| Opening | |
| Teacher will greet and motivate the students.Teacher will check the attendance list. | Students will respond to the teacher.Students will respond to the teacher. |

Main Activity

Observing

- Teacher will give some text of narrative text.

Questioning

- Teacher will give the students opportunity to ask some questions and then explain them.

Experiment

- Teacher will distribute pictures about 'snow white' to student groups.

Associating

- Teacher will ask students to analyze the text.
- Teacher will give feedback.

Communicating

- Teacher will ask the students to present their works.

- Students will read the texts.
- Students try to find the main idea and other information from the texts.
- Students will question about any information of the texts such as social function, rhetorical structure and grammatical features of the text.
- In groups, students will find important information about the topic.
- With that information, students will make a narrative text by paying attention on the social function, rhetorical structure and grammatical features of the text.
- Students will analyze the text related to social function, rhetorical structure and grammatical features.

- In groups, students share about narrative text, and present their works in front of the class.

Closing- Teacher will conclude the
material.Teacher will greet the students.- With the teacher, students will
conclude the material.- Students will respond and greet the
teacher.

J. Assessment

Assessment of Social attitude

| | a. technique b. instrument | : peer assessment : questionnaire |
|-----|-------------------------------|--------------------------------------|
| No. | Attitude | Score |
| 1. | Curiosity | 1-2 |
| 2. | Confidence | 3-4 |
| 3. | Cooperation | 5-6 |

Assessment knowledge

c. Technique d. Instrument : written text bric

| nt | : | ru | ł |
|----|---|----|---|
| | | | |

| Scoring Aspects | Indicators | Score | Max. Score |
|-------------------------|----------------------|-------|------------|
| Organization | Orientation | 10 | |
| (The generic structure) | Complication | 20 | 40 |
| | Resolution | 15 | |
| Language Features | Elements of sentence | 15 | |
| (The linguistic | Relational verbs | 10 | 35 |
| features) | Adjectives | 10 | |
| NOV NOV | Preposition | 5 | |
| | Articles | 5 | |
| Mechanics | Capitalization | 5 | 25 |
| | Punctuation | 5 | |
| | Spelling | 5 | |
| Total Score | | | 100 |

: Presentation

Performance Technique Instrument

: Student presents the result of their narrative text in front of the class

| No. | Aspect of assessment | Score |
|-----|----------------------|----------|
| NTI | Behavior | (|
| 1. | Confidence | <u> </u> |
| 2. | Seriousness | |
| | Knowledge | |
| 1. | Pronunciation | |
| 2. | Fluency | |
| 3. | Intonation | |

Total Average

5. Confidence

- 3 =Confidence
- 2 = Less Confident
- 1 = Not Confident

6. Seriousness

- 3 = serious
- 2 = Less Serious
- 1 = not serious

7. Pronunciation

- 3 = Almost perfect
- 2 = There is mistake
- 1 = Too many mistakes so it is difficult to understand

8. Fluency

- 3 = Fluent
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- 1 = Not fluent

Attachment 1.

Assessment of social attitude

Assess every people in your group

Give grade from 0 up to 10, where 0 is the worst and 10 is the best Sum the results of your assessment to obtain the value of each member in your group!

| No. Name | | No. | Aspect of assessment | | | | | | |
|----------|---------|--------------|----------------------|---|---|---|---|---|--------|
| | | Presentation | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| 1. | 7 TH | 6 | | 1 | 5 | 2 | 5 | | \sim |
| 2. | han | oter | 1 | 1 | | 5 | | 1 | 111 |
| 3. | INITYET | SITV | C | R | 5 | | | | 0 |
| 4. | JIVIVE | 0111 | | | | | | | |

