# University of Strathclyde <br> Department of Curricular Studies 

# The Pedagogy and Implementation of 

# Modern Languages in the Primary School: 

Pupil Attitudes and Teachers' Views

by<br>Daniel Tierney

Appendices

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## DT/VW

Date

The Headteacher
X Primary School

## Dear Headteacher

I was National Development Officer for MLPS from 1992 until 2001. As part of my remit, I was involved in visiting schools across Scotland. I conducted interviews with teachers, headteachers and observed classes. That information gathering was very important in informing the Scottish Executive Education Department of the situation in primary schools and I also reported to the Ministerial Action Group on Languages. You will be aware that Modern Languages are now an integral part of the curriculum.

I now feel that there is a need for more research into what is happening in the primary languages classroom. It would be helpful if we could establish what is happening in the primary language classroom, what the teachers think and what the attitudes of the pupils are towards what we are doing. I have, therefore, embarked on some personal research to look at the current situation.

I have sought the support of your local authority and would now seek your permission to carry out research in your school. I should like to conduct an interview with your P6 MLPS teacher(s). This would take approximately $45 / 60$ minutes. However, I would "repay" the teacher's time by taking the class myself for 45 minutes or so to conduct questionnaires with the pupils. I would also be delighted to do some 15 to 20 minutes of language teaching with the class if that were permissible, although that would not be part of my research.

It is important to stress that I am in no way assessing the teacher, the pupils or the school. Indeed, no pupil, school or local authority will be identified in the report of the research.

MLPS has reached a critical juncture and I feel it is important to get the views of the teachers on what they are doing and also to get some information from the pupils with regard to their language learning experience. I would not be asking the pupils to comment on the teacher or the school in any way but would want to assess their attitudes to language learning and that would be useful information for MLPS teachers. Although I am attempting to "repay" the teacher's time by taking the class, the teacher would of course be able to remain in the room if she/he wished to do so.

I shall phone you in approximately one week's time to discuss the research further and hope that you will be willing to take part in this important research towards the end of May or in June.

Yours sincerely


Dan Tierney
Reader
Department of Language Education

Name: $\qquad$
School: $\qquad$
Date of Interview:
Generalist/Specialist?
Class $\qquad$

## INTRODUCTION

Thank you very much for helping me with my research. There has been a lot written about MLPS and different "experts" take different views on how it should be tackled. There is clearly no one correct answer and what I am trying to do is to get the views of the practitioners, the primary teachers themselves and to see what the actual reality is. I want to find out how that reality compares with what it says in the documents, the various reports and guidelines that have been written about MLPS. So I am not looking for correct answers, but simply your views so that I can consider them and compare them with what's been written.
I have certain areas which I wish to focus on but before that are there any issues you would like to raise.

## 1. Aims of MLPS

1.1 I would first like to talk to you about the main aims of MLPS and what you see those as. As I said, the "experts" right across Europe take different views on this matter, so there's no one correct answer. We are no different in Scotland in that respect. I have here some cards which I'd like to show you with some of the aims that people identify for MLPS and to see how you feel about them.

## Show card 1.

Some people see it as developing the child's ability in French, to develop what's called the child's linguistic competence, i.e to stick with one language and work on that.
Show card 2 .
Others would argue that the child should have a taste of different languages. Do a little work in maybe 2 or 3 languages.
Show card 3.
A different viewpoint, and this is found in some parts of England for example, is that you develop the child's general awareness of language, not teaching them the language itself but using examples from different languages to show the child how language works, not one specific language but looking at languages in general.
Show card 4.
The fourth argument is that the most important thing no matter what you do, is to develop the confidence of the child, and to build up the child's feeling of security and confidence in attempting to speak a language.

## Show card 5

Others say that, Yes it is important to develop language ability whatever, but the main aim for primary languages is that the child should have a positive attitude to language learning, that the child should enjoy the experience and therefore would be willing to learn languages at a later stage.

Show card 6.
For others the language lesson is an opportunity to develop awareness of cultures, to make pupils aware of similarities and differences.

## Show card 7.

And another argument is that the language experience should be used to develop an awareness of European matters, to make the child aware of being, let's say, a citizen of Europe and gain an understanding of other European countries and cultures.

I'd like to know how you feel about those aims, or maybe you have a different aim entirely and that's possible. Can I ask you which of those you would consider to be your main aim. Where would you stand in this argument / debate. (Gently encourage the teacher to read the cards and record order of priority.)

## Card

1. Development of linguistic competence in French
2. Encountering languages
3. Development of general language awareness
4. Development of confidence
5. Development of a positive attitude to language learning

6. Development of cultural awareness
7. Development of European awareness
1.2 OK. You have decided that ' $x$ ' is your main aim. Could we maybe explore why you said that.
Show card 1.
Has that come about as a kind of national aim for us in Scotland? Has it come from the training programme for example?, or
Show card 2
Is that the advice from the Local Authority? (name the authority) or
Show card 3
Or maybe the school has reached that aim, that's a decision you've come to within the school which is perfectly acceptable obviously. Or
Show card 4
Is it perhaps your personal preference?
(Tick or record order of priority.)
8. That is the National aim/the aim of the Training Programme

9. That is the advice from the local authority

10. That is the school policy
11. That is my personal preference

## 2. Skills

2.1 I'd now like to spend some time getting your thoughts on the skills of the pupils.

## (Tick as appropriate.)

1. Would I be right in thinking that the pupils listen to the language?
2. Speak the language?
3. Do they read the language? Are they involved in reading,
 seeing the written word and actually reading it?
4. Do they write the language?

2.2 Just to help me understand what happens, can I ask you if that means you spend more time on listening than on writing, or you do more speaking than reading?
(Record order of priority .)
Listening
Speaking
Reading
Writing

2.3 So for you $\square$ is the most important. I'd really be interested to know your thinking on that one because again the so-called 'experts' have got different views on it. Why does this get your emphasis?
2.4 You'll know that the Minister set up this high-powered group, all the "highheidyins", on an Action Group for Languages and one of the things that their report recommended was that the pupils should spend 75 minutes per week on language learning. Can we talk about the amount of time devoted to MLPS in your classroom? Can we talk about what actually happens here in school ' $y$ '. Again there's no correct answer, and I'm not saying the Action Group recommendation is the correct one. I just want to find out what is actually happening in school. HMI aren't going to come in and say you're doing too little or too much as a result of my research. They'll never know!

Would you spend
(Tick as appropriate.)

1. less than 30 minutes on MLPS?
2. maybe a bit more, 30-45 minutes?
3. maybe $45-60$ minutes?
4. $60-75$ minutes?
5. $75-90$ minutes perhaps?
6. or, more than 90 minutes?
2.5 Thank you. OK they spend $\square$ minutes on MLPS in a week. Roughly how much of that time would be spent
7. listening, about half the time? ' $x$ ' minutes?
8. speaking?
9. what about reading?
10. how much time would they spend here in school ' $x$ ' doing writing?
(Record \% of time pupils spend on)

| Listening? | Minutes $=\square_{\%}$ |
| :--- | ---: |
| Speaking? | Minutes $=\square \%$ |
| Reading? |  |
| Writing? | Minutes $=\square_{\%}$ |
| Minutes $=\square \%$ |  |

3. Listening

Now can we talk a little bit about listening.
3.1 So your pupils are listening and you want to see if they understand. Do they show this by (Show cards)

Which of these is the one that you use most? You probably just do that anyway but can I ask you to think about it to try to help me work out which of those is the most common activity or common way of pupils showing understanding. Can you put these in an order?
(Record order of priority.)

## Card

1. maybe giving an answer in English?
2. or maybe responding in French?

3. or would you ask them to do actions, for example to show you,
 or to point, or to choose something or to make something or to run somewhere? To show understanding by a physical response?
4. or would you ask them to tick boxes?
5. or draw lines connecting language?

6. or maybe they write down answers in English?

7. or maybe ask them to write down something in French perhaps?
3.2 Now different people take different views about how much the child should be required to speak the modern language. Some teachers say that the child should not be required to say anything for a long period and should just hear the language and do things - should have what is called a silent period and should eventually speak whenever the child feels ready to do so. Another view is that you cannot allow that at this stage, and that you need to encourage the child to respond in French. Which of those views would you feel more close to?

- has the child a right to a silent period, not to have to speak?, or

- do we need to encourage the child to respond?
3.3 Great. Thanks. Maybe I could move on to the kind of listening activities that you do with them. I have more of these cards for you.
Which of these cards, these activities, are the main listening tasks for you?
(Record the order of priority.)
Card

1. Do they listen to instructions in class?

2. listen to Art \& Craft instructions?

3. what about listening to a cassette? Do they do this?

4. what about listening to stories?

5. listening to songs. Do you do much of that?

6. listening to instructions for physical education?

7. listening to play games?


### 3.4 Then move on to gently enquire as to why these activities are important to the teacher.

So ' x ' is an important activity for you. It's important that we understand why experienced teachers do different activities. Can you give me some insight into your thinking about these activities and why they are important to you?

Reasons for these activities

- Listening to class instructions?
- Listening to Art \& Craft instructions?
- Listening to a cassette?
- Listening to stories?
- Listening to songs?
- Listening to P.E. instructions?
- Listening to play games?

[^0]3.5 So listening is important to you / quite important / very important. One last question on that. Do you as an experienced teacher see it that way because (Show cards and record order of priority.)

Card

1. it's the skill pupils need most, that they are going to be listening $\square$ to language more than anything
2. or is it a way of developing their listening skills in general and $\square$ you're using the foreign language to do that?
3. or do they hear a good model for speaking and that's why it's important?
4. or maybe it builds up the pupil's confidence and that's why you do the listening you do
5. or it may be that they enjoy listening,
6. or maybe there is some other reason. I would be interested to $\square$ know your views.
7. Speaking

That was great for listening. Can we do something similar now for speaking?
4.1 First of all, let's consider the kind of speaking that they do and which you would do most often?
(Show cards and record the order of priority.)
Card

1. Do they respond to your questions in French?

2. What about speaking French with a neighbour, a partner?

3. Speaking French to play a game perhaps?

4. Speaking French, repeating in chorus after you?

5. What about repetition as an individual after you?


Do you do that?
6. And another kind of speaking would be singing songs.
 Do you do that?
4.2 Then move on to gently enquire as to why these activities are important to the teacher.

So ' $x$ ' is an important activity for you. It's important that we understand why experienced teachers do different activities. Can you give me some insight into your thinking about these activities and why they are important to you?
(Reasons for speaking activities.)

1. Respond to questions in French?
2. Speak French with a partner?
3. Speak French to play a game?
4. Repeat in chorus?
5. Repeat as an individual?
6. Sing songs?
(Repeat key reasons and say "I am writing down $x$ or $y$. " to ensure key reasons are noted.)

Can I just take a moment or so to ask about pronunciation, and if you develop the pronunciation of sounds with the pupils. I'm not saying you should or you should not. I'm just attempting to find out if it happens.
(If teacher says yes try to establish which sounds.)

- Develop pronunciation of particular sounds?

Which? $\qquad$
And what about when they make mistakes in pronunciation. I wonder if you correct them?

- would you do that always?

- frequently?

- sometimes?
- or never?


Again, just so that I understand your thinking, what are your views on correcting the pronunciation?
4.4 So speaking is important to you / quite important / very important. One last question on that. Do you as an experienced teacher see it that way because (Show cards and record order of priority.)

1. It's the skill pupils need most. They'll do more speaking more
 than anything. That's what's most important.
2. They are at a particularly good age for developing pronunciation and that's why you want them to do a lot of that.
3. They are willing to speak / have a go.

4. It develops their confidence.

5. They enjoy speaking.

Or maybe there's some other reason?

## 5. Reading

5.1 Earlier we were talking about how they showed understanding of listening and I'd be interested to know how they show understanding of reading. So, for example would they (Show cards and record order of priority.) Which way would you use most often?

Card

1. Do something physically - do an action?

2. Or would they tick boxes?
3. Or would they be involved in writing in English?

4. Or would they be writing in French to show understanding?

5.2 This is another area that people have different viewpoints on, so it's important that I get your views - the views of Scottish teachers who are doing the work in classrooms. I'd be interested to know the kind of reading that the pupils are actually doing. How much they're seeing the written word and your thinking behind that. As I've said before, there's no one answer on this matter. People are taking different views and that's why the research is important, and your contribution to that is so valuable. (Show them cards and record order of priority.) Which of these cards, these activities, are the main reading tasks for you?

Card

1. If you're doing flashcard work, for example would the pupils
 see the written word?
2. Do they ever read short text, for example songs, stories?
3. What about reading instructions to do something? To do an action or to make something?
4. Or maybe they read the written word when they're playing games for example Pelmanism with the text as well as picture cards? Do they do that?
5.3 What's your thinking for using these approaches, in showing them the written word for flashcards or getting them to read a short text or instruction, or seeing text in games? Can you help me to understand what's happening there?

## (Reasons for reading activities.)

- $\quad$ Show pupils the written word?
- Ask them to read short text?
- Ask them to read instructions?
- Ask them to read text in games?
5.4 We've learned so much from primary teachers in terms of development of language generally. I mean after all you develop the child's first language and I wonder if in foreign languages you make any definite connections between the written form and sound patterns. Would you do that for example?

5.5 If the teacher has answered yes to 5.4 try to establish which sound patterns are developed in that way.
Which sound patterns? (if applicable)
5.6 So you attach some importance to reading. Just like I did for listening and speaking it would be useful to get behind your thinking on that and make sure I understand what you, as an experienced teacher, are doing and why you're doing it. Is it because (Show cards and record order of priority.)


## Card

1. It is the skill they need most?
2. It develops reading skills generally?

3. It helps them to see the written word?
4. It helps to develop awareness of sound patterns?

5. They enjoy reading?

Or maybe there's some other reason?
6. Writing

This is maybe the most important part because again teachers and so-called "experts" are all taking different views about it.
6.1 It would be good to know the kind of writing that your pupils are doing. Do they (Show cards and record order of priority.) Which of these I wonder do they do most often?

Card

1. Write responses to questions in French?

2. Copy write e.g. vocabulary or sentences into jotters?

3. Write labels or captions?

4. Do some guided writing e.g. about self or family?

6.2 As before I'd like to get your thinking on the reasons behind these activities. Can you help me with that?
5. What about writing responses to questions in French? What's your thinking behind that?
6. Or copywriting?
$\qquad$
7. Writing labels or captions?

- 

4. Doing some guided writing?
6.3 Let me explore this issue of writing a little bit more with you, and ask you about the importance of writing as a skill just as I did with listening and writing and speaking. (Show cards and record the order of priority.)
5. Maybe you think it is the skill they need most. Would that be your view?
6. Or do you see it developing their writing skills in general terms?

7. Does it help them to consolidate the spoken form?

8. Do you see writing developing their awareness of sound patterns,
 making the link between the written form and the sound?
9. Or do you consider that they enjoy writing?

10. Or perhaps there's another reason?

## 7. Knowing about Language

Thank you very much. It's been very good to get your views and thoughts on these matters. Last section. No right or wrong answers. Just views. So you do not need to give me an answer you think I might be looking for.
7.1 Do you spend any time explaining the language to them? How it works? Grammar or other aspects?
Yes? Which would you do?
$\qquad$
$\qquad$
$\qquad$
7.2 What about them being able to know when to be polite, how to ask for help? Anything like that?
$\qquad$
$\qquad$
$\qquad$
7.3 What about making sentences longer? Using prepositions or adjectives, adverbs. What about anything in that area?
8. Finally, are there further observations you would like to make in your own words? Anything special I should know about regarding MLPS here in your classroom?
$\qquad$
$\qquad$

Thank you very much. As I said at the start your views will not be attributed to you by name. No teacher will be identified in the write up of this work.

## 8. Continuity into secondary

In a few months time they will be going to secondary. I would like to ask about continuity.
8.1 Please tell me about primary / secondary liaison in this cluster.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
8.2 Do you feel that secondary colleagues

> Are not interested in the MLPS programme?
$\square$

Are quite interested in the MLPS programme?
$\square$

Are very interested in the MLPS programme?
9. Finally, are there further observations you would like to make in your own words? Anything special I should know about regarding MLPS here in your classroom?

Thank you very much. As I said at the start your views will not be attributed to you by name. No teacher will be identified in the write up of this work.

## Pupil Questionnaire - Final Draft

Name: $\qquad$ School: $\qquad$ Class: $\qquad$ Boy/Girl

1. SPEAKING

|  | Do not like | Like a little | Quite like | Like a lot | Favourite |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Answering the teacher's questions |  |  |  |  |  |
| Speaking with a partner |  |  |  |  |  |
| Speaking when you play a game |  |  |  |  |  |
| Repeating as a whole class |  |  |  |  |  |
| Repeating something by yourself |  |  |  |  |  |
| Singing songs |  |  |  |  |  |

What you think about speaking:
2. LISTENING

|  | Do not like | Like a little | Quite like | Like a lot |
| :--- | :--- | :--- | :--- | :--- |
| Listening to <br> instructions |  |  |  |  |
| Listening to the <br> cassette |  |  |  |  |
| Listening to stories |  |  |  |  |
| Listening to songs |  |  |  |  |
| Listening to PE <br> instructions |  |  |  |  |
| Listening to play <br> games |  |  |  |  |


| Favourite |
| :---: |
|  |
|  |
|  |
|  |
|  |

What you think about listening:
3. READING

|  | Do not like | Like a little | Quite like | Like a lot |
| :--- | :--- | :--- | :--- | :--- |
| Reading words on <br> flashcards |  |  |  |  |
| Reading stories, <br> songs |  |  |  |  |
| Reading instructions |  |  |  |  |
| Reading word cards |  |  |  |  |

What you think about reading:
4. WRITING

|  | Do not like | Like a little | Quite like | Like a lot |
| :--- | :--- | :--- | :--- | :--- |
| Writing down <br> answers |  |  |  |  |
| Copying down <br> words |  |  |  |  |
| Writing labels or <br> captions |  |  |  |  |

What you think about writing:

## 5. LANGUAGES

|  | Do not like | Like a little | Quite like | Like a lot |
| :--- | :--- | :--- | :--- | :--- |
| French |  |  |  |  |

Favourite Subject

What you think about French:
5.2 How did you find learning French?

5.3 Which language you would like to learn: (Tick only ONE box)

| French |  |
| :--- | :--- |



| Italian |  |
| :--- | :--- |


| Spanish |  |
| :--- | :--- |

Another language? $\qquad$
Why you like/would like that language.

## Appendix 4 - Frequencies for ALL P6 schools - Speaking Activities

 Answering the teacher's questionStatistics
answer

| Boy | N | Valid <br> Missing | 259 |
| :--- | :--- | :--- | ---: |
|  |  |  | 0 |
|  | Mean | 2.42 |  |
|  | Median | 2.00 |  |
|  | Std. Deviation | .810 |  |
|  | Skewness | .060 |  |
|  | Std. Error of Skewness |  | .151 |
|  | Kurtosis | -.474 |  |
|  | Std. Error of Kurtosis |  | .302 |
| Girl | N | Valid | 209 |
|  | Mean | 0 |  |
|  | Median | 2.73 |  |
|  | Std. Deviation | 3.00 |  |
|  | Skewness | .812 |  |
|  | Std. Error of Skewness | -.126 |  |
|  | Kurtosis | .168 |  |
|  | Std. Error of Kurtosis | -.522 |  |
|  |  | .335 |  |

answer

| gender1 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Boy | Valid | 1 | 31 | 12.0 | 12.0 | 12.0 |
|  |  | 2 | 110 | 42.5 | 42.5 | 54.4 |
|  |  | 3 | 96 | 37.1 | 37.1 | 91.5 |
|  |  | 4 | 82 | 8.5 | 8.5 | 100.0 |
|  |  | Total | 259 | 100.0 | 100.0 |  |
| Girl | Valid | 1 | 12 | 5.7 | 5.7 | 5.7 |
|  |  | 2 | 68 | 32.5 | 32.5 | 38.3 |
|  |  | 3 | 93 | 44.5 | 44.5 | 82.8 |
|  |  | 4 | 17.2 | 17.2 | 100.0 |  |
|  |  | Total | 209 | 100.0 | 100.0 |  |

## T-Test

Group Statistics

|  | gender1 | N | Mean | Std. Deviation | Std. Error <br> Mean |
| :--- | :--- | ---: | ---: | ---: | ---: |
| answer | Boy | 259 | 2.42 | .810 | .050 |
|  | Girl | 209 | 2.73 | .812 | .056 |

Independent Samples Test

|  |  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| answer | Equal variances assumed |  | . 317 | $\cdot .573$ | -4.129 | 466 | . 000 | -. 311 | . 075 | -. 459 | -. 163 |
|  | Equal variances not assumed |  |  | -4.128 | 444.910 | . 000 | -. 311 | . 075 | -. 459 | -. 163 |

## Speaking with a partner

Statistics

| - | N | Valid Missing | 0 53 |
| :---: | :---: | :---: | :---: |
| Boy | N | Valid Missing | 229 0 |
|  | Mean |  | 2.94 |
|  | Median |  | 3.00 |
|  | Std. Deviation |  | . 960 |
|  | Skewness |  | -. 515 |
|  | Std. Error of Skewness |  | . 161 |
|  | Kurtosis |  | -. 734 |
|  | Std. Error of Kurtosis |  | . 320 |
| Girl | N | Valid | 186 |
|  |  | Missing | 0 |
|  | Mean |  | 3.22 |
|  | Median |  | 3.00 |
|  | Std. Deviation |  | . 887 |
|  | Skewness |  | -. 813 |
|  | Std. Error of Skewness |  | . 178 |
|  | Kurtosis |  | -. 352 |
|  | Std. Error of Kurtosis |  | . 355 |


| g2 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Missing | System | 53 | 100.0 |  |
| Boy | Valid | 1 | 21 | 9.2 | 9.2 | 9.2 |
|  |  | 2 | 49 | 21.4 | 21.4 | 30.6 |
|  |  | 3 | 81 | 35.4 | 35.4 | 65.9 |
|  |  | 48 | 34.1 | 34.1 | 100.0 |  |
|  |  | Total | 229 | 100.0 | 100.0 |  |
| Girl | Valid | 1 | 8 | 4.3 | 4.3 | 4.3 |
|  |  | 2 | 33 | 17.7 | 17.7 | 22.0 |
|  |  | 3 | 56 | 30.1 | 30.1 | 52.2 |
|  |  | 4 | 89 | 47.8 | 47.8 | 100.0 |
|  |  | Total | 186 | 100.0 | 100.0 |  |

## Mann-Whitney Test

## Ranks

|  | g 2 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| partner | Boy | 229 | 193.21 | 44245.50 |
|  | Girl | 186 | 226.21 | 42074.50 |
|  | Total | 415 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | partner |
| :--- | ---: |
| Mann-Whitney U | 17910.500 |
| Wilcoxon W | 44245.500 |
| Z | -2.953 |
| Asymp. Sig. (2-tailed) | .003 |

a. Grouping Variable: g2

## Speaking when you play a game

Statistics
Games

| . | N | Valid <br> Missing | 0 |
| :--- | :--- | :--- | ---: |
| Boy | N | Valid | 14 |
|  |  | Missing | 249 |
|  | Mean | 0 |  |
|  | Median | 3.24 |  |
|  | Std. Deviation |  | 4.00 |
|  | Skewness | .937 |  |
|  | Std. Error of Skewness |  | -1.003 |
|  | Kurtosis | .154 |  |
|  | Std. Error of Kurtosis |  | -.058 |
| Girl | N | Valid | .307 |
|  |  | Missing | 205 |
|  | Mean | 0 |  |
|  | Median | 3.24 |  |
|  | Std. Deviation | 3.00 |  |
|  | Skewness | .884 |  |
|  | Std. Error of Skewness |  | -.875 |
|  | Kurtosis | .170 |  |
|  | Std. Error of Kurtosis |  | -.226 |
|  |  | .338 |  |

Games

| g3 |  |  |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Frequency | Percent | Valid Percent | Cumulative <br> Percent |  |  |  |
| Boy | Missing | System | 14 | 100.0 |  |  |
|  |  | Valid | 1 | 17 | 6.8 | 6.8 |
|  |  | 2 | 35 | 14.1 | 14.1 | 6.8 |
|  |  | 3 | 68 | 27.3 | 27.3 | 48.9 |
|  |  | 4 | 129 | 51.8 | 51.8 | 100.0 |
|  |  | Total | 249 | 100.0 | 100.0 |  |
| Girl | Valid | 1 | 9 | 4.4 | 4.4 | 4.4 |
|  |  | 2 | 34 | 16.6 | 16.6 | 21.0 |
|  |  | 3 | 61 | 29.8 | 29.8 | 50.7 |
|  |  | 4 | 101 | 49.3 | 49.3 | 100.0 |
|  |  | Total | 205 | 100.0 | 100.0 |  |

## Mann-Whitney Test

Ranks

|  | g3 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Games | Boy | 249 | 229.08 | 57040.00 |
|  | Girl | 205 | 225.59 | 46245.00 |
|  | Total | 454 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Games |
| :--- | ---: |
| Mann-Whitney U | 25130.000 |
| Wilcoxon W | 46245.000 |
| Z | -.307 |
| Asymp. Sig. (2-tailed) | .759 |

a. Grouping Variable: g3

## Repeating as a whole class

Statistics
class

| . | N | Valid <br> Missing | 0 |
| :--- | :--- | :--- | ---: |
| boy | N | Valid | 3 |
|  | Missing | 254 |  |
|  | Mean | 0 |  |
|  | Median | 2.57 |  |
|  | Std. Deviation | 3.00 |  |
|  | Skewness | 1.056 |  |
|  | Std. Error of Skewness |  | -.087 |
|  | Kurtosis | .153 |  |
|  | Std. Error of Kurtosis |  | -1.199 |
| girl | N | Valid | .304 |
|  |  | Missing | 211 |
|  | Mean | 0 |  |
|  | Median | 2.91 |  |
|  | Std. Deviation | 3.00 |  |
|  | Skewness | .946 |  |
|  | Std. Error of Skewness |  | -.456 |
|  | Kurtosis | .167 |  |
|  | Std. Error of Kurtosis |  | -.739 |
|  |  | .333 |  |

class

| g4 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| . | Missing | System | 3 | 100.0 |  |  |
| boy | Valid | 1 | 50 | 19.7 | 19.7 | 19.7 |
|  |  | 2 | 69 | 27.2 | 27.2 | 46.9 |
|  |  | 3 | 75 | 29.5 | 29.5 | 76.4 |
|  | 4 | 60 | 23.6 | 23.6 | 100.0 |  |
|  |  | Total | 254 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 19 | 9.0 | 9.0 | 9.0 |
|  |  | 2 | 48 | 22.7 | 22.7 | 31.8 |
|  |  | 3 | 78 | 37.0 | 37.0 | 68.7 |
|  |  | 4 | 66 | 31.3 | 31.3 | 100.0 |
|  |  | Total | 211 | 100.0 | 100.0 |  |

## Mann-Whitney Test

## Ranks

|  | g4 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| class | boy | 254 | 214.40 | 54457.00 |
|  | girl | 211 | 255.39 | 53888.00 |
|  | Total | 465 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | class |
| :--- | ---: |
| Mann-Whitney U | 22072.000 |
| Wilcoxon W | 54457.000 |
| Z | -3.405 |
| Asymp. Sig. (2-tailed) | .001 |

a. Grouping Variable: g4

## Repeating something by yourself

| Statistics |  |  |  |
| :---: | :---: | :---: | :---: |
| . | N | Valid | 0 |
|  |  | Missing | 6 |
| boy | N | Valid | 253 |
|  |  | Missing | 0 |
|  | Mean |  | 2.12 |
|  | Median |  | 2.00 |
|  | Std. Deviation |  | 1.056 |
|  | Skewness |  | . 404 |
|  | Std. Error of Skewness |  | . 153 |
|  | Kurtosis |  | -1.126 |
|  | Std. Error of Kurtosis |  | . 305 |
| girl | N | Valid | 209 |
|  |  | Missing | 0 |
|  | Mean |  | 2.27 |
|  | Median |  | 2.00 |
|  | Std. Deviation |  | 1.027 |
|  | Skewness |  | . 319 |
|  | Std. Error of Skewness |  | . 168 |
|  | Kurtosis |  | -1.025 |
|  | Std. Error of Kurtosis |  | . 335 |

self

| g5 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| boy | Missing | System | 6 | 100.0 |  |  |
|  | Valid | 1 | 95 | 37.5 | 37.5 | 37.5 |
|  |  | 2 | 64 | 25.3 | 25.3 | 62.8 |
|  |  | 3 | 62 | 24.5 | 24.5 | 87.4 |
|  |  | 4 | 32 | 12.6 | 12.6 | 100.0 |
| girl | Valid | Total | 253 | 100.0 | 100.0 |  |
|  |  | 2 | 56 | 26.8 | 26.8 | 26.8 |
|  |  | 3 | 73 | 34.9 | 34.9 | 61.7 |
|  |  | 4 | 47 | 22.5 | 22.5 | 84.2 |
|  |  | Total | 33 | 15.8 | 15.8 | 100.0 |
|  |  | 209 | 100.0 | 100.0 |  |  |

## Mann-Whitney Test

Ranks

|  | g5 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| self | boy | 253 | 222.63 | 56326.00 |
|  | girl | 209 | 242.23 | 50627.00 |
|  | Total | 462 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | self |
| :--- | ---: |
| Mann-Whitney U | 24195.000 |
| Wilcoxon W | 56326.000 |
| Z | -1.635 |
| Asymp. Sig. (2-tailed) | .102 |

a. Grouping Variable: g5

## Singing songs

## Statistics

singing

| . | N | Valid <br> Missing | 0 |
| :--- | :--- | :--- | ---: |
| boy | N | Valid | 5 |
|  | Missing | 255 |  |
|  | Mean | 0 |  |
|  | Median | 2.80 |  |
|  | Std. Deviation | 3.00 |  |
|  | Skewness | 1.119 |  |
|  | Std. Error of Skewness |  | -.353 |
|  | Kurtosis | .153 |  |
|  | Std. Error of Kurtosis |  | -1.278 |
|  | girl | Valid | .304 |
|  | N | Missing | 208 |
|  |  | 0 |  |
|  | Mean | 3.32 |  |
|  | Median | 4.00 |  |
|  |  | .894 |  |
|  | Std. Deviation | -1.132 |  |
|  | Skewness | .169 |  |
|  | Std. Error of Skewness |  | .284 |
|  | Kurtosis | .336 |  |
|  |  |  |  |

singing

| g6 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| . | Missing | System | 5 | 100.0 |  |  |
| boy | Valid | 1 | 44 | 17.3 | 17.3 | 17.3 |
|  |  | 2 | 57 | 22.4 | 22.4 | 39.6 |
|  |  | 3 | 59 | 23.1 | 23.1 | 62.7 |
|  |  | 4 | 95 | 37.3 | 37.3 | 100.0 |
|  |  | Total | 255 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 11 | 5.3 | 5.3 | 5.3 |
|  |  | 2 | 27 | 13.0 | 13.0 | 18.3 |
|  |  | 3 | 54 | 26.0 | 26.0 | 44.2 |
|  |  | 4 | 116 | 55.8 | 55.8 | 100.0 |
|  |  | Total | 208 | 100.0 | 100.0 |  |

## Mann-Whitney Test

## Ranks

|  | g6 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| singing | boy | 255 | 205.35 | 52363.50 |
|  | girl | 208 | 264.68 | 55052.50 |
|  | Total | 463 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | singing |
| :--- | ---: |
| Mann-Whitney U | 19723.500 |
| Wilcoxon W | 52363.500 |
| Z | -5.050 |
| Asymp. Sig. (2-tailed) | .000 |

a. Grouping Variable: g6

## Appendix 5 - Frequencies for ALL P6 schools - Listening activities

## Listening to instructions

| Statistics |  |  |  |
| :---: | :---: | :---: | :---: |
| instruct |  |  |  |
| . | N | Valid <br> Missing | 0 6 |
| boy | N | Valid Missing | 257 |
|  | Mean |  | 2.20 |
|  | Median |  | 2.00 |
|  | Std. Deviation |  | . 900 |
|  | Skewness |  | . 237 |
|  | Std. Error of Skewness |  | . 152 |
|  | Kurtosis |  | -. 777 |
|  | Std. Error of Kurtosis |  | . 303 |
| girl | N | Valid | 205 |
|  |  | Missing | 0 |
|  | Mean |  | 2.51 |
|  | Median |  | 2.00 |
|  | Std. Deviation |  | . 808 |
|  | Skewness |  | . 173 |
|  | Std. Error of Skewness |  | . 170 |
|  | Kurtosis |  | -. 474 |
|  | Std. Error of Kurtosis |  | . 338 |

## instruct

| g7 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| . | Missing | System | 6 | 100.0 |  |  |
| boy | Valid | 1 | 63 | 24.5 | 24.5 | 24.5 |
|  |  | 2 | 99 | 38.5 | 38.5 | 63.0 |
|  |  | 3 | 75 | 29.2 | 29.2 | 92.2 |
|  |  | 4 | 20 | 7.8 | 7.8 | 100.0 |
|  |  | Total | 257 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 17 | 8.3 | 8.3 | 8.3 |
|  |  | 2 | 91 | 44.4 | 44.4 | 52.7 |
|  |  | 3 | 73 | 35.6 | 35.6 | 88.3 |
|  |  | 4 | 24 | 11.7 | 11.7 | 100.0 |
|  |  | Total | 205 | 100.0 | 100.0 |  |

## Mann-Whitney Test

## Ranks

|  | g7 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| instruct | boy | 257 | 212.35 | 54573.50 |
|  | girl | 205 | 255.51 | 52379.50 |
|  | Total | 462 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | instruct |
| :--- | ---: |
| Mann-Whitney U | 21420.500 |
| Wilcoxon W | 54573.500 |
| Z | -3.656 |
| Asymp. Sig. (2-tailed) | .000 |

a. Grouping Variable: g7

## Listening to the cassette

Statistics
cassette

| . | N | Valid <br> Missing | 0 <br> boy |
| :--- | :--- | :--- | ---: |
|  | N | Valid |  |
|  | Missing | 225 |  |
|  | Mean | 0 |  |
|  | Median | 2.74 |  |
|  | Std. Deviation | 3.00 |  |
|  | Skewness | 1.029 |  |
|  | Std. Error of Skewness |  | -.384 |
|  | Kurtosis | .162 |  |
|  | Std. Error of Kurtosis |  | -.974 |
| girl | N | Valid | .323 |
|  |  | Missing | 180 |
|  | Mean | 0 |  |
|  | Median | 2.78 |  |
|  | Std. Deviation | 3.00 |  |
|  | Skewness | 1.011 |  |
|  | Std. Error of Skewness |  | -.295 |
|  | Kurtosis | .181 |  |
|  | Std. Error of Kurtosis |  | -1.034 |
|  |  | .360 |  |


| g8 |  |  |  |  |  | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Missing | System | 63 | 100.0 |  |
| boy | Valid | 1 | 37 | 16.4 | 16.4 | 16.4 |
|  |  | 2 | 44 | 19.6 | 19.6 | 36.0 |
|  |  | 3 | 84 | 37.3 | 37.3 | 73.3 |
|  |  | 4 | 60 | 26.7 | 26.7 | 100.0 |
|  |  | Total | 225 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 23 | 12.8 | 12.8 | 12.8 |
|  |  | 2 | 47 | 26.1 | 26.1 | 38.9 |
|  |  | 3 | 57 | 31.7 | 31.7 | 70.6 |
|  |  | 4 | 53 | 29.4 | 29.4 | 100.0 |
|  |  | Total | 180 | 100.0 | 100.0 |  |

## Mann-Whitney Test

Ranks

|  | g8 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| cassette | boy | 225 | 201.69 | 45380.50 |
|  | girl | 180 | 204.64 | 36834.50 |
|  | Total | 405 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | cassette |
| :--- | ---: |
| Mann-Whitney U | 19955.500 |
| Wilcoxon W | 45380.500 |
| Z | -.262 |
| Asymp. Sig. (2-tailed) | .793 |

a. Grouping Variable: g8

## Listening to stories

Statistics
stories

| . | N | Valid Missing | 0 256 |
| :---: | :---: | :---: | :---: |
| boy | N | Valid | 124 |
|  |  | Missing | 0 |
|  | Mean |  | 2.84 |
|  | Median |  | 3.00 |
|  | Std. Deviation |  | 1.136 |
|  | Skewness |  | -. 454 |
|  | Std. Error of Skewness |  | . 217 |
|  | Kurtosis |  | -1.225 |
|  | Std. Error of Kurtosis |  | . 431 |
| girl | N | Valid | 88 |
|  |  | Missing | 0 |
|  | Mean |  | 3.06 |
|  | Median |  | 3.00 |
|  | Std. Deviation |  | 1.021 |
|  | Skewness |  | -. 779 |
|  | Std. Error of Skewness |  | . 257 |
|  | Kurtosis |  | -. 555 |
|  | Std. Error of Kurtosis |  | . 508 |

stories

| g9 |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| . | Missing | System | 256 | 100.0 |  |  |
| boy | Valid | 1 | 23 | 18.5 | 18.5 | 18.5 |
|  |  | 2 | 22 | 17.7 | 17.7 | 36.3 |
|  |  | 3 | 31 | 25.0 | 25.0 | 61.3 |
|  |  | 4 | 48 | 38.7 | 38.7 | 100.0 |
|  |  | Total | 124 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 10 | 11.4 | 11.4 | 11.4 |
|  |  | 2 | 13 | 14.8 | 14.8 | 26.1 |
|  |  | 3 | 27 | 30.7 | 30.7 | 56.8 |
|  |  | 4 | 38 | 43.2 | 43.2 | 100.0 |
|  |  | Total | 88 | 100.0 | 100.0 |  |

## Mann-Whitney Test

Ranks

|  | g9 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| stories | boy | 124 | 102.19 | 12671.50 |
|  | girl | 88 | 112.57 | 9906.50 |
|  | Total | 212 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | stories |
| :--- | ---: |
| Mann-Whitney U | 4921.500 |
| Wilcoxon W | 12671.500 |
| Z | -1.277 |
| Asymp. Sig. (2-tailed) | .202 |

a. Grouping Variable: g9

## Listening to songs

Statistics
songs

| . | N | Valid <br> Missing | 0 |
| :--- | :--- | :--- | ---: |
| boy | N | Valid | 35 |
|  | Missing | 248 |  |
|  | Mean | 0 |  |
|  | Median | 2.87 |  |
|  | Std. Deviation | 3.00 |  |
|  | Skewness | 1.087 |  |
|  | Std. Error of Skewness |  | -.465 |
|  | Kurtosis | .155 |  |
|  | Std. Error of Kurtosis |  | -1.114 |
| girl | N | Valid | .308 |
|  | Mean | 185 |  |
|  | Median | 0 |  |
|  |  | 3.20 |  |
|  | Std. Deviation | 4.00 |  |
|  | Skewness | .960 |  |
|  |  | -.896 |  |
|  | Std. Error of Skewness |  | .179 |
|  |  | -.357 |  |
|  | Surtosis | .355 |  |

songs

| g10 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Missing | System | 35 | 100.0 |  |
|  |  |  |  |  |  |  |
| boy | Valid | 1 | 38 | 15.3 | 15.3 | 15.3 |
|  |  | 2 | 50 | 20.2 | 20.2 | 35.5 |
|  |  | 3 | 66 | 26.6 | 26.6 | 62.1 |
|  |  | 4 | 34 | 37.9 | 37.9 | 100.0 |
|  |  | Total | 248 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 13 | 7.0 | 7.0 | 7.0 |
|  |  | 2 | 31 | 16.8 | 16.8 | 23.8 |
|  |  | 3 | 47 | 25.4 | 25.4 | 49.2 |
|  |  | 4 | 94 | 50.8 | 50.8 | 100.0 |
|  |  | Total | 185 | 100.0 | 100.0 |  |

## Mann-Whitney Test

## Ranks

|  | g10 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| songs | boy | 248 | 201.51 | 49975.00 |
|  | girl | 185 | 237.76 | 43986.00 |
|  | Total | 433 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | songs |
| :--- | ---: |
| Mann-Whitney U | 19099.000 |
| Wilcoxon W | 49975.000 |
| Z | -3.157 |
| Asymp. Sig. (2-tailed) | .002 |
| a Grouping Variable. |  |

a. Grouping Variable: g10

## Listening to PE instructions

Statistics
physed

| . | N | Valid <br> Missing | 0 367 |
| :---: | :---: | :---: | :---: |
| boy | N | Valid Missing | 61 0 |
|  | Mean |  | 2.64 |
|  | Median |  | 3.00 |
|  | Std. Deviation |  | 1.184 |
|  | Skewness |  | -. 189 |
|  | Std. Error of Skewness |  | . 306 |
|  | Kurtosis |  | -1.475 |
|  | Std. Error of Kurtosis |  | . 604 |
| girl | N | Valid | 40 |
|  |  | Missing | 0 |
|  | Mean |  | 3.05 |
|  | Median |  | 3.00 |
|  | Std. Deviation |  | . 876 |
|  | Skewness |  | -. 583 |
|  | Std. Error of Skewness |  | . 374 |
|  | Kurtosis |  | -. 373 |
|  | Std. Error of Kurtosis |  | . 733 |

physed

| g11 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Missing | System | 367 | 100.0 |  |
| boy | Valid | 1 | 15 | 24.6 | 24.6 | 24.6 |
|  |  | 2 | 12 | 19.7 | 19.7 | 44.3 |
|  |  | 3 | 14 | 23.0 | 23.0 | 67.2 |
|  |  | 4 | 32 | 32.8 | 100.0 |  |
|  |  | Total | 61 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 2 | 5.0 | 5.0 | 5.0 |
|  |  | 2 | 8 | 20.0 | 20.0 | 25.0 |
|  |  | 3 | 16 | 40.0 | 40.0 | 65.0 |
|  |  | 4 | 14 | 35.0 | 35.0 | 100.0 |
|  |  | Total | 40 | 100.0 | 100.0 |  |