5. Intonation

- 3 =Almost perfect
- 2 = There is a mistake
- 1 = Too many mistake

APPENDIX B

The Calculation of the Data in Experimental Class

| No | Students' Initial | Pre-test (X ₁) | Post-test (X ₂) | Deviation (d1) | Dx (d – Mx) | Standard Deviation (Dx ²⁾ |
|----|----------------------|-------------------------------|--------------------------------|-------------------|----------------|--|
| 1 | AL | 80 | 86 | 6 | -0.27 | 0.07 |
| 2 | AS | 83 | 85 | 2 | -4.27 | 18.23 |
| 3 | AYS | 89 | 93 | 4 | -2.27 | 5.15 |
| 4 | CKD | 44 | 50 | 6 | -0.27 | 0.07 |
| 5 | DEA | 88 | 92 | 4 | -2.27 | 5.15 |
| 6 | DES | 67 | 90 | 23 | 16.73 | 279.9 |
| 7 | EHH | 72 | 77 | 5 | 1.27 | 1.61 |
| 8 | EKD | 77 | 81 | 4 | -2.27 | 5.15 |
| 9 | ES | 89 | 93 | 4 | -2.27 | 5.15 |
| 10 | EP | 87 | 94 | 7 | 0.73 | 0.53 |
| 11 | GW | 69 | 79 | 10 | 3.73 | 13.91 |
| 12 | HNN | 85 | 88 | 3 | -3.27 | 10.69 |
| 13 | IAA | 74 | 77 | 3 | -3.27 | 10.69 |
| 14 | ICA | 43 | 59 | 16 | 9.73 | 94.67 |
| 15 | II | 65 | 79 | 14 | 7.73 | 59.75 |
| 16 | IKA | 57 | 62 | 5 | -1.27 | 1.61 |
| 17 | JAW | 88 | 96 | 8 | 1.73 | 2.99 |
| 18 | JHP | 55 | 57 | 2 | -4.27 | 18.23 |
| 19 | JR | 70 | 83 | 13 | 6.73 | 45.29 |
| 20 | KAR | 79 | 83 | 4 | -2.27 | 5.15 |
| 21 | NS | 72 | 75 | 3 | -3.27 | 10.69 |
| 22 | S | 81 | 94 | 13 | 6.73 | 45.29 |
| 23 | SA | 70 | 80 | 10 | 3.73 | 13.91 |
| 24 | SAR | 68 | 75 | 7 | 0.73 | 0.53 |
| 25 | SJR | 69 | 72 | 3 | -3.27 | 10.69 |
| 26 | SN | 68 | 75 | 7 | 0.73 | 0.53 |
| 27 | SS | 75 | 79 | 4 | -2.27 | 5.15 |
| 28 | SS | 71 | 73 | 2 | -4.27 | 18.23 |
| 29 | SR | 85 | 92 | 7 | 0.73 | 0.53 |
| 30 | SRS | 64 | 66 | 2 | -4.27 | 18.23 |
| 31 | R | 78 | 83 | 5 | -1.27 | 1.61 |
| 32 | RD | 78 | 82 | 4 | -2.27 | 5.15 |
| 33 | RR | 87 | 90 | 3 | -3.27 | 10.69 |
| 34 | RS | 54 | 62 | 8 | 1.73 | 2.99 |
| 35 | VIA | 77 | 80 | 3 | -3.27 | 10.69 |
| 36 | VOS | 60 | 64 | 4 | -2.27 | 5.15 |
| Т | OTAL (Σ) | 2618 | 2846 | 226 | | 737.94 |
| | MEAN | 72.72 | 79,05 | | | |