## Mann-Whitney Test

Ranks

|  | g11 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| physed | boy | 61 | 47.38 | 2890.00 |
|  | girl | 40 | 56.53 | 2261.00 |
|  | Total | 101 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | physed |
| :--- | ---: |
| Mann-Whitney U | 999.000 |
| Wilcoxon W | 2890.000 |
| Z | -1.597 |
| Asymp. Sig. (2-tailed) | .110 |

a. Grouping Variable: g11

## Listening to play games

Statistics
games2

| . | N | Valid <br> Missing | 0 |
| :--- | :--- | :--- | ---: |
| boy | N | Valid | 3 |
|  | Missing | 265 |  |
|  | Mean | 0 |  |
|  | Median | 3.26 |  |
|  | Std. Deviation | 4.00 |  |
|  | Skewness | .919 |  |
|  | Std. Error of Skewness |  | -.924 |
|  | Kurtosis | .150 |  |
|  | Std. Error of Kurtosis |  | -.316 |
| girl | N | .298 |  |
|  |  | Valid | 200 |
|  | Mean | 0 |  |
|  |  | 3.33 |  |
|  | Median | 4.00 |  |
|  | Std. Deviation | .856 |  |
|  | Skewness | -1.165 |  |
|  | Std. Error of Skewness | .172 |  |
|  | Kurtosis | .613 |  |
|  |  | .342 |  |

games2

| g12 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  | Missing | System | 3 | 100.0 |  |  |
| boy | Valid | 1 | 13 | 4.9 | 4.9 | 4.9 |
|  |  | 2 | 47 | 17.7 | 17.7 | 22.6 |
|  |  | 3 | 63 | 23.8 | 23.8 | 46.4 |
|  |  | 4 | 53.6 | 53.6 | 100.0 |  |
|  |  | Total | 265 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 10 | 5.0 | 5.0 | 5.0 |
|  |  | 2 | 21 | 10.5 | 10.5 | 15.5 |
|  |  | 3 | 63 | 31.5 | 31.5 | 47.0 |
|  |  | 106 | 53.0 | 53.0 | 100.0 |  |
|  |  | Total | 200 | 100.0 | 100.0 |  |

## Mann-Whitney Test

Ranks

|  | g12 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| games2 | boy | 265 | 230.51 | 61085.00 |
|  | girl | 200 | 236.30 | 47260.00 |
|  | Total | 465 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | games2 |
| :--- | ---: |
| Mann-Whitney U | 25840.000 |
| Wilcoxon W | 61085.000 |
| Z | -.506 |
| Asymp. Sig. (2-tailed) | .613 |

a. Grouping Variable: g12

## Appendix 6 - Frequencies for ALL P6-Reading Activities

 Reading words on flashcardsStatistics
flcards

| . | N | Valid Missing | 0 3 |
| :---: | :---: | :---: | :---: |
| boy | N | Valid Missing | 251 |
|  | Mean |  | 2.55 |
|  | Median |  | 3.00 |
|  | Std. Deviation |  | 1.012 |
|  | Skewness |  | -. 091 |
|  | Std. Error of Skewness |  | . 154 |
|  | Kurtosis |  | -1.079 |
|  | Std. Error of Kurtosis |  | . 306 |
| girl | N | Valid | 214 |
|  |  | Missing | 0 |
|  | Mean |  | 2.74 |
|  | Median |  | 3.00 |
|  | Std. Deviation |  | . 859 |
|  | Skewness |  | -. 229 |
|  | Std. Error of Skewness |  | . 166 |
|  | Kurtosis |  | -. 580 |
|  | Std. Error of Kurtosis |  | . 331 |

flcards

| g13 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Missing | System | 3 | 100.0 |  |
| boy | Valid | 1 | 47 | 18.7 | 18.7 | 18.7 |
|  |  | 2 | 70 | 27.9 | 27.9 | 46.6 |
|  |  | 3 | 84 | 33.5 | 33.5 | 80.1 |
|  |  | 4 | 19 | 19.9 | 10.9 | 100.0 |
|  |  | Total | 251 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 17 | 7.9 | 7.9 | 7.9 |
|  |  | 2 | 63 | 29.4 | 29.4 | 37.4 |
|  |  | 3 | 93 | 43.5 | 43.5 | 80.8 |
|  |  | 4 | 19.2 | 19.2 | 100.0 |  |
|  |  | Total | 214 | 100.0 | 100.0 |  |

## Mann-Whitney Test

## Ranks

|  | g13 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| flcards | boy | 251 | 222.00 | 55721.50 |
|  | girl | 214 | 245.90 | 52623.50 |
|  | Total | 465 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | flcards |
| :--- | ---: |
| Mann-Whitney U | 24095.500 |
| Wilcoxon W | 55721.500 |
| Z | -2.003 |
| Asymp. Sig. (2-tailed) | .045 |

a. Grouping Variable: g13

## Reading stories, songs

Statistics
stories2

| . | N | Valid Missing | 0 239 |
| :---: | :---: | :---: | :---: |
| boy | N | Valid <br> Missing | 128 0 |
|  | Mean |  | 2.41 |
|  | Median |  | 2.00 |
|  | Std. Deviation |  | 1.068 |
|  | Skewness |  | . 071 |
|  | Std. Error of Skewness |  | . 214 |
|  | Kurtosis |  | -1.236 |
|  | Std. Error of Kurtosis |  | . 425 |
| girl | N | Valid | 101 |
|  |  | Missing | 0 |
|  | Mean |  | 2.76 |
|  | Median |  | 3.00 |
|  | Std. Deviation |  | 1.011 |
|  | Skewness |  | -. 273 |
|  | Std. Error of Skewness |  | . 240 |
|  | Kurtosis |  | -1.036 |
|  | Std. Error of Kurtosis |  | . 476 |

stories2

| g14 |  |  |  |  | Cumulative <br> Percent |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| . | Missing | System | 239 | 100.0 |  |  |
| boy | Valid | 1 | 33 | 25.8 | 25.8 | 25.8 |
|  |  | 2 | 34 | 26.6 | 26.6 | 52.3 |
|  |  | 3 | 37 | 28.9 | 28.9 | 81.3 |
|  |  | 4 | 24 | 18.8 | 18.8 | 100.0 |
|  |  | Total | 128 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 13 | 12.9 | 12.9 | 12.9 |
|  |  | 2 | 27 | 26.7 | 26.7 | 39.6 |
|  |  | 3 | 32 | 31.7 | 31.7 | 71.3 |
|  |  | 4 | 29 | 28.7 | 28.7 | 100.0 |
|  |  | Total | 101 | 100.0 | 100.0 |  |

## Mann-Whitney Test

## Ranks

|  | g14 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| stories2 | boy | 128 | 105.62 | 13519.50 |
|  | girl | 101 | 126.89 | 12815.50 |
|  | Total | 229 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | stories2 |
| :--- | ---: |
| Mann-Whitney U | 5263.500 |
| Wilcoxon W | 13519.500 |
| Z | -2.496 |
| Asymp. Sig. (2-tailed) | .013 |

a. Grouping Variable: g14

## Reading instructions

Statistics
instru2

| . | N | Valid <br> Missing | 0 <br> boy |
| :--- | :--- | :--- | ---: |
|  | N | Valid |  |
|  | Missing | 206 |  |
|  | Mean | 0 |  |
|  | Median | 2.14 |  |
|  | Std. Deviation | 2.00 |  |
|  | Skewness | .988 |  |
|  | Std. Error of Skewness |  | .428 |
|  | Kurtosis | .169 |  |
|  | Std. Error of Kurtosis |  | -.874 |
| girl | N | Valid | .337 |
|  | Missing | 166 |  |
|  |  | 0 |  |
|  | Mean | 2.30 |  |
|  | Median | 2.00 |  |
|  | Std. Deviation | 1.006 |  |
|  | Skewness | .269 |  |
|  | Std. Error of Skewness |  | .188 |
|  | Kurtosis | -.992 |  |
|  | Std. Error of Kurtosis |  | .375 |

instru2

| g15 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Missing | System | 96 | 100.0 |  |
|  |  |  |  |  |  |  |
| boy | Valid | 1 | 65 | 31.6 | 31.6 | 31.6 |
|  |  | 2 | 71 | 34.5 | 34.5 | 66.0 |
|  |  | 3 | 47 | 22.8 | 22.8 | 88.8 |
|  |  | 4 | 23 | 11.2 | 11.2 | 100.0 |
|  |  | Total | 206 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 41 | 24.7 | 24.7 | 24.7 |
|  |  | 2 | 59 | 35.5 | 35.5 | 60.2 |
|  |  | 3 | 41 | 24.7 | 24.7 | 84.9 |
|  |  | 4 | 25 | 15.1 | 15.1 | 100.0 |
|  |  | Total | 166 | 100.0 | 100.0 |  |

## Mann-Whitney Test

## Ranks

|  | g15 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| instru2 | boy | 206 | 178.90 | 36853.00 |
|  | girl | 166 | 195.93 | 32525.00 |
|  | Total | 372 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | instru2 |
| :--- | ---: |
| Mann-Whitney U | 15532.000 |
| Wilcoxon W | 36853.000 |
| Z | -1.585 |
| Asymp. Sig. (2-tailed) | .113 |

a. Grouping Variable: g15

## Reading word cards

Statistics
wordcards

| . | N | Valid <br> Missing | 0 |
| :--- | :--- | :--- | ---: |
| boy | N | Valid |  |
|  | Missing | 27 |  |
|  | Mean | 240 |  |
|  | Median | 0 |  |
|  | Std. Deviation | 2.50 |  |
|  | Skewness | 3.00 |  |
|  | Std. Error of Skewness |  | 1.047 |
|  | Kurtosis | .066 |  |
|  | Std. Error of Kurtosis |  | .157 |
| girl | N | Valid | -1.183 |
|  |  | Missing | .313 |
|  |  | 201 |  |
|  | Mean | 0 |  |
|  | Median | 2.85 |  |
|  | Std. Deviation | 3.00 |  |
|  | Skewness | .939 |  |
|  | Std. Error of Skewness |  | -.420 |
|  | Kurtosis | .172 |  |
|  | Std. Error of Kurtosis |  | -.701 |
|  |  | .341 |  |


| g16 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  | Missing | System | 27 | 100.0 |  |  |
| boy | Valid | 1 | 54 | 22.5 | 22.5 | 22.5 |
|  |  | 2 | 60 | 25.0 | 25.0 | 47.5 |
|  |  | 3 | 79 | 32.9 | 32.9 | 80.4 |
|  | 4 | 47 | 19.6 | 19.6 | 100.0 |  |
|  |  | Total | 240 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 20 | 10.0 | 10.0 | 10.0 |
|  |  | 2 | 46 | 22.9 | 22.9 | 32.8 |
|  |  | 3 | 80 | 39.8 | 39.8 | 72.6 |
|  |  | 4 | 25 | 27.4 | 27.4 | 100.0 |
|  |  | Total | 201 | 100.0 | 100.0 |  |

## Mann-Whitney Test

Ranks

|  | g16 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| wordcards | boy | 240 | 202.37 | 48568.50 |
|  | girl | 201 | 243.25 | 48892.50 |
|  | Total | 441 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | wordcards |
| :--- | ---: |
| Mann-Whitney U | 19648.500 |
| Wilcoxon W | 48568.500 |
| Z | -3.493 |
| Asymp. Sig. (2-tailed) | .000 |

a. Grouping Variable: g16

## Appendix 7 - Frequencies for ALL P6 - Writing Activities

 Writing down answersStatistics
answer2

| $\cdot$ | N | Valid <br> Missing | 0 <br> boy |
| :--- | :--- | :--- | ---: |
|  | N | Valid | 33 |
|  | Missing | 233 |  |
|  | Mean | 0 |  |
|  | Median | 2.56 |  |
|  | Std. Deviation |  | 1.041 |
|  | Skewness | -.109 |  |
|  | Std. Error of Skewness |  | .159 |
|  | Kurtosis | -1.152 |  |
|  | Std. Error of Kurtosis |  | .318 |
| girl | N | Valid | 202 |
|  | Missing | 0 |  |
|  |  | 2.74 |  |
|  | Mean | 3.00 |  |
|  |  | .944 |  |
|  | Stdian | -.205 |  |
|  |  | .171 |  |
|  | Skewness | -.889 |  |
|  | Std. Error of Skewness |  | .341 |


| g17 |  |  |  |  |  | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Missing | System | 33 | 100.0 |  |
|  |  |  |  |  |  |  |
| boy | Valid | 1 | 46 | 19.7 | 19.7 | 19.7 |
|  |  | 2 | 61 | 26.2 | 26.2 | 45.9 |
|  |  | 3 | 75 | 32.2 | 32.2 | 78.1 |
|  |  | 4 | 51 | 21.9 | 21.9 | 100.0 |
|  |  | Total | 233 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 21 | 10.4 | 10.4 | 10.4 |
|  |  | 2 | 60 | 29.7 | 29.7 | 40.1 |
|  |  | 3 | 72 | 35.6 | 35.6 | 75.7 |
|  |  | 4 | 49 | 24.3 | 24.3 | 100.0 |
|  |  | Total | 202 | 100.0 | 100.0 |  |

## Mann-Whitney Test

Ranks

|  | g17 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| answer2 | boy | 233 | 208.94 | 48682.50 |
|  | girl | 202 | 228.45 | 46147.50 |
|  | Total | 435 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | answer2 |
| :--- | ---: |
| Mann-Whitney U | 21421.500 |
| Wilcoxon W | 48682.500 |
| Z | -1.680 |
| Asymp. Sig. (2-tailed) | .093 |

a. Grouping Variable: g17

## Copying down words

Statistics
copy

| $\cdot$ | N | Valid <br> Missing | 0 |
| :--- | :--- | :--- | ---: |
| boy | N | Valid |  |
|  | Missing | 42 |  |
|  | Mean | 227 |  |
|  | Median | 0 |  |
|  | Std. Deviation | 2.61 |  |
|  | Skewness | 3.00 |  |
|  | Std. Error of Skewness |  | 1.073 |
|  | Kurtosis | -.186 |  |
|  | Std. Error of Kurtosis |  | .162 |
| girl | N | -1.211 |  |
|  |  | Valid | .322 |
|  | Mean | 199 |  |
|  | Median | 0 |  |
|  | Std. Deviation | 2.79 |  |
|  | Skewness | 3.00 |  |
|  | Std. Error of Skewness | .934 |  |
|  | Kurtosis | -.368 |  |
|  | Std. Error of Kurtosis |  | .172 |
|  |  | -.713 |  |
|  |  | .343 |  |

copy

| g18 |  |  |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |  |
| boy | Missing | System | 42 | 100.0 |  |  |
|  | Valid | 1 | 47 | 20.7 | 20.7 | 20.7 |
|  |  | 2 | 51 | 22.5 | 22.5 | 43.2 |
|  |  | 3 | 73 | 32.2 | 32.2 | 75.3 |
|  |  | 4 | 56 | 24.7 | 24.7 | 100.0 |
|  |  | Total | 227 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 21 | 10.6 | 10.6 | 10.6 |
|  |  | 2 | 48 | 24.1 | 24.1 | 34.7 |
|  |  | 3 | 81 | 40.7 | 40.7 | 75.4 |
|  |  | 4 | 49 | 24.6 | 24.6 | 100.0 |
|  |  | Total | 199 | 100.0 | 100.0 |  |

## Mann-Whitney Test

Ranks

|  | g18 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| copy | boy | 227 | 204.55 | 46432.00 |
|  | girl | 199 | 223.71 | 44519.00 |
|  | Total | 426 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | copy |
| :--- | ---: |
| Mann-Whitney U | 20554.000 |
| Wilcoxon W | 46432.000 |
| Z | -1.670 |
| Asymp. Sig. (2-tailed) | .095 |

a. Grouping Variable: g18

## Writing labels or captions

Statistics
labels

| . | N | Valid <br> Missing | $\begin{array}{r} 0 \\ 37 \end{array}$ |
| :---: | :---: | :---: | :---: |
| boy | N | Valid Missing | 227 0 |
|  | Mean |  | 2.42 |
|  | Median |  | 2.00 |
|  | Std. Deviation |  | 1.075 |
|  | Skewness |  | . 105 |
|  | Std. Error of Skewness |  | . 162 |
|  | Kurtosis |  | -1.244 |
|  | Std. Error of Kurtosis |  | . 322 |
| girl | N | Valid | 204 |
|  |  | Missing | 0 |
|  | Mean |  | 2.72 |
|  | Median |  | 3.00 |
|  | Std. Deviation |  | 1.030 |
|  | Skewness |  | -. 171 |
|  | Std. Error of Skewness |  | . 170 |
|  | Kurtosis |  | -1.156 |
|  | Std. Error of Kurtosis |  | . 339 |

labels

| g19 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  | Missing | System | 37 | 100.0 |  |  |
| boy | Valid | 1 | 56 | 24.7 | 24.7 | 24.7 |
|  |  | 2 | 66 | 29.1 | 29.1 | 53.7 |
|  |  | 3 | 58 | 25.6 | 25.6 | 79.3 |
|  | 4 | 47 | 20.7 | 20.7 | 100.0 |  |
|  |  | Total | 227 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 28 | 13.7 | 13.7 | 13.7 |
|  |  | 2 | 61 | 29.9 | 29.9 | 43.6 |
|  |  | 3 | 56 | 27.5 | 27.5 | 71.1 |
|  |  | 4 | 28 | 28.9 | 28.9 | 100.0 |
|  |  | Total | 204 | 100.0 | 100.0 |  |

## Mann-Whitney Test

Ranks

|  | g19 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| labels | boy | 227 | 200.49 | 45510.50 |
|  | girl | 204 | 233.26 | 47585.50 |
|  | Total | 431 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | labels |
| :--- | ---: |
| Mann-Whitney U | 19632.500 |
| Wilcoxon W | 45510.500 |
| Z | -2.823 |
| Asymp. Sig. (2-tailed) | .005 |

a. Grouping Variable: g19

## Appendix 8 - Frequencies for ALL P6 schools

## Overall Attitudes

Statistics
attitude

| $\cdot$ | N | Valid <br> Missing | 0 |
| :--- | :--- | :--- | ---: |
| boy | N | Valid | 8 |
|  | Missing | 247 |  |
|  | Mean | 0 |  |
|  | Median | 2.80 |  |
|  | Std. Deviation | 3.00 |  |
|  | Skewness | 1.084 |  |
|  | Std. Error of Skewness |  | -.466 |
|  | Kurtosis | .155 |  |
|  | Std. Error of Kurtosis |  | -1.063 |
| girl | N | Valid | .309 |
|  | Mean | 213 |  |
|  |  | 0 |  |
|  | Median | 3.23 |  |
|  | Std. Deviation | 3.00 |  |
|  | Skewness | .922 |  |
|  | Std. Error of Skewness | -1.067 |  |
|  | Kurtosis | .167 |  |
|  |  | .237 |  |
|  | Std. Error of Kurtosis |  | .332 |

attitude

| g20 |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Missing | System | 8 | 100.0 |  |
|  |  |  |  |  |  |  |
| boy | Valid | 1 | 45 | 18.2 | 18.2 | 18.2 |
|  |  | 2 | 39 | 15.8 | 15.8 | 34.0 |
|  |  | 3 | 83 | 33.6 | 33.6 | 67.6 |
|  |  | 4 | 80 | 32.4 | 32.4 | 100.0 |
|  |  | Total | 247 | 100.0 | 100.0 |  |
| girl | Valid | 1 | 16 | 7.5 | 7.5 | 7.5 |
|  |  | 2 | 23 | 10.8 | 10.8 | 18.3 |
|  |  | 3 | 69 | 32.4 | 32.4 | 50.7 |
|  |  | 4 | 105 | 49.3 | 49.3 | 100.0 |
|  |  | Total | 213 | 100.0 | 100.0 |  |

## Mann-Whitney Test

Ranks

|  | g20 | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| attitude | boy | 247 | 206.48 | 51001.00 |
|  | girl | 213 | 258.35 | 55029.00 |
|  | Total | 460 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | attitude |
| :--- | ---: |
| Mann-Whitney U | 20373.000 |
| Wilcoxon W | 51001.000 |
| Z | -4.413 |
| Asymp. Sig. (2-tailed) | .000 |

a. Grouping Variable: g20

## Perception of difficulty

Statistics
difficulty

| $\cdot$ | N | Valid <br> Missing | 0 |
| :--- | :--- | :--- | ---: |
| boy | N | Valid |  |
|  | Missing | 247 |  |
|  | Mean | 0 |  |
|  | Median | 3.05 |  |
|  | Std. Deviation | 3.00 |  |
|  | Skewness | .970 |  |
|  | Std. Error of Skewness |  | .037 |
|  | Kurtosis | .155 |  |
|  | Std. Error of Kurtosis |  | .122 |
| girl | N | Valid | .309 |
|  | Mean |  | 215 |
|  | Median | 0 |  |
|  | Std. Deviation |  | 2.75 |
|  | Skewness | .981 |  |
|  | Std. Error of Skewness |  | .182 |
|  | Kurtosis | .166 |  |
|  | Std. Error of Kurtosis |  | .067 |
|  |  | .330 |  |

difficulty

| g21 |  |  |  |  | Cumulative <br> Percent |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| a | Missing | System | 6 | 100.0 |  |  |
| boy | Valid | very easy | 16 | 6.5 | 6.5 | 6.5 |
|  |  | easy | 41 | 16.6 | 16.6 | 23.1 |
|  | average | 126 | 51.0 | 51.0 | 74.1 |  |
|  |  | difficult | 43 | 17.4 | 17.4 | 91.5 |
|  | very difficult | 21 | 8.5 | 8.5 | 100.0 |  |
|  | Total | 247 | 100.0 | 100.0 |  |  |
| girl | Valid | very easy | 23 | 10.7 | 10.7 | 10.7 |
|  |  | easy | 55 | 25.6 | 25.6 | 36.3 |
|  | average | 101 | 47.0 | 47.0 | 83.3 |  |
|  |  | difficult | 24 | 11.2 | 11.2 | 94.4 |
|  |  | very difficult | 12 | 5.6 | 5.6 | 100.0 |
|  |  | Total | 215 | 100.0 | 100.0 |  |

## T-Test

Group Statistics

|  | g21 | N |  | Mean | Std. Deviation |
| :--- | :--- | ---: | ---: | ---: | ---: | \(\left.\begin{array}{c}Std. Error <br>

Mean\end{array}\right]\)

Independent Samples Test

|  |  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| difficulty | Equal variances assumed <br> Equal variances not assumed |  | 2.464 | . 117 | $\begin{aligned} & 3.245 \\ & 3.242 \end{aligned}$ | 460 449.815 | .001 .001 | .295 .295 | .091 .091 | .116 .116 | .474 .474 |

## Appendix 9-Anovas for P6 High and Low FME Speaking Activities - Answering the Teacher's Questions

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 129 |
| Gender | 3.00 | High | 121 |
|  | 1.00 | Boy | 132 |
|  | 2.00 | Girl | 118 |

## Descriptive Statistics

Dependent Variable: Answering the teacher's questions

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.4857 | .73707 | 70 |
|  | Girl | 2.8475 | .76143 | 59 |
|  | Total | 2.6512 | .76701 | 129 |
| High | Boy | 2.5484 | .86228 | 62 |
|  | Girl | 2.6949 | .83572 | 59 |
|  | Total | 2.6198 | .84908 | 121 |
| Total | Boy | 2.5152 | .79584 | 132 |
|  | Girl | 2.7712 | .79969 | 118 |
|  | Total | 2.6360 | .80629 | 250 |

## Tests of Between-Subjects Effects

Dependent Variable: Answering the teacher's questions

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $4.900^{\text {a }}$ | 3 | 1.633 | 2.560 | .056 |
| Intercept | 1739.333 | 1 | 1739.333 | 2725.738 | .000 |
| FME | .126 | 1 | .126 | .197 | .658 |
| Gender | 4.017 | 1 | 4.017 | 6.295 | .013 |
| FME * Gender | .720 | 1 | .720 | 1.129 | .289 |
| Error | 156.976 | 246 | .638 |  |  |
| Total | 1899.000 | 250 |  |  |  |
| Corrected Total | 161.876 | 249 |  |  |  |

a. $R$ Squared $=.030$ (Adjusted $R$ Squared $=.018$ )

## Profile Plots

Estimated Marginal Means of Answering the teacher's questions


## Speaking with a partner

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :---: |
| FME | 1.00 | Low | 129 |
|  | 3.00 | High | 120 |
| Gender | 1.00 | Boy | 131 |
|  | 2.00 | Girl | 118 |

## Descriptive Statistics

Dependent Variable: Speaking with a partner

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 3.1286 | .91559 | 70 |
|  | Girl | 3.2373 | .87767 | 59 |
|  | Total | 3.1783 | .89660 | 129 |
| High | Boy | 2.8525 | 1.12303 | 61 |
|  | Girl | 3.0339 | 1.03334 | 59 |
|  | Total | 2.9417 | 1.07918 | 120 |
| Total | Boy | 3.0000 | 1.02282 | 131 |
|  | Girl | 3.1356 | .96001 | 118 |
|  | Total | 3.0643 | .99388 | 249 |

## Tests of Between-Subjects Effects

Dependent Variable: Speaking with a partner

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Interced Model | $4.847^{\text {a }}$ | 3 | 1.616 | 1.648 | . 179 |
| FME | 2324.601 | 1 | 2324.601 | 2371.793 | . 000 |
| Gender | 3.560 | 1 | 3.560 | 3.633 | . 058 |
| FME * Gender | 1.304 | 1 | 1.304 | 1.330 | . 250 |
| Error Gender | . 082 | 1 | . 082 | . 084 | . 773 |
| Total | 240.125 | 245 | . 980 |  |  |
| Corrected Total | 2583.000 | 249 |  |  |  |
| a. R Squal | 244.972 | 248 |  |  |  |

a. R Squared $=.020($ Adjusted R Squared $=.008)$

Estimated Marginal Means of Speaking with a partner


## Speaking when you play a game

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 129 |
| Gender | 3.00 | High | 115 |
|  | 1.00 | Boy | 127 |
|  | 2.00 | Girl | 117 |

## Descriptive Statistics

Dependent Variable: Speaking when you play a game

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 3.2143 | .84943 | 70 |
|  | Girl | 3.3898 | .80979 | 59 |
|  | Total | 3.2946 | .83295 | 129 |
| High | Boy | 3.4211 | .84404 | 57 |
|  | Girl | 3.2241 | .95593 | 58 |
|  | Total | 3.3217 | .90368 | 115 |
| Total | Boy | 3.3071 | .84995 | 127 |
|  | Girl | 3.3077 | .88534 | 117 |
|  | Total | 3.3074 | .86530 | 244 |

Tests of Between-Subjects Effects
Dependent Variable: Speaking when you play a game

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $2.146^{\mathrm{a}}$ | 3 | .715 | .955 | .415 |
| Intercept | 2658.950 | 1 | 2658.950 | 3549.199 | .000 |
| FME | .026 | 1 | .026 | .034 | .854 |
| Gender | .007 | 1 | .007 | .009 | .924 |
| FME *Gender | 2.101 | 1 | 2.101 | 2.805 | .095 |
| Error | 179.801 | 240 | .749 |  |  |
| Total | 2851.000 | 244 |  |  |  |
| Corrected Total | 181.947 | 243 |  |  |  |

a. R Squared $=.012$ (Adjusted R Squared $=-.001$ )

## Profile Plots

Estimated Marginal Means of Speaking when you play a game



## Repeating as a whole class

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :---: |
| FME | 1.00 | Low | 129 |
|  | 3.00 | High | 120 |
| Gender | 1.00 | Boy | 131 |
|  | 2.00 | Girl | 118 |

## Descriptive Statistics

Dependent Variable: Repeating as a whole class

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.6429 | 1.06371 | 70 |
|  | Girl | 3.2203 | .72082 | 59 |
|  | Total | 2.9070 | .96373 | 129 |
| High | Boy | 2.5574 | .99204 | 61 |
|  | Girl | 2.7966 | .96096 | 59 |
|  | Total | 2.6750 | .98016 | 120 |
| Total | Boy | 2.6031 | 1.02791 | 131 |
|  | Girl | 3.0085 | .87213 | 118 |
|  | Total | 2.7952 | .97665 | 249 |

## Tests of Between-Subjects Effects

${ }^{\text {Dependent Variable: Repeating as a whole class }}$

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $15.739^{a}$ | 3 | 5.246 | 5.821 | .001 |
| Intercept | 1948.438 | 1 | 1948.438 | 2161.838 | .000 |
| FME | 4.015 | 1 | 4.015 | 4.455 | .036 |
| Gender | 10.329 | 1 | 10.329 | 11.460 | .001 |
| FME * Gender | 1.772 | 1 | 1.772 | 1.966 | .162 |
| Error | 220.816 | 245 | .901 |  |  |
| Total | 2182.000 | 249 |  |  |  |
| Corrected Total | 236.554 | 248 |  |  |  |
| a. R Squ |  |  |  |  |  |

a. R Squared $=.067$ (Adjusted $\mathrm{R} \mathrm{Squared}=.055$ )

Estimated Marginal Means of Repeating as a whole class


## Repeating something by yourself

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 128 |
|  | 3.00 | High | 118 |
| Gender | 1.00 | Boy | 129 |
|  | 2.00 | Girl | 117 |

## Descriptive Statistics

Dependent Variable: Repeating something by yourself

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.2714 | 1.02039 | 70 |
|  | Girl | 2.2414 | .92358 | 58 |
|  | Total | 2.2578 | .97404 | 128 |
| High | Boy | 2.1525 | 1.06372 | 59 |
|  | Girl | 2.2034 | 1.11076 | 59 |
|  | Total | 2.1780 | 1.08314 | 118 |
| Total | Boy | 2.2171 | 1.03804 | 129 |
|  | Girl | 2.2222 | 1.01804 | 117 |
|  | Total | 2.2195 | 1.02648 | 246 |

Tests of Between-Subjects Effects
Dependent Variable: Repeating something by yourself

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $.496^{\mathrm{a}}$ | 3 | .165 | .155 | .926 |
| Intercept | 1202.202 | 1 | 1202.202 | 1129.179 | .000 |
| FME | .376 | 1 | .376 | .353 | .553 |
| Gender | .007 | 1 | .007 | .006 | .937 |
| FME * Gender | .100 | 1 | .100 | .094 | .759 |
| Error | 257.650 | 242 | 1.065 |  |  |
| Total | 1470.000 | 246 |  |  |  |
| Corrected Total | 258.146 | 245 |  |  |  |

a. $R$ Squared $=.002$ (Adjusted $R$ Squared $=-.010)$

## Profile Plots

Estimated Marginal Means of Repeating something by yourself


## Singing songs

Between-Subjects Factors

|  |  |  |  |
| :--- | :--- | :--- | :---: |
| FME | 1.00 | Low | N |
|  | 3.00 | High | 129 |
|  | 1.00 | Boy | 119 |
|  | 2.00 | Girl | 130 |

## Descriptive Statistics

Dependent Variable: Singing songs

| FME |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
| Low | Gender | Mean | Std. Deviation | N |
|  | Boy | 2.9286 | 1.06759 | 70 |
|  | Girl | 3.3898 | .71960 | 59 |
|  | Total | 3.1395 | .94987 | 129 |
| High | Boy | 2.6167 | 1.04300 | 60 |
|  | Girl | 3.0678 | .99766 | 59 |
|  | Total | 2.8403 | 1.04137 | 119 |
| Total | Boy | 2.7846 | 1.06374 | 130 |
|  | Girl | 3.2288 | .88105 | 118 |
|  | Total | 2.9960 | 1.00403 | 248 |

## Tests of Between-Subjects Effects

Dependent Variable: Singing songs

| Source | Type III Sum <br> of Squares | df | Mean Square | F |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $18.407^{\circ}$ | 3 | 6.136 | 6.493 | Sig. |
| Intercept | 2221.546 | 1 | 2221.546 | 2350.751 | .000 |
| FME | 6.197 | 1 | 6.197 | 6.557 | .000 |
| Gender | 12.836 | 1 | 12.836 | 13.583 | .011 |
| FME * Gender | .002 | 1 | .002 | .002 | .967 |
| Error | 230.589 | 244 | .945 |  |  |
| Total | 2475.000 | 248 |  |  |  |
| Corrected Total | 248.996 | 247 |  |  |  |

a. $R$ Squared $=.074$ (Adjusted R Squared $=.063$ )

Singing songs

## Profile Plots

Estimated Marginal Means of Singing songs


## Appendix 10 - Anovas for P6 High and Low FME <br> Listening Activities - Listening to Instructions

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :---: |
| FME | 1.00 | Low | 129 |
|  | 3.00 | High | 120 |
| Gender | 1.00 | Boy | 131 |
|  | 2.00 | Girl | 118 |

Descriptive Statistics
Dependent Variable: Listening to instructions

| FME |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
| Low | Gender | Mean | Std. Deviation | N |
|  | Boy | 2.3857 | .80385 | 70 |
|  | Girl | 2.6271 | .82834 | 59 |
|  | Total | 2.4961 | .82086 | 129 |
| High | Boy | 2.3115 | .94058 | 61 |
|  | Girl | 2.5593 | .81518 | 59 |
|  | Total | 2.4333 | .88625 | 120 |
| Total | Boy | 2.3511 | .86757 | 131 |
|  | Girl | 2.5932 | .81898 | 118 |
|  | Total | 2.4659 | .85185 | 249 |

## Tests of Between-Subjects Effects

Dependent Variable: Listening to instructions

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $3.953^{\mathrm{a}}$ | 3 | 1.318 | 1.834 | .141 |
| Intercept | 1512.697 | 1 | 1512.697 | 2105.664 | .000 |
| FME | .312 | 1 | .312 | .435 | .510 |
| Gender | 3.707 | 1 | 3.707 | 5.160 | .024 |
| FME * Gender | .001 | 1 | .001 | .001 | .976 |
| Error | 176.007 | 245 | .718 |  |  |
| Total | 1694.000 | 249 |  |  |  |
| Corrected Total | 179.960 | 248 |  |  |  |

a. R Squared $=.022($ Adjusted $R$ Squared $=.010)$

Estimated Marginal Means of Listening to instructions


Listening to the cassette

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 125 |
| Gender | 3.00 | High | 114 |
|  | 1.00 | Boy | 126 |
|  | 2.00 | Girl | 113 |

Descriptive Statistics
Dependent Variable: Listening to the cassette

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.8551 | .91194 | 69 |
|  | Girl | 2.8750 | .83258 | 56 |
|  | Total | 2.8640 | .87385 | 125 |
| High | Boy | 2.5088 | 1.08764 | 57 |
|  | Girl | 2.6140 | 1.08157 | 57 |
|  | Total | 2.5614 | 1.08109 | 114 |
| Total | Boy | 2.6984 | 1.00614 | 126 |
|  | Girl | 2.7434 | .97081 | 113 |
|  | Total | 2.7197 | .98778 | 239 |

## Tests of Between-Subjects Effects

Dependent Variable: Listening to the cassette

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $5.787^{\text {a }}$ | 3 | 1.929 | 2.002 | .114 |
| Intercept | 1746.577 | 1 | 1746.577 | 1812.681 | .000 |
| FME | 5.468 | 1 | 5.468 | 5.675 | .018 |
| Gender | .232 | 1 | .232 | .241 | .624 |
| FME * Gender | .108 | 1 | .108 | .112 | .738 |
| Error | 226.430 | 235 | .964 |  |  |
| Total | 2000.000 | 239 |  |  |  |
| Corrected Total | 232.218 | 238 |  |  |  |

a. R Squared $=.025$ (Adjusted R Squared $=.012$ )

## Profile Plots

Estimated Marginal Means of Listening to the cassette


## Listening to stories

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 45 |
| Gender | 3.00 | High | 53 |
|  | 1.00 | Boy | 53 |
|  | 2.00 | Girl | 45 |

## Descriptive Statistics

Dependent Variable: Listening to stories

| FME |  |  |  |  |  | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Low | Boy | 3.0000 | .97802 | 24 |  |  |  |  |  |
|  | Girl | 3.3810 | .86465 | 21 |  |  |  |  |  |
|  | Total | 3.1778 | .93636 | 45 |  |  |  |  |  |
| High | Boy | 2.6897 | 1.13715 | 29 |  |  |  |  |  |
|  | Girl | 2.6667 | 1.12932 | 24 |  |  |  |  |  |
|  | Total | 2.6792 | 1.12273 | 53 |  |  |  |  |  |
| Total | Boy | 2.8302 | 1.06943 | 53 |  |  |  |  |  |
|  | Girl | 3.0000 | 1.06600 | 45 |  |  |  |  |  |
|  | Total | 2.9082 | 1.06574 | 98 |  |  |  |  |  |

## Tests of Between-Subjects Effects

Dependent Variable: Listening to stories

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $7.681^{\mathrm{a}}$ | 3 | 2.560 | 2.348 | .078 |
| Intercept | 832.735 | 1 | 832.735 | 763.734 | .000 |
| FME | 6.346 | 1 | 6.346 | 5.820 | .018 |
| Gender | .775 | 1 | .775 | .710 | .401 |
| FME *Gender | .986 | 1 | .986 | .905 | .344 |
| Error | 102.493 | 94 | 1.090 |  |  |
| Total | 939.000 | 98 |  |  |  |
| Corrected Total | 110.173 | 97 |  |  |  |
| a. R Squared $=070$ (Adjusted R Squared $=040$ ( |  |  |  |  |  |

a. R Squared $=.070$ (Adjusted R Squared $=.040$ )

## Profile Plots

Estimated Marginal Means of Listening to stories


## Listening to songs

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 127 |
|  | 3.00 | High | 98 |
| Gender | 1.00 | Boy | 121 |
|  | 2.00 | Girl | 104 |

## Descriptive Statistics

Dependent Variable: Listening to songs

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 3.0580 | .98345 | 69 |
|  | Girl | 3.3103 | .84203 | 58 |
|  | Total | 3.1732 | .92663 | 127 |
| High | Boy | 2.5385 | 1.07487 | 52 |
|  | Girl | 2.8913 | 1.15909 | 46 |
|  | Total | 2.7041 | 1.12341 | 98 |
| Total | Boy | 2.8347 | 1.05156 | 121 |
|  | Girl | 3.1250 | 1.01146 | 104 |
|  | Total | 2.9689 | 1.04108 | 225 |

## Tests of Between-Subjects Effects

${ }^{\text {Oppendent Variable: Listening to songs }}$

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $17.221^{\text {a }}$ | 3 | 5.740 | 5.624 | .001 |
| Intercept | 1914.539 | 1 | 1914.539 | 1875.822 | .000 |
| FME | 12.116 | 1 | 12.116 | 11.871 | .001 |
| Gender | 5.038 | 1 | 5.038 | 4.936 | .027 |
| FME * Gender | .139 | 1 | .139 | .136 | .713 |
| Error | 225.562 | 221 | 1.021 |  |  |
| Total | 2226.000 | 225 |  |  |  |
| Corrected Total | 242.782 | 224 |  |  |  |
| a. R |  |  |  |  |  |

a. $R$ Squared $=.071$ (Adjusted $R$ Squared $=.058$ )

## Profile Plots

Estimated Marginal Means of Listening to songs


## Listening to PE instructions

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 21 |
| Gender | 3.00 | High | 25 |
|  | 1.00 | Boy | 23 |
|  | 2.00 | Girl | 23 |

## Descriptive Statistics

Dependent Variable: Listening to PE instructions

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| LOW | Boy | 3.0909 | .94388 | 11 |
|  | Girl | 3.3000 | .67495 | 10 |
|  | Total | 3.1905 | .81358 | 21 |
| High | Boy | 2.8333 | 1.19342 | 12 |
|  | Girl | 3.1538 | .80064 | 13 |
|  | Total | 3.0000 | 1.00000 | 25 |
| Total | Boy | 2.9565 | 1.06508 | 23 |
|  | Girl | 3.2174 | .73587 | 23 |
|  | Total | 3.0870 | .91472 | 46 |

## Tests of Between-Subjects Effects

Oependent Variable: Listening to PE instructions

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $1.284^{\text {a }}$ | 3 | .428 | .494 | .688 |
| Intercept | 436.310 | 1 | 436.310 | 503.877 | .000 |
| FME | .464 | 1 | .464 | .536 | .468 |
| Gender | .799 | 1 | .799 | .922 | .342 |
| FME * Gender | .035 | 1 | .035 | .041 | .841 |
| Error | 36.368 | 42 | .866 |  |  |
| Total | 476.000 | 46 |  |  |  |
| Corrected Total | 37.652 | 45 |  |  |  |

a. R Squared $=.034$ (Adjusted R Squared $=-.035$ )

Estimated Marginal Means of Listening to PE instructions


## Listening to play games

Between-Subjects Factors

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | N |
| Gender | 3.00 | High | 128 |
|  | 1.00 | Boy | 119 |
|  | 2.00 | Girl | 132 |

## Descriptive Statistics

Dependent Variable: Listening to play games

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 3.4429 | .79191 | 70 |
|  | Girl | 3.4828 | .80003 | 58 |
|  | Total | 3.4609 | .79271 | 128 |
| High | Boy | 3.3387 | .88602 | 62 |
|  | Girl | 3.2456 | .89204 | 57 |
|  | Total | 3.2941 | .88637 | 119 |
| Total | Boy | 3.3939 | .83582 | 132 |
|  | Girl | 3.3652 | .85153 | 115 |
|  | Total | 3.3806 | .84157 | 247 |

## Tests of Between-Subjects Effects

${ }^{\text {Dependent }}$ Variable: Listening to play games

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $2.024^{2}$ | 3 | .675 | .952 | .416 |
| Intercept | 2799.364 | 1 | 2799.364 | 3950.260 | .000 |
| FME | 1.787 | 1 | 1.787 | 2.521 | .114 |
| Gender | .043 | 1 | .043 | .061 | .805 |
| FME * Gender | .271 | 1 | .271 | .383 | .537 |
| Error | 172.203 | 243 | .709 |  |  |
| Total | 2997.000 | 247 |  |  |  |
| Corrected Total | 174.227 | 246 |  |  |  |

a. R Squared $=.012$ (Adjusted R Squared $=-.001$ )

## Profile Plots

Estimated Marginal Means of Listening to play games


## Appendix 11 - Anovas for P6 High and Low FME <br> Reading Activities - Reading words on flashcards

Between-Subjects Factors

|  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| FME | 1.00 | Value Label | N |  |
| Gender | 3.00 | High | 129 |  |
|  | 1.00 | Boy | 121 |  |
|  | 2.00 | Girl | 132 |  |

## Descriptive Statistics

Dependent Variable: Reading words on flashcards

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.6714 | .91242 | 70 |
|  | Girl | 3.0169 | .62949 | 59 |
|  | Total | 2.8295 | .81129 | 129 |
| High | Boy | 2.5968 | .99934 | 62 |
|  | Girl | 2.8814 | .98409 | 59 |
|  | Total | 2.7355 | .99807 | 121 |
| Total | Boy | 2.6364 | .95128 | 132 |
|  | Girl | 2.9492 | .82532 | 118 |
|  | Total | 2.7840 | .90588 | 250 |

Tests of Between-Subjects Effects
${ }^{\text {Dependent } V \text { Variable: Reading words on flashcards }}$

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $6.821^{\mathrm{a}}$ | 3 | 2.274 | 2.832 | .039 |
| Intercept | 1938.812 | 1 | 1938.812 | 2414.745 | .000 |
| FME | .687 | 1 | .687 | .856 | .356 |
| Gender | 6.173 | 1 | 6.173 | 7.689 | .006 |
| FME *Gender | .058 | 1 | .058 | .072 | .789 |
| Error | 197.515 | 246 | .803 |  |  |
| Total | 2142.000 | 250 |  |  |  |
| Corrected Total | 204.336 | 249 |  |  |  |

a. R Squared $=.033$ (Adjusted $\mathrm{R} \mathrm{Squared}=.022$ )