APPENDIX C

| The Calculation of the Data in Control Class |
|--|
|--|

| No | Students' Initial | Pre-test (X ₁) | Post-test (X ₂) | Deviation (d1) | Dx (d – Mx) | Standard Deviation (Dx ²⁾ |
|----|----------------------|-------------------------------|--------------------------------|-------------------|----------------|--|
| 1 | AAS | 73 | 75 | 3 | 0.34 | 0.11 |
| 2 | ADS | 56 | 62 | 6 | 3.34 | 11.15 |
| 3 | AH | 40 | 41 | 1 | -1.66 | 2.75 |
| 4 | AYS | 60 | 61 | 1 | -1.66 | 2.75 |
| 5 | ASR | 66 | 64 | -2 | -4.66 | 21.71 |
| 6 | В | 40 | 41 | 1 | -1.66 | 2.75 |
| 7 | САН | 67 | 71 | 4 | 1.34 | 1.79 |
| 8 | DS | 63 | 65 | 2 | -0.66 | 0.43 |
| 9 | DP | 61 | 70 | 9 | 6.34 | 40.19 |
| 10 | DRF | 46 | 50 | 4 | 1.34 | 1.79 |
| 11 | FH | 68 | 66 | -2 | -4.66 | 21.71 |
| 12 | FS | 62 | 63 | 1 | -1.66 | 2.75 |
| 13 | GRS | 40 | 41 | 1 | -1,66 | 2.75 |
| 14 | IKH | 62 | 58 | -4 | -6.66 | 44.35 |
| 15 | JPS | 68 | 65 | -3 | -5.66 | 32.03 |
| 16 | KL | 63 | 66 | 3 | 0.34 | 0.11 |
| 17 | KAS | 72 | 75 | 3 | 0.34 | 0.11 |
| 18 | K | 63 | 65 | 2 | -0.66 | 0.43 |
| 19 | KH | 50 | 53 | 3 | 0.34 | 0.11 |
| 20 | KPS | 75 | 80 | 5 | 2.34 | 5.47 |
| 21 | MAR | 40 | 41 | 1 | -1.66 | 2.75 |
| 21 | MS | 69 | 64 | -5 | -7.66 | 58.67 |
| 23 | MI | 64 | 59 | -5 | -7.66 | 58.67 |
| 24 | MZS | 44 | 53 | 11 | 8.34 | 69.55 |
| 25 | NH | 52 | 55 | 3 | 0.34 | 0.11 |
| 26 | NN | 60 | 65 | 5 | 2.34 | 5.47 |
| 27 | P | 65 | 76 | 11 | 8.34 | 69.55 |
| 28 | R | 55 | 52 | -3 | -5.66 | 32.03 |
| 29 | SHS | 70 | 73 | -3 | -5.66 | 32.03 |
| 30 | SR | 69 | 72 | 3 | 0.34 | 0.11 |
| 31 | WS | 52 | 59 | 7 | 4.34 | 18.83 |
| 32 | WAIS | 56 | 62 | 6 | 3.34 | 11.15 |
| 33 | ZH | 42 | 48 | 6 | 3.34 | 11.15 |
| 34 | ZA | 40 | 43 | 3 | 0.34 | 0.11 |
| 35 | ZPH | 62 | 67 | 5 | 2.34 | 5.47 |
| 36 | ZS | 51 | 62 | 11 | 8.34 | 69.55 |
| | Total | 2086 | 2181 | 94 | | 635,15 |
| | Mean | 57.94 | 60.58 | | | |

APPENDIX D

The calculation of the t-test

$$Mx = \frac{\sum d}{Nx} = \frac{226}{36} = 6.27$$
$$My = \frac{\sum d}{Ny} = \frac{94}{36} = 2.61$$
$$dx^{2} = 737.94$$
$$dy^{2} = 635.15$$
$$Nx = 36$$
$$Ny = 36$$

$$t \ observed = \frac{Mx - My}{\sqrt{\left[\left[\frac{dx2 + dy2}{(Ny + Ny) - 2}\right]\left[\frac{1}{Nx} + \frac{1}{Ny}\right]\right]}}$$
$$t \ observed = \frac{6.27 - 2.61}{\sqrt{\left[\left[\frac{737.94 + 635.15}{(36 + 36) - 2}\right]\left[\frac{1}{36} + \frac{1}{36}\right]\right]}}$$
$$t \ observed = \frac{3.66}{\sqrt{\left[\left[\frac{1373.09}{70}\right]\left[\frac{2}{36}\right]\right]}}$$
$$t \ observed = \frac{3.66}{\sqrt{\left[\left[\frac{2746.18}{2520}\right]\right]}}$$
$$t \ observed = \frac{3.66}{\sqrt{\left[\left[\frac{10.81}{2520}\right]\right]}}$$
$$t \ observed = \frac{3.66}{\sqrt{\left[\left[1.08\right]\right]}}$$
$$t \ observed = \frac{3.66}{\sqrt{\left[\left[1.08\right]\right]}}$$