## Profile Plots

Estimated Marginal Means of Reading words on flashcards


## Reading stories, songs

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 68 |
| Gender | 3.00 | High | 35 |
|  | 1.00 | Boy | 55 |
|  | 2.00 | Girl | 48 |

Descriptive Statistics
Dependent Variable: Reading stories, songs

| FME |  |  |  |  |  | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Low | Boy | 2.4444 | .93944 | 36 |  |  |  |  |  |
|  | Girl | 2.8437 | .88388 | 32 |  |  |  |  |  |
|  | Total | 2.6324 | .92888 | 68 |  |  |  |  |  |
| High | Boy | 2.8421 | 1.01451 | 19 |  |  |  |  |  |
|  | Girl | 2.3750 | 1.25831 | 16 |  |  |  |  |  |
|  | Total | 2.6286 | 1.13981 | 35 |  |  |  |  |  |
| Total | Boy | 2.5818 | .97546 | 55 |  |  |  |  |  |
|  | Girl | 2.6875 | 1.03464 | 48 |  |  |  |  |  |
|  | Total | 2.6311 | .99990 | 103 |  |  |  |  |  |

## Tests of Between-Subjects Effects

Dependent Variable: Reading stories, songs

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected Model | $4.597^{\text {a }}$ | 3 | 1.532 | 1.558 | . 205 |
| intercept- | 633.680 | 1 | 633.680 | 644.196 | . 000 |
| Gender | . 029 | 1 | . 029 | . 029 | . 864 |
| Gender | . 026 | 1 | . 026 | . 027 | . 870 |
| Error ${ }^{\text {a }}$ Gender | 4.310 | 1 | 4.310 | 4.382 | . 039 |
| Total | 97.384 | 99 | . 984 |  |  |
| Corr | 815.000 | 103 |  |  |  |
| Corrected Total | 101.981 | 102 |  |  |  |

a. R Squared $=.045$ (Adjusted R Squared $=.016$ )

## Profile Plots

Estimated Marginal Means of Reading stories, songs


## Reading instructions

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 125 |
|  | 3.00 | High | 55 |
| Gender | 1.00 | Boy | 97 |
|  | 2.00 | Girl | 83 |

## Descriptive Statistics

${ }^{D}$ ependent Variable: Reading instructions

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.0909 | .83624 | 66 |
|  | Girl | 2.4915 | .91676 | 59 |
|  | Total | 2.2800 | .89443 | 125 |
| High | Boy | 2.2581 | 1.06357 | 31 |
|  | Girl | 2.2083 | 1.14129 | 24 |
|  | Total | 2.2364 | 1.08804 | 55 |
| Total | Boy | 2.1443 | .91275 | 97 |
|  | Girl | 2.4096 | .98818 | 83 |
|  | Total | 2.2667 | .95485 | 180 |

## Tests of Between-Subjects Effects

Dependent Variable: Reading instructions

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $5.106^{\text {a }}$ | 3 | 1.702 | 1.895 | .132 |
| Intercept | 772.281 | 1 | 772.281 | 859.750 | .000 |
| FME | .127 | 1 | .127 | .141 | .707 |
| Gender | 1.161 | 1 | 1.161 | 1.293 | .257 |
| FME*Gender | 1.913 | 1 | 1.913 | 2.130 | .146 |
| Error | 158.094 | 176 | .898 |  |  |
| Total | 1088.000 | 180 |  |  |  |
| Corrected Total | 163.200 | 179 |  |  |  |

a. $R$ Squared $=.031$ (Adjusted $R$ Squared $=.015$ )

## Profile Plots

Estimated Marginal Means of Reading instructions


## Reading wordcards

Between-Subjects Factors

|  |  |  |  |
| :--- | :--- | :--- | :---: |
| FME | 1.00 | Value Label | N |
|  | 3.00 | High | 129 |
| Gender | 1.00 | Boy | 102 |
|  | 2.00 | Girl | 124 |

## Descriptive Statistics

Dependent Variable: Reading word cards

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| LOw | Boy | 2.6429 | .90146 | 70 |
|  | Girl | 2.9322 | .82763 | 59 |
|  | Total | 2.7752 | .87714 | 129 |
| High | Boy | 2.7407 | 1.08480 | 54 |
|  | Girl | 2.8542 | 1.01036 | 48 |
|  | Total | 2.7941 | 1.04681 | 102 |
| Total | Boy | 2.6855 | .98250 | 124 |
|  | Girl | 2.8972 | .91047 | 107 |
|  | Total | 2.7835 | .95366 | 231 |

Tests of Between-Subjects Effects
Dependent Variable: Reading word cards

| Source | Type III Sum <br> of Squares | df | Mean Square | F |  |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $3.028^{\text {a }}$ | 3 | 1.009 | 1.111 | Sig. |
| Intercept | 1767.587 | 1 | 1767.587 | 1946.363 | .345 |
| FME | .006 | 1 | .006 | .006 | .938 |
| Gender | 2.298 | 1 | 2.298 | 2.531 | .113 |
| FME *Gender | .438 | 1 | .438 | .483 | .488 |
| Error | 206.150 | 227 | .908 |  |  |
| Total | 1999.000 | 231 |  |  |  |
| Corrected Total | 209.177 | 230 |  |  |  |

a. R Squared $=.014$ (Adjusted R Squared $=.001$ )

Estimated Marginal Means of Reading word cards


Appendix 12 - Anovas for P6 High and Low FME
Writing Activities - Writing down answers
Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 128 |
| Gender | 3.00 | High | 114 |
|  | 1.00 | Boy | 130 |
|  | 2.00 | Girl | 112 |

## Descriptive Statistics

Dependent Variable: Writing down answers

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.6087 | .94273 | 69 |
|  | Girl | 2.8136 | .84025 | 59 |
|  | Total | 2.7031 | .89934 | 128 |
| High | Boy | 2.5574 | 1.05711 | 61 |
|  | Girl | 2.8679 | .87789 | 53 |
|  | Total | 2.7018 | .98601 | 114 |
| Total | Boy | 2.5846 | .99444 | 130 |
|  | Girl | 2.8393 | .85481 | 112 |
|  | Total | 2.7025 | .93919 | 242 |

Tests of Between-Subjects Effects
Dependent Variable: Writing down answers

| Source | Type III Sum <br> of Squares | df | Mean Square | F |  |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $4.070^{\mathrm{a}}$ | 3 | 1.357 | 1.549 | Sig. |
| Intercept | 1764.074 | 1 | 1764.074 | 2013.584 | .000 |
| FME | .000 | 1 | .000 | .000 | .990 |
| Gender | 3.983 | 1 | 3.983 | 4.546 | .034 |
| FME *Gender | .167 | 1 | .167 | .191 | .662 |
| Error | 208.509 | 238 | .876 |  |  |
| Total | 1980.000 | 242 |  |  |  |
| Corrected Total | 212.579 | 241 |  |  |  |

a. $R$ Squared $=.019$ (Adjusted $R$ Squared $=.007$ )

## Profile Plots

Estimated Marginal Means of Writing down answers


## Copying down words

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :---: |
| FME | 1.00 | Low | 129 |
|  | 3.00 | High | 116 |
| Gender | 1.00 | Boy | 129 |
|  | 2.00 | Girl | 116 |

## Descriptive Statistics

Dependent Variable: Copying down words

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.7429 | 1.00269 | 70 |
|  | Girl | 3.2542 | .82197 | 59 |
|  | Total | 2.9767 | .95578 | 129 |
| High | Boy | 2.4407 | 1.08709 | 59 |
|  | Girl | 2.6667 | .95119 | 57 |
|  | Total | 2.5517 | 1.02444 | 116 |
| Total | Boy | 2.6047 | 1.04895 | 129 |
|  | Girl | 2.9655 | .93186 | 116 |
|  | Total | 2.7755 | 1.00949 | 245 |

## Tests of Between-Subjects Effects

Dependent Variable: Copying down words

|  |  |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| Corrected Model | $20.886^{\mathrm{a}}$ | 3 | 6.962 | 7.367 | .000 |
| Intercept | 1876.047 | 1 | 1876.047 | 1985.044 | .000 |
| FME | 12.044 | 1 | 12.044 | 12.744 | .000 |
| Gender | 8.272 | 1 | 8.272 | 8.753 | .003 |
| FME *Gender | 1.239 | 1 | 1.239 | 1.311 | .253 |
| Error | 227.767 | 241 | .945 |  |  |
| Total | 2136.000 | 245 |  |  |  |
| Corrected Total | 248.653 | 244 |  |  |  |

a. R Squared $=.084$ (Adjusted R Squared $=.073$ )

## Profile Plots

Estimated Marginal Means of Copying down words


## Writing labels or captions

Between-Subjects Factors

|  |  |  |  |
| :--- | :--- | :--- | :---: |
| FME | 1.00 | Value Label | N |
| Gender | 3.00 | High | 127 |
|  | 1.00 | Boy | 114 |
|  | 2.00 | Girl | 127 |

## Descriptive Statistics

Dependent Variable: Writing labels or captions

| FME |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
| Low | Gender | Mean | Std. Deviation | N |
|  | Boy | 2.4265 | .95129 | 68 |
|  | Girl | 2.7966 | .92438 | 59 |
|  | Total | 2.5984 | .95336 | 127 |
| High | Boy | 2.5593 | 1.07111 | 59 |
|  | Girl | 2.6909 | 1.01603 | 55 |
|  | Total | 2.6228 | 1.04238 | 114 |
| Total | Boy | 2.4882 | 1.00685 | 127 |
|  | Girl | 2.7456 | .96681 | 114 |
|  | Total | 2.6100 | .99443 | 241 |

## Tests of Between-Subjects Effects

Tests of Between-Subjects Effects

| Dependent Variable: Writing labels or captions |
| :--- |
| Source |
| Corrected Model |
| Intercept |
| FME |
| Type III Sum |
| of Squares |

Gender
FME *Gender
a. R Squared $=.020$ (Adjusted R Squared $=.008$ )

## Profile Plots

Estimated Marginal Means of Writing labels or captions


## Appendix 13 - Anovas for P6 High and Low FME <br> Overall Attitudes

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :---: |
| FME | 1.00 | Low | 129 |
|  | 3.00 | High | 121 |
|  | 1.00 | Boy | 132 |
|  | 2.00 | Girl | 118 |

## Descriptive Statistics

Dependent Variable: Do you like learning french

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.8714 | .97685 | 70 |
|  | Girl | 3.5085 | .72808 | 59 |
|  | Total | 3.1628 | .92526 | 129 |
| High | Boy | 2.6613 | 1.07037 | 62 |
|  | Girl | 3.2373 | .93475 | 59 |
|  | Total | 2.9421 | 1.04321 | 121 |
| Total | Boy | 2.7727 | 1.02332 | 132 |
|  | Girl | 3.3729 | .84526 | 118 |
|  | Total | 3.0560 | .98832 | 250 |

## Tests of Between-Subjects Effects

Dependent Variable: Do you like learning french

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $26.062^{\mathrm{a}}$ | 3 | 8.687 | 9.841 | .000 |
| Intercept | 2344.176 | 1 | 2344.176 | 2655.572 | .000 |
| FME | 3.602 | 1 | 3.602 | 4.081 | .044 |
| Gender | 22.880 | 1 | 22.880 | 25.919 | .000 |
| FME * Gender | .058 | 1 | .058 | .066 | .798 |
| Error | 217.154 | 246 | .883 |  |  |
| Total | 2578.000 | 250 |  |  |  |
| Corrected Total | 243.216 | 249 |  |  |  |

a. R Squared $=.107$ (Adjusted R Squared $=.096$ )

## Profile Plots

## Estimated Marginal Means of Do you like learning french



Gender
-Boy

- Girl

Perception of difficulty
Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| Gender | 1.00 | Low | 129 |
|  | 3.00 | High | 121 |
|  | 1.00 | Boy | 132 |
|  | 2.00 | Girl | 118 |

## Descriptive Statistics

| Gender | Mean | Std. Deviation | N |
| :---: | :---: | :---: | :---: |
| Boy | 2.9857 | . 87630 | 70 |
| Girl | 2.4915 | . 85848 | 59 |
| Total | 2.7597 | . 89944 | 129 |
| Boy | 3.3065 | 1.09528 | 62 |
| Girl | 3.0508 | 1.07357 | 59 |
| Total | 3.1818 | 1.08781 | 121 |
| Boy | 3.1364 | . 99443 | 132 |
| Girl | 2.7712 | 1.00776 | 118 |
| Total | 2.9640 | 1.01530 | 250 |

Dependent Variable: How did you find learning French

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $20.920^{\circ}$ | 3 | 6.973 | 7.276 | .000 |
| Intercept | 2177.728 | 1 | 2177.728 | 2272.350 | .000 |
| FME | 12.043 | 1 | 12.043 | 12.566 | .000 |
| Gender | 8.741 | 1 | 8.741 | 9.121 | .003 |
| FME * Gender | .885 | 1 | .885 | .924 | .337 |
| Error | 235.756 | 246 | .958 |  |  |
| Total | 2453.000 | 250 |  |  |  |
| Corrected Total | 256.676 | 249 |  |  |  |

a. R Squared $=.082$ (Adjusted R Squared $=.070$ )

## Profile Plots

Estimated Marginal Means of How did you find learning French


Gender

- Boy



## Appendix 14 - Frequencies and Tests for ALL P7 schools - Speaking Activities Answering the teacher's questions

Statistics
Answering the teacher's questions

| Boy | N | Valid <br> Missing | 247 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 1 |
|  | Median | 2.4049 |  |
|  | Std. Deviation | 2.0000 |  |
|  | Skewness | .75308 |  |
|  | Std. Error of Skewness |  | -.018 |
|  | Kurtosis | .155 |  |
|  | Std. Error of Kurtosis |  | -.354 |
|  | N | Valid | .309 |
|  | Missing | 258 |  |
|  |  |  | 0 |
|  | Mean | 2.4612 |  |
|  | Median | 2.0000 |  |
|  | Std. Deviation | .76934 |  |
|  | Skewness | .234 |  |
|  | Std. Error of Skewness |  | .152 |
|  | Kurtosis | -.318 |  |
|  | Std. Error of Kurtosis |  | .302 |

Answering the teacher's questions

| Gender |  |  |  |  |  | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Boy | Valid | 1.00 | 26 | 10.5 | 10.5 | 10.5 |
|  |  | 2.00 | 109 | 44.0 | 44.1 | 54.7 |
|  | 3.00 | 98 | 39.5 | 39.7 | 94.3 |  |
|  |  | 4.00 | 14 | 5.6 | 5.7 | 100.0 |
|  |  | Total | 247 | 99.6 | 100.0 |  |
|  | Missing | System | 1 | .4 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 20 | 7.8 | 7.8 | 7.8 |
|  |  | 2.00 | 123 | 47.7 | 47.7 | 55.4 |
|  | 3.00 | 91 | 35.3 | 35.3 | 90.7 |  |
|  |  | 2.00 | 9.3 | 9.3 | 100.0 |  |
|  |  | Total | 258 | 100.0 | 100.0 |  |

## T-Test

## Group Statistics

|  | Gender | N | Mean | Std. Deviation | Std. Error <br> Mean |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Answering the | Boy | 247 | 2.4049 | .75308 | .04792 |
| teacher's questions | Girl | 258 | 2.4612 | .76934 | .04790 |

Independent Samples Test

|  |  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| Answering the teacher's questions | Equal variances assumed |  | . 155 | . 694 | -. 832 | 503 | . 406 | -. 05638 | . 06778 | -. 18955 | . 07679 |
|  | Equal variances not assumed |  |  | -. 832 | 502.750 | . 406 | -. 05638 | . 06775 | -. 18949 | . 07673 |

## Speaking with a partner

Statistics
Speaking with a partner

| Boy | N | Valid <br> Missing | 247 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 1 |
|  | Median | 3.0891 |  |
|  | Std. Deviation | 3.0000 |  |
|  | Skewness | .84594 |  |
|  | Std. Error of Skewness |  | -.618 |
|  | Kurtosis | .155 |  |
|  | Std. Error of Kurtosis |  | -.319 |
| Girl | N | .309 |  |
|  | Mean | Missing | 258 |
|  | Median |  | 0 |
|  | Std. Deviation |  | 3.1899 |
|  | Skewness |  | .0000 |
|  | Std. Error of Skewness |  | -.73827 |
|  | Kurtosis | .152 |  |
|  | Std. Error of Kurtosis |  | .057 |
|  |  | .302 |  |

Speaking with a partner


## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Speaking with a partner | Boy | 247 | 245.18 | 60560.50 |
|  | Girl | 258 | 260.48 | 67204.50 |
|  | Total | 505 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Speaking with <br> a partner |
| :--- | ---: |
| Mann-Whitney U | 29932.500 |
| Wilcoxon W | 60560.500 |
| Z | -1.266 |
| Asymp. Sig. (2-tailed) | .206 |

a. Grouping Variable: Gender

## Repeating as a whole class

Statistics
Repeating as a whole class

| Boy | N <br> Mean <br> Median <br> Std. Deviation <br> Skewness <br> Std. Error of Skewness <br> Kurtosis <br> Std. Error of Kurtosis | Valid Missing | 245 3 2.5878 3.0000 .95678 .002 .156 -.958 .310 |
| :---: | :---: | :---: | :---: |
| Girl | N | Valid Missing | 253 5 |
|  | Mean |  | 2.9684 |
|  | Median |  | 3.0000 |
|  | Std. Deviation |  | . 85854 |
|  | Skewness |  | -. 394 |
|  | Std. Error of Skewness |  | . 153 |
|  | Kurtosis |  | -. 635 |
|  | Std. Error of Kurtosis |  | . 305 |

Repeating as a whole class

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boy | Valid | 1.00 | 32 | 12.9 | 13.1 | 13.1 |
|  |  | 2.00 | 87 | 35.1 | 35.5 | 48.6 |
|  |  | 3.00 | 76 | 30.6 | 31.0 | 79.6 |
|  |  | 4.00 | 50 | 20.2 | 20.4 | 100.0 |
|  |  | Total | 245 | 98.8 | 100.0 |  |
|  | Missing | System | 3 | 1.2 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 12 | 4.7 | 4.7 | 4.7 |
|  |  | 2.00 | 61 | 23.6 | 24.1 | 28.9 |
|  |  | 3.00 | 103 | 39.9 | 40.7 | 69.6 |
|  |  | 4.00 | 77 | 29.8 | 30.4 | 100.0 |
|  |  | Total | 253 | 98.1 | 100.0 |  |
|  | Missing | System | 5 | 1.9 |  |  |
|  | Total |  | 258 | 100.0 |  |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Repeating as | Boy | 245 | 221.27 | 54211.50 |
| a whole class | Girl | 253 | 276.84 | 70039.50 |
|  | Total | 498 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Repeating as <br> a whole class |
| :--- | ---: |
| Mann-Whitney U | 24076.500 |
| Wilcoxon W | 54211.500 |
| Z | -4.516 |
| Asymp. Sig. (2-tailed) | .000 |

a. Grouping Variable: Gender

## Repeating something by yourself

## Statistics



Repeating something by yourself

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boy | Valid | 1.00 | 97 | 39.1 | 40.9 | 40.9 |
|  |  | 2.00 | 74 | 29.8 | 31.2 | 72.2 |
|  |  | 3.00 | 54 | 21.8 | 22.8 | 94.9 |
|  |  | 4.00 | 12 | 4.8 | 5.1 | 100.0 |
|  |  | Total | 237 | 95.6 | 100.0 |  |
|  | Missing | System | 11 | 4.4 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 91 | 35.3 | 37.0 | 37.0 |
|  |  | 2.00 | 82 | 31.8 | 33.3 | 70.3 |
|  |  | 3.00 | 55 | 21.3 | 22.4 | 92.7 |
|  |  | 4.00 | 18 | 7.0 | 7.3 | 100.0 |
|  |  | Total | 246 | 95.3 | 100.0 |  |
|  | Missing Total | System | 12 258 | 4.7 100.0 |  |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Repeating something | Boy | 237 | 236.52 | 56055.50 |
| by yourself | Girl | 246 | 247.28 | 60830.50 |
|  | Total | 483 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Repeating <br> something by <br> yourself |
| :--- | ---: |
| Mann-Whitney U | 27852.500 |
| Wilcoxon W | 56055.500 |
| Z | -.895 |
| Asymp. Sig. (2-tailed) | .371 |

a. Grouping Variable: Gender

## Speaking when you play a game

## Frequencies

## Statistics

Speaking when you play a game

| Boy | N | Valid <br> Missing | 247 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 1 |
|  | Median | 3.1336 |  |
|  | Std. Deviation | 3.0000 |  |
|  | Skewness | .87557 |  |
|  | Std. Error of Skewness |  | -.667 |
|  | Kurtosis | .155 |  |
|  | Std. Error of Kurtosis |  | -.464 |
| Girl | N | Valid | 209 |
|  | Mean |  | 256 |
|  | Median | 2 |  |
|  | Std. Deviation | 3.0898 |  |
|  | Skewness | .84234 |  |
|  | Std. Error of Skewness | -.489 |  |
|  | Kurtosis | .152 |  |
|  | Std. Error of Kurtosis |  | -.669 |
|  |  | .303 |  |

Speaking when you play a game

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boy | Valid | 1.00 | 11 | 4.4 | 4.5 | 4.5 |
|  |  | 2.00 | 47 | 19.0 | 19.0 | 23.5 |
|  |  | 3.00 | 87 | 35.1 | 35.2 | 58.7 |
|  |  | 4.00 | 102 | 41.1 | 41.3 | 100.0 |
|  |  | Total | 247 | 99.6 | 100.0 |  |
|  | Missing | System | 1 | . 4 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 8 | 3.1 | 3.1 | 3.1 |
|  |  | 2.00 | 56 | 21.7 | 21.9 | 25.0 |
|  |  | 3.00 | 97 | 37.6 | 37.9 | 62.9 |
|  |  | 4.00 | 95 | 36.8 | 37.1 | 100.0 |
|  |  | Total | 256 | 99.2 | 100.0 |  |
|  | Missing | System | 2 | . 8 |  |  |
|  | Total |  | 258 | 100.0 |  |  |

## Mann-Whitney Test

Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Speaking when | Boy | 247 | 256.76 | 63418.50 |
| you play a game | Girl | 256 | 247.41 | 63337.50 |
|  | Total | 503 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Speaking <br> when you <br> play a game |
| :--- | ---: |
| Mann-Whitney U | 30441.500 |
| Wilcoxon W | 63337.500 |
| Z | -.767 |
| Asymp. Sig. (2-tailed) | .443 |

a. Grouping Variable: Gender

## Singing songs

## Statistics

Singing songs

| Boy | N | Valid <br> Missing | 246 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 2 |
|  | Median | 2.5407 |  |
|  | Std. Deviation | 3.0000 |  |
|  | Skewness | 1.10858 |  |
|  | Std. Error of Skewness |  | -.140 |
|  | Kurtosis | .155 |  |
|  | Std. Error of Kurtosis |  | -1.320 |
| Girl | N | Valid | .309 |
|  | Mean | 252 |  |
|  | Median | 6 |  |
|  | Std. Deviation |  | 2.8889 |
|  | Skewness | 3.0000 |  |
|  | Std. Error of Skewness |  | 1.10934 |
|  | Kurtosis | -.484 |  |
|  | Std. Error of Kurtosis |  | .153 |
|  |  | -1.161 |  |
|  |  | .306 |  |

Singing songs

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Boy | Valid | 1.00 | 62 | 25.0 | 25.2 | 25.2 |
|  |  | 2.00 | 47 | 19.0 | 19.1 | 44.3 |
|  | 3.00 | 79 | 31.9 | 32.1 | 76.4 |  |
|  |  | 4.00 | 58 | 23.4 | 23.6 | 100.0 |
|  | Total | 246 | 99.2 | 100.0 |  |  |
|  | Missing | System | 2 | .8 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 40 | 15.5 | 15.9 | 15.9 |
|  |  | 2.00 | 50 | 19.4 | 19.8 | 35.7 |
|  |  | 3.00 | 60 | 23.3 | 23.8 | 59.5 |
|  |  | 4.00 | 102 | 39.5 | 40.5 | 100.0 |
|  |  | Total | 252 | 97.7 | 100.0 |  |
|  |  | 6 | 2.3 |  |  |  |
|  | Missing | System | 258 | 100.0 |  |  |
|  |  |  |  |  |  |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Singing songs | Boy | 246 | 226.89 | 55814.00 |
|  | Girl | 252 | 271.58 | 68437.00 |
|  | Total | 498 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Singing <br> songs |
| :--- | ---: |
| Mann-Whitney U | 25433.000 |
| Wilcoxon W | 55814.000 |
| Z | -3.595 |
| Asymp. Sig. (2-tailed) | .000 |

a. Grouping Variable: Gender

## Appendix 15 - Frequencies and Tests for ALL P7 schools - Listening Activities Listening to instructions

Statistics
Listening to instructions

| Boy | N | Valid |  |
| :--- | :--- | :--- | ---: |
|  | Missing | 242 |  |
|  | Mean | 6 |  |
|  | Median | 2.2355 |  |
|  | Std. Deviation | 2.0000 |  |
|  | Skewness | .83386 |  |
|  | Std. Error of Skewness |  | .313 |
|  | Kurtosis | .156 |  |
|  | Std. Error of Kurtosis |  | -.402 |
| Girl | N | Valid | .312 |
|  | Mean | 256 |  |
|  | Median | 2.3945 |  |
|  | Std. Deviation |  | 2.0000 |
|  | Skewness | .78504 |  |
|  | Std. Error of Skewness | .206 |  |
|  | Kurtosis | .152 |  |
|  | Std. Error of Kurtosis |  | -.328 |
|  |  |  |  |
|  |  | .303 |  |

## Listening to instructions

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Boy | Valid | 1.00 | 44 | 17.7 | 18.2 | 18.2 |
|  |  | 2.00 | 115 | 46.4 | 47.5 | 65.7 |
|  |  | 3.00 | 65 | 26.2 | 26.9 | 92.6 |
|  | 4.00 | 18 | 7.3 | 7.4 | 100.0 |  |
|  |  | Total | 242 | 97.6 | 100.0 |  |
|  | Missing | System | 6 | 2.4 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 27 | 10.5 | 10.5 | 10.5 |
|  |  | 2.00 | 122 | 47.3 | 47.7 | 58.2 |
|  |  | 3.00 | 86 | 33.3 | 33.6 | 91.8 |
|  |  | 4.00 | 21 | 8.1 | 8.2 | 100.0 |
|  |  | Total | 256 | 99.2 | 100.0 |  |
|  | Missing | System | 2 | .8 |  |  |
|  |  |  | 258 | 100.0 |  |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Listening to instructions | Boy | 242 | 235.60 | 57016.00 |
|  | Girl | 256 | 262.64 | 67235.00 |
|  | Total | 498 |  |  |

## Test Statistics ${ }^{\text {a }}$

|  | Listening to <br> instructions |
| :--- | ---: |
| Mann-Whitney U | 27613.000 |
| Wilcoxon W | 57016.000 |
| Z | -2.258 |
| Asymp. Sig. (2-tailed) | .024 |

a. Grouping Variable: Gender

## Listening to the cassette

## Statistics

Listening to the cassette


## Listening to the cassette

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boy | Valid | 1.00 | 52 | 21.0 | 25.9 | 25.9 |
|  |  | 2.00 | 52 | 21.0 | 25.9 | 51.7 |
|  |  | 3.00 | 66 | 26.6 | 32.8 | 84.6 |
|  |  | 4.00 | 31 | 12.5 | 15.4 | 100.0 |
|  |  | Total | 201 | 81.0 | 100.0 |  |
|  | Missing | System | 47 | 19.0 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 37 | 14.3 | 17.9 | 17.9 |
|  |  | 2.00 | 68 | 26.4 | 32.9 | 50.7 |
|  |  | 3.00 | 71 | 27.5 | 34.3 | 85.0 |
|  |  | 4.00 | 31 | 12.0 | 15.0 | 100.0 |
|  |  | Total | 207 | 80.2 | 100.0 |  |
|  | Missing | System | 51 | 19.8 |  |  |
|  | Total |  | 258 | 100.0 |  |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Listening to the cassette | Boy | 201 | 199.82 | 40164.50 |
|  | Girl | 207 | 209.04 | 43271.50 |
|  | Total | 408 |  |  |

## Test Statistics ${ }^{\text {a }}$

|  | Listening to <br> the cassette |
| :--- | ---: |
| Mann-Whitney U | 19863.500 |
| Wilcoxon W | 40164.500 |
| Z | -.822 |
| Asymp. Sig. (2-tailed) | .411 |

a. Grouping Variable: Gender

## Listening to stories

## Statistics

Listening to stories

| Boy | N | Valid <br> Missing | 126 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 122 |
|  | Median | 2.4206 |  |
|  | Std. Deviation | 2.0000 |  |
|  | Skewness | .96626 |  |
|  | Std. Error of Skewness |  | .147 |
|  | Kurtosis | .216 |  |
|  | Std. Error of Kurtosis |  | -.920 |
| Girl | N Valid | .428 |  |
|  | Mean | 116 |  |
|  | Medissing | 142 |  |
|  |  | 2.6983 |  |
|  | Std. Deviation |  | 1.0000 |
|  | Skewness |  | -.241 |
|  | Std. Error of Skewness |  | .225 |
|  | Kurtosis | -1.131 |  |
|  | Std. Error of Kurtosis |  | .446 |

Listening to stories

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Boy | Valid | 1.00 | 23 | 9.3 | 18.3 | 18.3 |
|  |  | 2.00 | 47 | 19.0 | 37.3 | 55.6 |
|  |  | 3.00 | 36 | 14.5 | 28.6 | 84.1 |
|  |  | 4.00 | 20 | 8.1 | 15.9 | 100.0 |
|  | Motal | 126 | 50.8 | 100.0 |  |  |
|  | Missing | System | 122 | 49.2 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 19 | 7.4 | 16.4 | 16.4 |
|  |  | 2.00 | 29 | 11.2 | 25.0 | 41.4 |
|  |  | 3.00 | 36 | 14.0 | 31.0 | 72.4 |
|  |  | 4.00 | 32 | 12.4 | 27.6 | 100.0 |
|  |  | Total | 116 | 45.0 | 100.0 |  |
|  | Missing | System | 142 | 55.0 |  |  |
|  |  | 258 | 100.0 |  |  |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Listening to stories | Boy | 126 | 112.46 | 14170.00 |
|  | Girl | 116 | 131.32 | 15233.00 |
|  | Total | 242 |  |  |

## Test Statistics ${ }^{\text {a }}$

|  | Listening to <br> stories |
| :--- | ---: |
| Mann-Whitney U | 6169.000 |
| Wilcoxon W | 14170.000 |
| Z | -2.174 |
| Asymp. Sig. (2-tailed) | .030 |

a. Grouping Variable: Gender

## Listening to songs

Statistics
Listening to songs

| Boy | N | Valid <br> Missing | 222 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 26 |
|  | Median | 2.6081 |  |
|  | Std. Deviation | 3.0000 |  |
|  | Skewness | 1.03536 |  |
|  | Std. Error of Skewness |  | -.095 |
|  | Kurtosis | .163 |  |
|  | Std. Error of Kurtosis |  | -1.151 |
| Girl | N | Valid | .325 |
|  | Mean | 218 |  |
|  | Median | 40 |  |
|  | Std. Deviation |  | 2.9679 |
|  | Skewness | 3.0000 |  |
|  | Std. Error of Skewness |  | .99948 |
|  | Kurtosis | -.466 |  |
|  | Std. Error of Kurtosis |  | .165 |
|  |  | -.997 |  |
|  |  | .328 |  |

Listening to songs

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Boy | Valid | 1.00 | 38 | 15.3 | 17.1 | 17.1 |
|  |  | 2.00 | 65 | 26.2 | 29.3 | 46.4 |
|  |  | 3.00 | 65 | 26.2 | 29.3 | 75.7 |
|  | 4.00 | 54 | 21.8 | 24.3 | 100.0 |  |
|  | Total | 222 | 89.5 | 100.0 |  |  |
|  | Missing | System | 26 | 10.5 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 19 | 7.4 | 8.7 | 8.7 |
|  |  | 2.00 | 55 | 21.3 | 25.2 | 33.9 |
|  |  | 3.00 | 58 | 22.5 | 26.6 | 60.6 |
|  |  | 4.00 | 86 | 33.3 | 39.4 | 100.0 |
|  |  | Total | 218 | 84.5 | 100.0 |  |
|  | Missing | System | 40 | 15.5 |  |  |
|  |  | 258 | 100.0 |  |  |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Listening to songs | Boy | 222 | 199.47 | 44281.50 |
|  | Girl | 218 | 241.92 | 52738.50 |
|  | Total | 440 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Listening to <br> songs |
| :--- | ---: |
| Mann-Whitney U | 19528.500 |
| Wilcoxon W | 44281.500 |
| Z | -3.644 |
| Asymp. Sig. (2-tailed) | .000 |

a. Grouping Variable: Gender

## Listening to PE instructions

Statistics
Listening to PE instructions

| Boy | N | Valid <br> Missing | 103 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 145 |
|  | Median | 2.8544 |  |
|  | Std. Deviation | 3.0000 |  |
|  | Skewness | .97425 |  |
|  | Std. Error of Skewness |  | -.415 |
|  | Kurtosis | .238 |  |
|  | Std. Error of Kurtosis |  | -.825 |
| Girl | N | Valid | .472 |
|  | Mean | 90 |  |
|  | Median |  | 168 |
|  | Std. Deviation |  | 2.8111 |
|  | Skewness | 3.0000 |  |
|  | Std. Error of Skewness | .95863 |  |
|  | Kurtosis | -.392 |  |
|  | Std. Error of Kurtosis |  | .254 |
|  |  | -.760 |  |
|  |  | .503 |  |

Listening to PE instructions

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boy | Valid | 1.00 | 11 | 4.4 | 10.7 | 10.7 |
|  |  | 2.00 | 24 | 9.7 | 23.3 | 34.0 |
|  |  | 3.00 | 37 | 14.9 | 35.9 | 69.9 |
|  |  | 4.00 | 31 | 12.5 | 30.1 | 100.0 |
|  |  | Total | 103 | 41.5 | 100.0 |  |
|  | Missing | System | 145 | 58.5 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 10 | 3.9 | 11.1 | 11.1 |
|  |  | 2.00 | 21 | 8.1 | 23.3 | 34.4 |
|  |  | 3.00 | 35 | 13.6 | 38.9 | 73.3 |
|  |  | 4.00 | 24 | 9.3 | 26.7 | 100.0 |
|  |  | Total | 90 | 34.9 | 100.0 |  |
|  | Missing | System | 168 | 65.1 |  |  |
|  | Total |  | 258 | 100.0 |  |  |

## T-Test

Group Statistics

|  | Gender | N | Mean | Std. Deviation | Std. Error <br> Mean |
| :--- | :--- | ---: | ---: | ---: | :---: |
| Listening to PE | Boy | 103 | 2.8544 | .97425 | .09600 |
| instructions | Girl | 90 | 2.8111 | .95863 | .10105 |

Independent Samples Test


## Listening to play games

Statistics
Listening to play games

| Boy | N | Valid <br> Missing | 240 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 8 |
|  | Median | 3.2792 |  |
|  | Std. Deviation | 3.5000 |  |
|  | Skewness | .84906 |  |
|  | Std. Error of Skewness |  | -.941 |
|  | Kurtosis | .157 |  |
|  | Std. Error of Kurtosis |  | .012 |
|  | Girl | Valid | .313 |
|  | Mean | 252 |  |
|  | Median | 6.2540 |  |
|  |  |  | 3.0000 |
|  | Std. Deviation | .78772 |  |
|  | Skewness | -.680 |  |
|  | Std. Error of Skewness | .153 |  |
|  | Kurtosis | -.463 |  |
|  | Std. Error of Kurtosis | .306 |  |


| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boy | Valid | 1.00 | 9 | 3.6 | 3.8 | 3.8 |
|  |  | 2.00 | 35 | 14.1 | 14.6 | 18.3 |
|  |  | 3.00 | 76 | 30.6 | 31.7 | 50.0 |
|  |  | 4.00 | 120 | 48.4 | 50.0 | 100.0 |
|  |  | Total | 240 | 96.8 | 100.0 |  |
|  | Missing | System | 8 | 3.2 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 4 | 1.6 | 1.6 | 1.6 |
|  |  | 2.00 | 42 | 16.3 | 16.7 | 18.3 |
|  |  | 3.00 | 92 | 35.7 | 36.5 | 54.8 |
|  |  | 4.00 | 114 | 44.2 | 45.2 | 100.0 |
|  |  | Total | 252 | 97.7 | 100.0 |  |
|  | Missing | System | 6 | . 2.3 |  |  |
|  | Total |  | 258 | 100.0 |  |  |

## NPar Tests

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Listening to play games | Boy | 240 | 250.85 | 60205.00 |
|  | Girl | 252 | 242.35 | 61073.00 |
|  | Total | 492 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Listening to <br> play games |
| :--- | ---: |
| Mann-Whitney U | 29195.000 |
| Wilcoxon W | 61073.000 |
| Z | -.720 |
| Asymp. Sig. (2-tailed) | .472 |

a. Grouping Variable: Gender

## Appendix 16 - Frequencies and Tests for ALL P7 schools - Reading Activities

 Reading words on flashcardsStatistics
Reading words on flashcards

| Boy | N | Valid <br> Missing | 240 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 8 |
|  | Median | 2.5083 |  |
|  | Std. Deviation | 3.0000 |  |
|  | Skewness | .91016 |  |
|  | Std. Error of Skewness |  | -.075 |
|  | Kurtosis | .157 |  |
|  | Std. Error of Kurtosis |  | -.785 |
|  | N | Valid | .313 |
|  | Missing | 248 |  |
|  |  |  | 10 |
|  | Mean | 2.7258 |  |
|  | Median | 3.0000 |  |
|  | Std. Deviation | .88933 |  |
|  | Skewness | -.164 |  |
|  | Std. Error of Skewness |  | .155 |
|  | Kurtosis | -.745 |  |
|  | Std. Error of Kurtosis |  | .308 |

Reading words on flashcards

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boy | Valid | 1.00 | 36 | 14.5 | 15.0 | 15.0 |
|  |  | 2.00 | 79 | 31.9 | 32.9 | 47.9 |
|  |  | 3.00 | 92 | 37.1 | 38.3 | 86.3 |
|  |  | 4.00 | 33 | 13.3 | 13.8 | 100.0 |
|  |  | Total | 240 | 96.8 | 100.0 |  |
|  | Missing | System | 8 | 3.2 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 21 | 8.1 | 8.5 | 8.5 |
|  |  | 2.00 | 78 | 30.2 | 31.5 | 39.9 |
|  |  | 3.00 | 97 | 37.6 | 39.1 | 79.0 |
|  |  | 4.00 | 52 | 20.2 | 21.0 | 100.0 |
|  |  | Total | 248 | 96.1 | 100.0 |  |
|  | Missing | System | 10 | 3.9 |  |  |
|  | Total |  | 258 | 100.0 |  |  |

## Mann-Whitney Test

Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Reading words | Boy | 240 | 228.89 | 54934.00 |
| on flashcards | Girl | 248 | 259.60 | 64382.00 |
|  | Total | 488 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Reading <br> words on <br> flashcards |
| :--- | ---: |
| Mann-Whitney U | 26014.000 |
| Wilcoxon W | 54934.000 |
| Z | -2.533 |
| Asymp. Sig. (2-tailed) | .011 |

a. Grouping Variable: Gender

## Reading stories, songs

Statistics
Reading stories, songs

| Boy | N | Valid <br> Missing | 142 |
| :--- | :--- | :--- | ---: |
|  |  |  | 106 |
|  | Mean | 2.2042 |  |
|  | Median | 2.0000 |  |
|  | Std. Deviation | 1.02824 |  |
|  | Skewness | .374 |  |
|  | Std. Error of Skewness |  | .203 |
|  | Kurtosis | -1.004 |  |
|  | Std. Error of Kurtosis |  | .404 |
| Girl | N | 142 |  |
|  | Mealid | 116 |  |
|  | Mean |  | 2.7254 |
|  |  | 3.0000 |  |
|  | Median | .99034 |  |
|  |  | -.179 |  |
|  |  | .203 |  |
|  | Std. Deviation | -1.041 |  |
|  |  | .404 |  |

Reading stories, songs

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boy | Valid | 1.00 | 43 | 17.3 | 30.3 | 30.3 |
|  |  | 2.00 | 47 | 19.0 | 33.1 | 63.4 |
|  |  | 3.00 | 32 | 12.9 | 22.5 | 85.9 |
|  |  | 4.00 | 20 | 8.1 | 14.1 | 100.0 |
|  |  | Total | 142 | 57.3 | 100.0 |  |
|  | Missing | System | 106 | 42.7 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 17 | 6.6 | 12.0 | 12.0 |
|  |  | 2.00 | 43 | 16.7 | 30.3 | 42.3 |
|  |  | 3.00 | 44 | 17.1 | 31.0 | 73.2 |
|  |  | 4.00 | 38 | 14.7 | 26.8 | 100.0 |
|  |  | Total | 142 | 55.0 | 100.0 |  |
|  | Missing | System | 116 | 45.0 |  |  |
|  | Total |  | 258 | 100.0 |  |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Reading stories, songs | Boy | 142 | 122.62 | 17412.00 |
|  | Girl | 142 | 162.38 | 23058.00 |
|  | Total | 284 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Reading <br> stories, <br> songs |
| :--- | ---: |
| Mann-Whitney U | 7259.000 |
| Wilcoxon W | 17412.000 |
| Z | -4.228 |
| Asymp. Sig. (2-tailed) | .000 |

a. Grouping Variable: Gender

## Reading instructions

Statistics
Reading instructions

| Boy | N | Valid <br> Missing | 212 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 36 |
|  | Median | 2.1226 |  |
|  | Std. Deviation | 2.0000 |  |
|  | Skewness | .87842 |  |
|  | Std. Error of Skewness |  | .436 |
|  | Kurtosis | .167 |  |
|  | Std. Error of Kurtosis |  | -.480 |
|  | N | Valid | .333 |
|  | Missing | 220 |  |
|  |  |  | 38 |
|  | Mean | 2.2182 |  |
|  | Median | 2.0000 |  |
|  | Std. Deviation | .86412 |  |
|  | Skewness | .248 |  |
|  | Std. Error of Skewness |  | .164 |
|  | Kurtosis | -.613 |  |
|  | Std. Error of Kurtosis |  | .327 |