APPENDIX E

PERCENTAGE POINTS OF THE T DISTRIBUTION

| Tails 1 2 3 4 5 6 7 8 9 10 11 12 | 0.20 3.078 1.886 1.638 1.533 1.476 1.440 1.415 1.397 1.383 1.372 | 0.10 6.314 2.920 2.353 2.132 2.015 1.943 1.895 1.860 | 0.05 12.71 4.303 3.182 2.776 2.571 2.447 | 0.02 31.82 6.965 4.541 3.747 3.365 | 0.01 63.66 9.925 5.841 4.604 | 0.002 318.3 22.330 10.210 7.173 | 12.92 | + |
|--|---|--|---|--|---|---|--|--|
| 2 3 4 5 6 7 8 9 10 11 | 1.886 1.638 1.533 1.476 1.440 1.415 1.397 1.383 | 2.920 2.353 2.132 2.015 1.943 1.895 | 4.303 3.182 2.776 2.571 2.447 | 6.965 4.541 3.747 3.365 | 9.925 5.841 | 22.330 10.210 | 31.6 12.92 | I 2 |
| 3 4 5 6 7 8 9 10 11 | 1.638 1.533 1.476 1.440 1.415 1.397 1.383 | 2.353 2.132 2.015 1.943 1.895 | 3.182 2.776 2.571 2.447 | 4.541 3.747 3.365 | 5.841 | 10.210 | 12.92 | |
| 4 5 6 7 8 9 10 11 | 1.533 1.476 1.440 1.415 1.397 1.383 | 2.132 2.015 1.943 1.895 | 2.776 2.571 2.447 | 3.747 3.365 | | | | 1 |
| 5 6 7 8 9 10 11 | 1.476 1.440 1.415 1.397 1.383 | 2.015 1.943 1.895 | 2.571 2.447 | 3.365 | 4.604 | 7 172 | | |
| 6 7 8 9 10 11 | 1.440 1.415 1.397 1.383 | 1.943 1.895 | 2.447 | | | /.1/3 | 8.610 | 1 |
| 6 7 8 9 10 11 | 1.415 1.397 1.383 | 1.943 1.895 | 2.447 | | 4.032 | 5.893 | 6.869 | i i |
| 7 8 9 10 11 | 1.415 1.397 1.383 | 1.895 | | 3.143 | 3.707 | 5.208 | | |
| 8 9 10 11 | 1.397 1.383 | | 2.365 | 2.998 | 3.499 | 4.785 | 5.408 | |
| 9 10 11 | 1.383 | | 2.306 | 2.896 | 3.355 | 4.501 | | i i |
| 10 11 | | | 2.262 | 2.821 | 3.250 | 4.297 | | |
| 11 | | 1.812 | 2.202 | 2.764 | 3.169 | 4.144 | | , 1 |
| | 1.363 | 1.796 | 2.220 | 2.718 | 3.109 | | | • |
| 12 | | | | | | 4.025 | | • |
| 10 1 | 1.356 | 1.782 | 2.179 | 2.681 | 3.055 | 3.930 | 4.318 | |
| 13 | 1.350 | 1.771 | 2.160 | 2.650 | 3.012 | 3.852 | 4.221 | |
| 14 | 1.345 | | 2.145 | 2.624 | 2.977 | 3.787 | 4.140 | |
| 15 | 1.341 | | | 2.602 | 2.947 | 3.733 | 4.073 | |
| | | | | | | | | |
| | | | 2.110 | 2.567 | | | | 1 |
| 18 | 1.330 | 1.734 | 2.101 | 2.552 | 2.878 | 3.610 | 3.922 | 1 |
| 19 | 1.328 | 1.729 | 2.093 | 2.539 | 2.861 | 3.579 | 3.883 | 1 |
| 20 | 1.325 | 1.725 | 2.086 | 2.528 | 2.845 | 3.552 | 3.850 | 2 |
| 21 | 1.323 | 1.721 | 2.080 | 2.518 | 2.831 | 3.527 | 3.819 | 2 |