Reading instructions

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boy | Valid | 1.00 | 54 | 21.8 | 25.5 | 25.5 |
|  |  | 2.00 | 94 | 37.9 | 44.3 | 69.8 |
|  |  | 3.00 | 48 | 19.4 | 22.6 | 92.5 |
|  |  | 4.00 | 16 | 6.5 | 7.5 | 100.0 |
|  |  | Total | 212 | 85.5 | 100.0 |  |
|  | Missing | System | 36 | 14.5 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 47 | 18.2 | 21.4 | 21.4 |
|  |  | 2.00 | 94 | 36.4 | 42.7 | 64.1 |
|  |  | 3.00 | 63 | 24.4 | 28.6 | 92.7 |
|  |  | 4.00 | 16 | 6.2 | 7.3 | 100.0 |
|  |  | Total | 220 | 85.3 | 100.0 |  |
|  | Missing | System | 38 | 14.7 |  |  |
|  | Total |  | 258 | 100.0 |  |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Reading instructions | Boy | 212 | 209.22 | 44355.00 |
|  | Girl | 220 | 223.51 | 49173.00 |
|  | Total | 432 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Reading <br> instructions |
| :--- | ---: |
| Mann-Whitney U | 21777.000 |
| Wilcoxon W | 44355.000 |
| Z | -1.263 |
| Asymp. Sig. (2-tailed) | .207 |

a. Grouping Variable: Gender

## Reading wordcards

Statistics
Reading word cards

| Boy | N | Valid <br> Missing | 216 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 32 |
|  | Median | 2.5370 |  |
|  | Std. Deviation | 3.0000 |  |
|  | Skewness | .93437 |  |
|  | Std. Error of Skewness |  | -.057 |
|  | Kurtosis | .166 |  |
|  | Std. Error of Kurtosis |  | -.856 |
|  | N | Valid | .330 |
|  | Missing | 211 |  |
|  |  |  | 47 |
|  | Mean | 2.7393 |  |
|  | Median | 3.0000 |  |
|  | Std. Deviation | .89086 |  |
|  | Skewness | -.238 |  |
|  | Std. Error of Skewness |  | .167 |
|  | Kurtosis | -.681 |  |
|  | Std. Error of Kurtosis |  | .333 |

Reading word cards

| Gender |  |  |  |  |  | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Boy | Valid | 1.00 | 32 | 12.9 | 14.8 | 14.8 |
|  |  | 2.00 | 71 | 28.6 | 32.9 | 47.7 |
|  |  | 3.00 | 78 | 31.5 | 36.1 | 83.8 |
|  | 4.00 | 35 | 14.1 | 16.2 | 100.0 |  |
|  | Missing | System | 216 | 87.1 | 100.0 |  |
|  |  | 32 | 12.9 |  |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 19 | 7.4 | 9.0 | 9.0 |
|  |  | 2.00 | 61 | 23.6 | 28.9 | 37.9 |
|  |  | 3.00 | 87 | 33.7 | 41.2 | 79.1 |
|  |  | 4.00 | 44 | 17.1 | 20.9 | 100.0 |
|  |  | Total | 211 | 81.8 | 100.0 |  |
|  |  | 47 | 18.2 |  |  |  |
|  | Missing | System | 258 | 100.0 |  |  |
|  |  |  |  |  |  |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Reading word cards | Boy | 216 | 201.40 | 43502.50 |
|  | Girl | 211 | 226.90 | 47875.50 |
|  | Total | 427 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Reading <br> word cards |
| :--- | ---: |
| Mann-Whitney U | 20066.500 |
| Wilcoxon W | 43502.500 |
| Z | -2.244 |
| Asymp. Sig. (2-tailed) | .025 |

a. Grouping Variable: Gender

## Appendix 17 - Frequencies and Tests for ALL P7 schools - Writing Activities

 Writing down answers
## Statistics

Writing down answers

| Boy | N | Valid <br> Missing | 242 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 6 |
|  | Median | 2.4298 |  |
|  | Std. Deviation | 2.0000 |  |
|  | Skewness | .97117 |  |
|  | Std. Error of Skewness |  | .118 |
|  | Kurtosis | .156 |  |
|  | Std. Error of Kurtosis |  | -.955 |
| Girl | N | .312 |  |
|  | Mealid | 255 |  |
|  | Median | 3 |  |
|  | Std. Deviation |  | 2.5412 |
|  | Skewness | 3.0000 |  |
|  | Std. Error of Skewness | .92498 |  |
|  |  | .014 |  |
|  | Kurtosis | .153 |  |
|  | Std. Error of Kurtosis |  | -.843 |
|  |  | .304 |  |

## Writing down answers

| Gender |  |  |  |  | Frequency | Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | Valid Percent | Cumulative |
| :---: |
| Percent |$|$

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Writing down answers | Boy | 242 | 240.63 | 58233.50 |
|  | Girl | 255 | 256.94 | 65519.50 |
|  | Total | 497 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Writing down <br> answers |
| :--- | ---: |
| Mann-Whitney U | 28830.500 |
| Wilcoxon W | 58233.500 |
| Z | -1.324 |
| Asymp. Sig. (2-tailed) | .186 |

a. Grouping Variable: Gender

## Copying down words

Statistics
Copying down words

| Boy | N | Valid <br> Missing | 246 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 2 |
|  | Median | 2.4878 |  |
|  | Std. Deviation | 2.5000 |  |
|  | Skewness | .96355 |  |
|  | Std. Error of Skewness |  | -.007 |
|  | Kurtosis | .155 |  |
|  | Std. Error of Kurtosis |  | -.950 |
| Girl | N | .309 |  |
|  | Mean | Missing | 254 |
|  | Median | 4 |  |
|  | Std. Deviation |  | 2.7165 |
|  | Skewness | 3.0000 |  |
|  | Std. Error of Skewness | .95261 |  |
|  | Kurtosis | -.152 |  |
|  | Std. Error of Kurtosis | .153 |  |
|  |  | -.951 |  |
|  |  | .304 |  |

Copying down words

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boy | Valid | 1.00 | 43 | 17.3 | 17.5 | 17.5 |
|  |  | 2.00 | 80 | 32.3 | 32.5 | 50.0 |
|  |  | 3.00 | 83 | 33.5 | 33.7 | 83.7 |
|  |  | 4.00 | 40 | 16.1 | 16.3 | 100.0 |
|  |  | Total | 246 | 99.2 | 100.0 |  |
|  | Missing | System | 2 | . 8 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 27 | 10.5 | 10.6 | 10.6 |
|  |  | 2.00 | 80 | 31.0 | 31.5 | 42.1 |
|  |  | 3.00 | 85 | 32.9 | 33.5 | 75.6 |
|  |  | 4.00 | 62 | 24.0 | 24.4 | 100.0 |
|  |  | Total | 254 | 98.4 | 100.0 |  |
|  | Missing | System | 4 | - 1.6 |  |  |
|  | Total |  | 258 | 100.0 |  |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Copying down words | Boy | 246 | 234.35 | 57650.00 |
|  | Girl | 254 | 266.14 | 67600.00 |
|  | Total | 500 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Copying <br> down words |
| :--- | ---: |
| Mann-Whitney U | 27269.000 |
| Wilcoxon W | 57650.000 |
| Z | -2.567 |
| Asymp. Sig. (2-tailed) | .010 |

a. Grouping Variable: Gender

## Writing labels or captions

Statistics
Writing labels or captions

| Boy | N | Valid <br> Missing | 219 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 29 |
|  | Median | 2.4840 |  |
|  | Std. Deviation |  | .0000 |
|  | Skewness | .93528 |  |
|  | Std. Error of Skewness |  | -.123 |
|  | Kurtosis | .164 |  |
|  | Std. Error of Kurtosis |  | -.873 |
| Girl | N | .327 |  |
|  | Mean | Missing | 229 |
|  | Median |  | 29 |
|  | Std. Deviation |  | 2.6856 |
|  | Skewness | 3.0000 |  |
|  | Std. Error of Skewness |  | .94906 |
|  | Kurtosis | -.110 |  |
|  | Std. Error of Kurtosis |  | .161 |
|  |  | -.946 |  |
|  |  | .320 |  |

Writing labels or captions

| $\begin{aligned} & \text { Gender } \\ & \hline \text { Boy } \end{aligned}$ |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid | 1.00 | 39 | 15.7 | 17.8 | 17.8 |
| Boy |  | 2.00 | 64 | 25.8 | 29.2 | 47.0 |
|  |  | 3.00 | 87 | 35.1 | 39.7 | 86.8 |
|  |  | 4.00 | 29 | 11.7 | 13.2 | 100.0 |
|  |  | Total | 219 | 88.3 | 100.0 |  |
|  | Missing | System | 29 | 11.7 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 25 | 9.7 | 10.9 | 10.9 |
|  |  | 2.00 | 75 | 29.1 | 32.8 | 43.7 |
|  |  | 3.00 | 76 | 29.5 | 33.2 | 76.9 |
|  |  | 4.00 | 53 | 20.5 | 23.1 | 100.0 |
|  |  | Total | 229 | 88.8 | 100.0 |  |
|  | Missing | System | 29 | 11.2 |  |  |
|  | Total |  | 258 | 100.0 |  |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Writing labels or captions | Boy | 219 | 212.13 | 46456.00 |
|  | Girl | 229 | 236.33 | 54120.00 |
|  | Total | 448 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Writing labels <br> or captions |
| :--- | ---: |
| Mann-Whitney U | 22366.000 |
| Wilcoxon W | 46456.000 |
| Z | -2.070 |
| Asymp. Sig. (2-tailed) | .038 |

a. Grouping Variable: Gender

## Appendix 18 - Frequencies and Tests for ALL P7 schools

## Overall Attitudes

Statistics
Do you like learning french

| Boy | N | Valid <br> Missing | 245 |
| :--- | :--- | :--- | ---: |
|  | Mean |  | 3 |
|  | Median | 2.6612 |  |
|  | Std. Deviation | 3.0000 |  |
|  | Skewness | .96852 |  |
|  | Std. Error of Skewness |  | -.149 |
|  | Kurtosis | .156 |  |
|  | Std. Error of Kurtosis |  | -.958 |
|  | Girl | Valid | .310 |
|  | Missing | 258 |  |
|  |  | 0 |  |
|  |  | 2.8915 |  |
|  | Mean | 3.0000 |  |
|  |  | .91456 |  |
|  |  | -.337 |  |
|  | Std. Deviation | .152 |  |
|  |  | -.814 |  |
|  | Std. Error of Skewness |  | .302 |

## Do you like learning french

| Gender |  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Boy | Valid | 1.00 | 32 | 12.9 | 13.1 | 13.1 |
|  |  | 2.00 | 74 | 29.8 | 30.2 | 43.3 |
|  | 3.00 | 84 | 33.9 | 34.3 | 77.6 |  |
|  |  | 4.00 | 55 | 22.2 | 22.4 | 100.0 |
|  |  | Total | 245 | 98.8 | 100.0 |  |
|  | Missing | System | 3 | 1.2 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 18 | 7.0 | 7.0 | 7.0 |
|  |  | 2.00 | 69 | 26.7 | 26.7 | 33.7 |
|  |  | 3.00 | 94 | 36.4 | 36.4 | 70.2 |
|  |  | 4.00 | 77 | 29.8 | 29.8 | 100.0 |
|  |  | Total | 258 | 100.0 | 100.0 |  |

## Mann-Whitney Test

## Ranks

|  | Gender | N | Mean Rank | Sum of Ranks |
| :--- | :--- | ---: | ---: | ---: |
| Do you like | Boy | 245 | 235.25 | 57636.50 |
| learning french | Girl | 258 | 267.91 | 69119.50 |
|  | Total | 503 |  |  |

Test Statistics ${ }^{\text {a }}$

|  | Do you like <br> learning <br> french |
| :--- | ---: |
| Mann-Whitney U | 27501.500 |
| Wilcoxon W | 57636.500 |
| Z | -2.635 |
| Asymp. Sig. (2-tailed) | .008 |

a. Grouping Variable: Gender

## Perception of difficulty

Statistics
How did you find learning French

| Boy | N <br> Mean <br> Median <br> Std. Deviation <br> Skewness <br> Std. Error of Skewness <br> Kurtosis <br> Std. Error of Kurtosis | Valid Missing | 245 3 3.0735 3.0000 .79619 .162 .156 .487 .310 |
| :---: | :---: | :---: | :---: |
| Girl | N | Valid Missing | 255 |
|  | Mean |  | 2.8745 |
|  | Median |  | 3.0000 |
|  | Std. Deviation |  | . 86939 |
|  | Skewness |  | -. 044 |
|  | Std. Error of Skewness |  | . 153 |
|  | Kurtosis |  | . 395 |
|  | Std. Error of Kurtosis |  | . 304 |

## How did you find learning French

| Gender | Valid |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boy |  | 1.00 | 5 | 2.0 | 2.0 | 2.0 |
|  |  | 2.00 | 43 | 17.3 | 17.6 | 19.6 |
|  |  | 3.00 | 137 | 55.2 | 55.9 | 75.5 |
|  |  | 4.00 | 49 | 19.8 | 20.0 | 95.5 |
|  |  | 5.00 | 11 | 4.4 | 4.5 | 100.0 |
|  |  | Total | 245 | 98.8 | 100.0 |  |
|  | Missing | System | 3 | 1.2 |  |  |
|  | Total |  | 248 | 100.0 |  |  |
| Girl | Valid | 1.00 | 17 | 6.6 | 6.7 | 6.7 |
|  |  | 2.00 | 54 | 20.9 | 21.2 | 27.8 |
|  |  | 3.00 | 137 | 53.1 | 53.7 | 81.6 |
|  |  | 4.00 | 38 | 14.7 | 14.9 | 96.5 |
|  |  | 5.00 | 9 | . 3.5 | 3.5 | 100.0 |
|  |  | Total | 255 | 98.8 | 100.0 |  |
|  | Missing | System | 3 | 1.2 |  |  |
|  | Total |  | 258 | 100.0 |  |  |

## T-Test

Group Statistics

|  | Gender | N | Mean | Std. Deviation | Std. Error <br> Mean |
| :--- | :--- | ---: | ---: | ---: | :---: |
| How did you find | Boy | 245 | 3.0735 | .79619 | .05087 |
| learning French | Girl | 255 | 2.8745 | .86939 | .05444 |

## Independent Samples Test

|  |  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| How did you find learning French | Equal variances assumed |  | 2.079 | . 150 | 2.666 | 498 | . 008 | . 19896 | . 07464 | . 05231 | . 34561 |
|  | Equal variances not assumed |  |  | 2.670 | 496.866 | . 008 | . 19896 | . 07451 | . 05257 | . 34535 |

## Ppendix 19 - Anovas for P7 High and Low FME

Peaking Activities - Answering the Teacher's Questions
Between-Subjects Factors

|  |  | Value Label |
| :--- | :--- | :--- |
| FME | 1.00 | Low |
| Gender | 3.00 | High |
|  | 1.00 | Boy |
|  | 2.00 | Girl |

## Descriptive Statistics

ependent Variable: Answering the teacher's questions

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.4070 | .65759 | 86 |
|  | Girl | 2.3765 | .70671 | 85 |
|  | Total | 2.3918 | .68061 | 171 |
| High | Boy | 2.5577 | .77746 | 52 |
|  | Girl | 2.4828 | .90304 | 58 |
|  | Total | 2.5182 | .84302 | 110 |
| Total | Boy | 2.4638 | .70617 | 138 |
|  | Girl | 2.4196 | .79090 | 143 |
|  | Total | 2.4413 | .74948 | 281 |

## Tests of Between-Subjects Effects

ependent Variable: Answering the teacher's questions

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $1.263^{\text {a }}$ | 3 | .421 | .747 | .525 |
| Intercept | 1612.117 | 1 | 1612.117 | 2862.202 | .000 |
| FME | 1.103 | 1 | 1.103 | 1.959 | .163 |
| Gender | .186 | 1 | .186 | .330 | .566 |
| FME *Gender | .033 | 1 | .033 | .059 | .809 |
| Error | 156.018 | 277 | .563 |  |  |
| Total | 1832.000 | 281 |  |  |  |
| Corrected Total | 157.281 | 280 |  |  |  |

[^1]
## rofile Plots

Estimated Marginal Means of Answering the teacher's questions


## Speaking with a partner

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 171 |
| Gender | 3.00 | High | 110 |
|  | 1.00 | Boy | 138 |
|  | 2.00 | Girl | 143 |

## Descriptive Statistics

Dependent Variable: Speaking with a partner

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 3.1163 | .74231 | 86 |
|  | Girl | 3.2471 | .67092 | 85 |
|  | Total | 3.1813 | .70869 | 171 |
| High | Boy | 2.9423 | .93753 | 52 |
|  | Girl | 3.1034 | .87238 | 58 |
|  | Total | 3.0273 | .90320 | 110 |
| Total | Boy | 3.0507 | .82234 | 138 |
|  | Girl | 3.1888 | .75946 | 143 |
|  | Total | 3.1210 | .79257 | 281 |

## Tests of Between-Subjects Effects

Dependent Variable: Speaking with a partner

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $3.031^{\mathrm{a}}$ | 3 | 1.010 | 1.619 | .185 |
| Intercept | 2572.225 | 1 | 2572.225 | 4121.983 | .000 |
| FME | 1.685 | 1 | 1.685 | 2.700 | .101 |
| Gender | 1.423 | 1 | 1.423 | 2.281 | .132 |
| FME *Gender | .015 | 1 | .015 | .025 | .875 |
| Error | 172.855 | 277 | .624 |  |  |
| Total | 2913.000 | 281 |  |  |  |
| Corrected Total | 175.886 | 280 |  |  |  |

a. R Squared $=.017$ (Adjusted R Squared $=.007$ )

Profile Plots

Estimated Marginal Means of Speaking with a partner


## eaking when you play a game

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 170 |
|  | 3.00 | High | 110 |
| Gender | 1.00 | Boy | 138 |
|  | 2.00 | Girl | 142 |

## Descriptive Statistics

Dependent Variable: Speaking when you play a game

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 3.1395 | .82836 | 86 |
|  | Girl | 3.0833 | .83894 | 84 |
|  | Total | 3.1118 | .83161 | 170 |
| High | Boy | 3.2115 | .89303 | 52 |
|  | Girl | 3.1724 | .86121 | 58 |
|  | Total | 3.1909 | .87257 | 110 |
| Total | Boy | 3.1667 | .85079 | 138 |
|  | Girl | 3.1197 | .84620 | 142 |
|  | Total | 3.1429 | .84727 | 280 |

## Tests of Between-Subjects Effects

Dependent Variable: Speaking when you play a game

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $.595^{\text {a }}$ | 3 | .198 | .274 | .844 |
| Intercept | 2648.653 | 1 | 2648.653 | 3660.793 | .000 |
| FME | .432 | 1 | .432 | .598 | .440 |
| Gender | .151 | 1 | .151 | .209 | .648 |
| FME *Gender | .005 | 1 | .005 | .007 | .935 |
| Error | 199.691 | 276 | .724 |  |  |
| Total | 2966.000 | 280 |  |  |  |
| Corrected Total | 200.286 | 279 |  |  |  |

a. R Squared $=.003$ (Adjusted R Squared $=-.008$ )

## rofile Plots

## Estimated Marginal Means of Speaking when you play a game



## Repeating as a whole class

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 168 |
| Gender | 3.00 | High | 109 |
|  | 1.00 | Boy | 138 |
|  | 2.00 | Girl | 139 |

## Descriptive Statistics

Dependent Variable: Repeating as a whole class

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.7209 | .86298 | 86 |
|  | Girl | 2.9390 | .83662 | 82 |
|  | Total | 2.8274 | .85469 | 168 |
| High | Boy | 2.7692 | .94174 | 52 |
|  | Girl | 3.0351 | .88570 | 57 |
|  | Total | 2.9083 | .91834 | 109 |
| Total | Boy | 2.7391 | .89037 | 138 |
|  | Girl | 2.9784 | .85523 | 139 |
|  | Total | 2.8592 | .87954 | 277 |

## Tests of Between-Subjects Effects

Dependent Variable: Repeating as a whole class

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $4.351^{\mathrm{a}}$ | 3 | 1.450 | 1.893 | .131 |
| Intercept | 2168.888 | 1 | 2168.888 | 2830.905 | .000 |
| FME | .344 | 1 | .344 | .449 | .503 |
| Gender | 3.865 | 1 | 3.865 | 5.045 | .026 |
| FME *Gender | .038 | 1 | .038 | .049 | .825 |
| Error | 209.158 | 273 | .766 |  |  |
| Total | 2478.000 | 277 |  |  |  |
| Corrected Total | 213.509 | 276 |  |  |  |

a. R Squared $=.020$ (Adjusted R Squared $=.010$ )

Estimated Marginal Means of Repeating as a whole class


## Repeating something by yourself

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 169 |
| Gender | 3.00 | High | 108 |
|  | 1.00 | Boy | 138 |
|  | 2.00 | Girl | 139 |

Descriptive Statistics
Dependent Variable: Repeating something by yourself

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 1.9419 | .85893 | 86 |
|  | Girl | 1.9157 | .91338 | 83 |
|  | Total | 1.9290 | .88354 | 169 |
| High | Boy | 1.9615 | 1.00901 | 52 |
|  | Girl | 2.1786 | .97435 | 56 |
|  | Total | 2.0741 | .99253 | 108 |
| Total | Boy | 1.9493 | .91478 | 138 |
|  | Girl | 2.0216 | .94384 | 139 |
|  | Total | 1.9856 | .92850 | 277 |