| 22 | 1.321 | 1.717 | 2.074 | 2.508 | 2.819 | 3.505 | 3.792 | 2 |
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| 40 I | 1.303 | 1.684 | 2.021 | | | | | |
| 42 | 1.302 | 1.682 | 2.018 | 2.418 | 2.698 | 3.296 | | |
| 44 | 1.301 | 1.680 | 2.015 | 2.414 | 2.692 | 3.286 | 3.526 | 4 |
| 46 | 1.300 | 1.679 | 2.013 | 2.410 | 2.687 | 3.277 | 3.515 | 4 |
| 48 | 1.299 | 1.677 | 2.011 | 2.407 | 2.682 | 3.269 | 3.505 | 4 |
| 50 j | 1.299 | 1.676 | 2.009 | 2.403 | 2.678 | 3.261 | | |
| 55 | 1.297 | 1.673 | 2.004 | 2.396 | 2.668 | | | |
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| 00 | 1.286 | 1.653 | 1.972 | 2.345 | 2.601 | 3.131 | 3.340 | 20 |
| Taile | 0 20 | 0 10 | 0 05 | 0 02 | 0 01 | 0 002 | 0 001 | |
| | | 0.05 | | | 0.001 | 0.002 | 0.0001 | |
| | 16 17 18 19 20 21 22 22 23 24 25 26 27 28 29 30 32 34 36 38 40 44 46 44 50 55 60 65 70 80 50 50 50 50 70 80 71 71 72 7 | 16 1.337 17 1.333 18 1.330 19 1.328 20 1.325 21 1.323 22 1.321 23 1.319 24 1.318 25 1.316 26 1.315 27 1.314 28 1.310 32 1.309 34 1.307 36 1.306 38 1.304 40 1.303 42 1.301 46 1.300 48 1.299 50 1.297 60 1.292 50 1.294 80 1.292 50 1.287 00 1.286 | 16 1.337 1.746 17 1.333 1.740 18 1.330 1.734 19 1.328 1.729 20 1.325 1.725 21 1.323 1.717 22 1.321 1.717 23 1.319 1.714 24 1.318 1.711 25 1.316 1.708 26 1.315 1.706 27 1.314 1.703 28 1.313 1.701 29 1.311 1.697 32 1.309 1.694 34 1.307 1.691 36 1.303 1.684 42 1.302 1.682 44 1.301 1.680 42 1.302 1.682 44 1.301 1.680 45 1.299 1.677 50 1.299 1.676 55 1.297 1.663 1.292 1.664 1.290 1.667 50 <t< td=""><td>16 1.337 1.746 2.120 17 1.333 1.740 2.110 18 1.330 1.734 2.101 19 1.328 1.729 2.093 20 1.325 1.725 2.086 21 1.323 1.712 2.080 22 1.321 1.717 2.074 23 1.319 1.714 2.069 24 1.318 1.711 2.064 25 1.316 1.708 2.060 26 1.315 1.706 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Tail Probabilities

This table was calculated by APL programs written by <u>William Knight</u>. The format of the table is adapted from a table constructed by Drake Bradley, Department of Psychology, Bates College, Lewiston-Ashburn, Maine, U.S.A. (source: <u>http://www.math.unb.ca/~knight/utility/t-table.htm</u>)