## Tests of Between-Subjects Effects

Dependent Variable: Repeating something by yourself

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $2.686^{\mathrm{a}}$ | 3 | .895 | 1.039 | .376 |
| Intercept | 1052.632 | 1 | 1052.632 | 1221.512 | .000 |
| FME | 1.314 | 1 | 1.314 | 1.525 | .218 |
| Gender | .599 | 1 | .599 | .695 | .405 |
| FME *Gender | .974 | 1 | .974 | 1.130 | .289 |
| Error | 235.256 | 273 | .862 |  |  |
| Total | 1330.000 | 277 |  |  |  |
| Corrected Total | 237.942 | 276 |  |  |  |

a. R Squared $=.011$ (Adjusted R Squared $=.000$ )

Estimated Marginal Means of Repeating something by yourself


Singing songs

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 169 |
| Gender | 3.00 | High | 108 |
|  | 1.00 | Boy | 138 |
|  | 2.00 | Girl | 139 |

## Descriptive Statistics

Dependent Variable: Singing songs

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.6977 | 1.11745 | 86 |
|  | Girl | 2.4337 | 1.09536 | 83 |
|  | Total | 2.5680 | 1.11127 | 169 |
| High | Boy | 2.7692 | 1.13094 | 52 |
|  | Girl | 3.1964 | 1.05175 | 56 |
|  | Total | 2.9907 | 1.10644 | 108 |
| Total | Boy | 2.7246 | 1.11897 | 138 |
|  | Girl | 2.7410 | 1.13787 | 139 |
|  | Total | 2.7329 | 1.12648 | 277 |

## Tests of Between-Subjects Effects

Dependent Variable: Singing songs

|  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| Corrected Model | $19.636^{\mathrm{a}}$ | 3 | 6.545 | 5.405 | .001 |
| Intercept | 2026.610 | 1 | 2026.610 | 1673.541 | .000 |
| FME | 11.454 | 1 | 11.454 | 9.458 | .002 |
| Gender | .439 | 1 | .439 | .362 | .548 |
| FME * Gender | 7.861 | 1 | 7.861 | 6.492 | .011 |
| Error | 330.595 | 273 | 1.211 |  |  |
| Total | 2419.000 | 277 |  |  |  |
| Corrected Total | 350.231 | 276 |  |  |  |

a. R Squared $=.056$ (Adjusted R Squared $=.046$ )

## Profile Plots

## Estimated Marginal Means of Singing songs



## Appendix 20 - Anovas for P7 High and Low FME Listening Activities - Listening to Instructions

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 170 |
| Gender | 3.00 | High | 111 |
|  | 1.00 | Boy | 138 |
|  | 2.00 | Girl | 143 |

## Descriptive Statistics

Dependent Variable: Listening to instructions

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.2235 | .74604 | 85 |
|  | Girl | 2.2941 | .73717 | 85 |
|  | Total | 2.2588 | .74027 | 170 |
| High | Boy | 2.3019 | .91115 | 53 |
|  | Girl | 2.5690 | .79719 | 58 |
|  | Total | 2.4414 | .86007 | 111 |
| Total | Boy | 2.2536 | .81107 | 138 |
|  | Girl | 2.4056 | .77130 | 143 |
|  | Total | 2.3310 | .79332 | 281 |

Tests of Between-Subjects Effects
Dependent Variable: Listening to instructions

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $4.427^{\text {a }}$ | 3 | 1.476 | 2.379 | .070 |
| Intercept | 1477.965 | 1 | 1477.965 | 2383.066 | .000 |
| FME | 2.092 | 1 | 2.092 | 3.373 | .067 |
| Gender | 1.912 | 1 | 1.912 | 3.083 | .080 |
| FME *Gender | .647 | 1 | .647 | 1.044 | .308 |
| Error | 171.794 | 277 | .620 |  |  |
| Total | 1703.000 | 281 |  |  |  |
| Corrected Total | 176.221 | 280 |  |  |  |

a. R Squared $=.025$ (Adjusted R Squared $=.015$ )

Estimated Marginal Means of Listening to instructions


## listening to the cassette

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :---: |
| FME | 1.00 | Low | 120 |
| Gender | 3.00 | High | 103 |
|  | 1.00 | Boy | 110 |
|  | 2.00 | Girl | 113 |

## Descriptive Statistics

Dependent Variable: Listening to the cassette

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.4000 | .99490 | 60 |
|  | Girl | 2.4167 | .94406 | 60 |
|  | Total | 2.4083 | .96577 | 120 |
| High | Boy | 2.1600 | 1.07590 | 50 |
|  | Girl | 2.3208 | 1.05199 | 53 |
|  | Total | 2.2427 | 1.06150 | 103 |
| Total | Boy | 2.2909 | 1.03468 | 110 |
|  | Girl | 2.3717 | .99278 | 113 |
|  | Total | 2.3318 | 1.01219 | 223 |

## Tests of Between-Subjects Effects

Dependent Variable: Listening to the cassette

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $2.193^{\text {a }}$ | 3 | .731 | .711 | .546 |
| Intercept | 1197.237 | 1 | 1197.237 | 1164.015 | .000 |
| FME | 1.563 | 1 | 1.563 | 1.519 | .219 |
| Gender | .436 | 1 | .436 | .424 | .516 |
| FME *Gender | .288 | 1 | .288 | .280 | .598 |
| Error | 225.251 | 219 | 1.029 |  |  |
| Total | 1440.000 | 223 |  |  |  |
| Corrected Total | 227.444 | 222 |  |  |  |

a. R Squared $=.010$ (Adjusted R Squared $=-.004$ )

## Profile Plots

Estimated Marginal Means of Listening to the cassette


## Listening to stories

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 39 |
|  | 3.00 | High | 79 |
| Gender | 1.00 | Boy | 66 |
|  | 2.00 | Girl | 52 |

## Descriptive Statistics

Dependent Variable: Listening to stories

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.4583 | .83297 | 24 |
|  | Girl | 2.1333 | .83381 | 15 |
|  | Total | 2.3333 | .83771 | 39 |
| High | Boy | 2.5952 | 1.03734 | 42 |
|  | Girl | 2.7027 | .87765 | 37 |
|  | Total | 2.6456 | .96128 | 79 |
| Total | Boy | 2.5455 | .96368 | 66 |
|  | Girl | 2.5385 | .89578 | 52 |
|  | Total | 2.5424 | .93044 | 118 |

Tests of Between-Subjects Effects
Dependent Variable: Listening to stories

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $3.748^{\mathrm{a}}$ | 3 | 1.249 | 1.460 | .229 |
| Intercept | 614.465 | 1 | 614.465 | 718.154 | .000 |
| FME | 3.134 | 1 | 3.134 | 3.663 | .058 |
| Gender | .297 | 1 | .297 | .347 | .557 |
| FME *Gender | 1.175 | 1 | 1.175 | 1.373 | .244 |
| Error | 97.540 | 114 | .856 |  |  |
| Total | 864.000 | 118 |  |  |  |
| Corrected Total | 101.288 | 117 |  |  |  |

a. R Squared $=.037$ (Adjusted R Squared $=.012$ )

## Profile Plots

## Estimated Marginal Means of Listening to stories



## Listening to songs

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 129 |
|  | 3.00 | High | 102 |
| Gender | 1.00 | Boy | 122 |
|  | 2.00 | Girl | 109 |

## Descriptive Statistics

Dependent Variable: Listening to songs

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.4306 | .94685 | 72 |
|  | Girl | 2.4035 | .90356 | 57 |
|  | Total | 2.4186 | .92447 | 129 |
| High | Boy | 2.7000 | 1.09265 | 50 |
|  | Girl | 3.3077 | .98097 | 52 |
|  | Total | 3.0098 | 1.07625 | 102 |
| Total | Boy | 2.5410 | 1.01352 | 122 |
|  | Girl | 2.8349 | 1.04096 | 109 |
|  | Total | 2.6797 | 1.03482 | 231 |

Tests of Between-Subjects Effects
Dependent Variable: Listening to songs

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $29.345^{\mathrm{a}}$ | 3 | 9.782 | 10.235 | .000 |
| Intercept | 1663.428 | 1 | 1663.428 | 1740.493 | .000 |
| FME | 19.492 | 1 | 19.492 | 20.395 | .000 |
| Gender | 4.771 | 1 | 4.771 | 4.992 | .026 |
| FME *Gender | 5.702 | 1 | 5.702 | 5.966 | .015 |
| Error | 216.949 | 227 | .956 |  |  |
| Total | 1905.000 | 231 |  |  |  |
| Corrected Total | 246.294 | 230 |  |  |  |

a. R Squared $=.119$ (Adjusted R Squared $=.108$ )

## Profile Plots

## Estimated Marginal Means of Listening to songs



## Listening to PE instructions

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 88 |
|  | 3.00 | High | 40 |
| Gender | 1.00 | Boy | 65 |
|  | 2.00 | Girl | 63 |

## Descriptive Statistics

Dependent Variable: Listening to PE instructions

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 3.0227 | .87574 | 44 |
|  | Girl | 3.0227 | .90190 | 44 |
|  | Total | 3.0227 | .88379 | 88 |
| High | Boy | 2.5714 | 1.02817 | 21 |
|  | Girl | 2.3158 | 1.00292 | 19 |
|  | Total | 2.4500 | 1.01147 | 40 |
| Total | Boy | 2.8769 | .94386 | 65 |
|  | Girl | 2.8095 | .98139 | 63 |
|  | Total | 2.8438 | .95931 | 128 |

Tests of Between-Subjects Effects
Dependent Variable: Listening to PE instructions

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $9.672^{\mathrm{a}}$ | 3 | 3.224 | 3.729 | .013 |
| Intercept | 820.309 | 1 | 820.309 | 948.842 | .000 |
| FME | 9.207 | 1 | 9.207 | 10.650 | .001 |
| Gender | .449 | 1 | .449 | .519 | .473 |
| FME * Gender | .449 | 1 | .449 | .519 | .473 |
| Error | 107.203 | 124 | .865 |  |  |
| Total | 1152.000 | 128 |  |  |  |
| Corrected Total | 116.875 | 127 |  |  |  |

a. R Squared $=.083$ (Adjusted R Squared $=.061$ )

## Profile Plots

Estimated Marginal Means of Listening to PE instructions


## istening to play games

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 166 |
|  | 3.00 | High | 107 |
| Gender | 1.00 | Boy | 135 |
|  | 2.00 | Girl | 138 |

## Descriptive Statistics

Dependent Variable: Listening to play games

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 3.3012 | .85161 | 83 |
|  | Girl | 3.2410 | .79003 | 83 |
|  | Total | 3.2711 | .81946 | 166 |
| High | Boy | 3.1923 | .86406 | 52 |
|  | Girl | 3.2000 | .84765 | 55 |
|  | Total | 3.1963 | .85163 | 107 |
| Total | Boy | 3.2593 | .85486 | 135 |
|  | Girl | 3.2246 | .81068 | 138 |
|  | Total | 3.2418 | .83147 | 273 |

Tests of Between-Subjects Effects
Dependent Variable: Listening to play games

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $.516^{\mathrm{a}}$ | 3 | .172 | .247 | .863 |
| Intercept | 2719.939 | 1 | 2719.939 | 3901.634 | .000 |
| FME | .365 | 1 | .365 | .524 | .470 |
| Gender | .045 | 1 | .045 | .064 | .800 |
| FME * Gender | .075 | 1 | .075 | .108 | .743 |
| Error | 187.528 | 269 | .697 |  |  |
| Total | 3057.000 | 273 |  |  |  |
| Corrected Total | 188.044 | 272 |  |  |  |

a. R Squared $=.003$ (Adjusted R Squared $=-.008$ )

## Profile Plots

Estimated Marginal Means of Listening to play games


## Appendix 21 Anovas for P7 High and Low FME <br> Reading Activities - Reading words on Flashcards

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 168 |
|  | 3.00 | High | 98 |
| Gender | 1.00 | Boy | 132 |
|  | 2.00 | Girl | 134 |

## Descriptive Statistics

Dependent Variable: Reading words on flashcards

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.5529 | .87974 | 85 |
|  | Girl | 2.6988 | .82247 | 83 |
|  | Total | 2.6250 | .85252 | 168 |
| High | Boy | 2.4468 | .95117 | 47 |
|  | Girl | 2.6471 | .99646 | 51 |
|  | Total | 2.5510 | .97518 | 98 |
| Total | Boy | 2.5152 | .90364 | 132 |
|  | Girl | 2.6791 | .88938 | 134 |
|  | Total | 2.5977 | .89855 | 266 |

Tests of Between-Subjects Effects
Dependent Variable: Reading words on flashcards

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $2.213^{\mathrm{a}}$ | 3 | .738 | .913 | .435 |
| Intercept | 1654.342 | 1 | 1654.342 | 2046.972 | .000 |
| FME | .385 | 1 | .385 | .477 | .491 |
| Gender | 1.852 | 1 | 1.852 | 2.291 | .131 |
| FME *Gender | .046 | 1 | .046 | .057 | .812 |
| Error | 211.746 | 262 | .808 |  |  |
| Total | 2009.000 | 266 |  |  |  |
| Corrected Total | 213.959 | 265 |  |  |  |

a. R Squared $=.010$ (Adjusted R Squared $=-.001$ )

## Profile Plots

Estimated Marginal Means of Reading words on flashcards


## Reading stories, songs

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | :--- |
| FME | 1.00 | Low | 64 |
|  | 3.00 | High | 78 |
| Gender | 1.00 | Boy | 75 |
|  | 2.00 | Girl | 67 |

## Descriptive Statistics

Dependent Variable: Reading stories, songs

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.2903 | 1.00643 | 31 |
|  | Girl | 2.4545 | .93845 | 33 |
|  | Total | 2.3750 | .96773 | 64 |
| High | Boy | 2.4318 | 1.08687 | 44 |
|  | Girl | 2.7941 | 1.00843 | 34 |
|  | Total | 2.5897 | 1.06217 | 78 |
| Total | Boy | 2.3733 | 1.04975 | 75 |
|  | Girl | 2.6269 | .98220 | 67 |
|  | Total | 2.4930 | 1.02277 | 142 |

## Tests of Between-Subjects Effects

Dependent Variable: Reading stories, songs

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $4.570^{\circ}$ | 3 | 1.523 | 1.471 | .225 |
| Intercept | 866.755 | 1 | 866.755 | 836.899 | .000 |
| FME | 2.018 | 1 | 2.018 | 1.948 | .165 |
| Gender | 2.417 | 1 | 2.417 | 2.334 | .129 |
| FME * Gender | .342 | 1 | .342 | .330 | .566 |
| Error | 142.923 | 138 | 1.036 |  |  |
| Total | 1030.000 | 142 |  |  |  |
| Corrected Total | 147.493 | 141 |  |  |  |

a. R Squared $=.031$ (Adjusted R Squared $=.010$ )

## Profile Plots

Estimated Marginal Means of Reading stories, songs


## Reading instructions

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 141 |
|  | 3.00 | High | 94 |
| Gender | 1.00 | Boy | 119 |
|  | 2.00 | Girl | 116 |

## Descriptive Statistics

Dependent Variable: Reading instructions

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.1429 | .82155 | 70 |
|  | Girl | 2.1268 | .80940 | 71 |
|  | Total | 2.1348 | .81258 | 141 |
| High | Boy | 2.3265 | 1.00805 | 49 |
|  | Girl | 2.2667 | .88933 | 45 |
|  | Total | 2.2979 | .94845 | 94 |
| Total | Boy | 2.2185 | .90347 | 119 |
|  | Girl | 2.1810 | .84028 | 116 |
|  | Total | 2.2000 | .87119 | 235 |

## Tests of Between-Subjects Effects

Dependent Variable: Reading instructions

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $1.594^{\mathrm{a}}$ | 3 | .531 | .697 | .555 |
| Intercept | 1106.321 | 1 | 1106.321 | 1451.997 | .000 |
| FME | 1.475 | 1 | 1.475 | 1.935 | .166 |
| Gender | .081 | 1 | .081 | .107 | .744 |
| FME * Gender | .027 | 1 | .027 | .035 | .851 |
| Error | 176.006 | 231 | .762 |  |  |
| Total | 1315.000 | 235 |  |  |  |
| Corrected Total | 177.600 | 234 |  |  |  |

a. R Squared $=.009$ (Adjusted R Squared $=-.004$ )

## Profile Plots

Estimated Marginal Means of Reading instructions


## Reading word cards

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 139 |
|  | 3.00 | High | 94 |
| Gender | 1.00 | Boy | 121 |
|  | 2.00 | Girl | 112 |

## Descriptive Statistics

Dependent Variable: Reading word cards

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.4865 | .81498 | 74 |
|  | Girl | 2.7846 | .73935 | 65 |
|  | Total | 2.6259 | .79193 | 139 |
| High | Boy | 2.3617 | 1.11171 | 47 |
|  | Girl | 2.7660 | .93745 | 47 |
|  | Total | 2.5638 | 1.04273 | 94 |
| Total | Boy | 2.4380 | .93891 | 121 |
|  | Girl | 2.7768 | .82429 | 112 |
|  | Total | 2.6009 | .89990 | 233 |

## Tests of Between-Subjects Effects

Dependent Variable: Reading word cards

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $7.132^{\mathrm{a}}$ | 3 | 2.377 | 3.012 | .031 |
| Intercept | 1513.397 | 1 | 1513.397 | 1917.413 | .000 |
| FME | .288 | 1 | .288 | .365 | .546 |
| Gender | 6.905 | 1 | 6.905 | 8.748 | .003 |
| FME *Gender | .158 | 1 | .158 | .200 | .655 |
| Error | 180.748 | 229 | .789 |  |  |
| Total | 1764.000 | 233 |  |  |  |
| Corrected Total | 187.880 | 232 |  |  |  |

a. R Squared $=.038$ (Adjusted R Squared $=.025$ )

## Profile Plots

Estimated Marginal Means of Reading word cards


## Appendix 22 - Anovas for P7 High and Low FME <br> Writing Activities - Writing down answers

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 171 |
|  | 3.00 | High | 111 |
| Gender | 1.00 | Boy | 139 |
|  | 2.00 | Girl | 143 |

## Descriptive Statistics

Dependent Variable: Writing down answers

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.3256 | .86012 | 86 |
|  | Girl | 2.3765 | .87255 | 85 |
|  | Total | 2.3509 | .86415 | 171 |
| High | Boy | 2.5660 | .99052 | 53 |
|  | Girl | 2.5690 | .91980 | 58 |
|  | Total | 2.5676 | .94985 | 111 |
| Total | Boy | 2.4173 | .91603 | 139 |
|  | Girl | 2.4545 | .89385 | 143 |
|  | Total | 2.4362 | .90344 | 282 |

## Tests of Between-Subjects Effects

Dependent Variable: Writing down answers

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $3.271^{\mathrm{a}}$ | 3 | 1.090 | 1.341 | .261 |
| Intercept | 1626.295 | 1 | 1626.295 | 1999.782 | .000 |
| FME | 3.150 | 1 | 3.150 | 3.874 | .050 |
| Gender | .049 | 1 | .049 | .060 | .807 |
| FME *Gender | .039 | 1 | .039 | .048 | .828 |
| Error | 226.080 | 278 | .813 |  |  |
| Total | 1903.000 | 282 |  |  |  |
| Corrected Total | 229.351 | 281 |  |  |  |

a. R Squared $=.014$ (Adjusted R Squared $=.004$ )

## Profile Plots

Estimated Marginal Means of Writing down answers


## Copying down words

## Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 171 |
|  | 3.00 | High | 111 |
| Gender | 1.00 | Boy | 139 |
|  | 2.00 | Girl | 143 |

## Descriptive Statistics

Dependent Variable: Copying down words

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.5581 | .95307 | 86 |
|  | Girl | 2.6118 | .86043 | 85 |
|  | Total | 2.5848 | .90593 | 171 |
| High | Boy | 2.6415 | .94247 | 53 |
|  | Girl | 2.8793 | .93804 | 58 |
|  | Total | 2.7658 | .94345 | 111 |
| Total | Boy | 2.5899 | .94649 | 139 |
|  | Girl | 2.7203 | .89918 | 143 |
|  | Total | 2.6560 | .92347 | 282 |

## Tests of Between-Subjects Effects

Dependent Variable: Copying down words

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $3.893^{\mathrm{a}}$ | 3 | 1.298 | 1.530 | .207 |
| Intercept | 1920.805 | 1 | 1920.805 | 2265.125 | .000 |
| FME | 2.070 | 1 | 2.070 | 2.441 | .119 |
| Gender | 1.427 | 1 | 1.427 | 1.683 | .196 |
| FME *Gender | .570 | 1 | .570 | .672 | .413 |
| Error | 235.741 | 278 | .848 |  |  |
| Total | 2229.000 | 282 |  |  |  |
| Corrected Total | 239.635 | 281 |  |  |  |

a. R Squared $=.016$ (Adjusted R Squared $=.006$ )

## Profile Plots

Estimated Marginal Means of Copying down words


## Writing labels or captions

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 153 |
|  | 3.00 | High | 98 |
| Gender | 1.00 | Boy | 124 |
|  | 2.00 | Girl | 127 |

## Descriptive Statistics

Dependent Variable: Writing labels or captions

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.4805 | .91206 | 77 |
|  | Girl | 2.6053 | .89560 | 76 |
|  | Total | 2.5425 | .90312 | 153 |
| High | Boy | 2.4894 | .88151 | 47 |
|  | Girl | 2.6078 | 1.05978 | 51 |
|  | Total | 2.5510 | .97518 | 98 |
| Total | Boy | 2.4839 | .89700 | 124 |
|  | Girl | 2.6063 | .96080 | 127 |
|  | Total | 2.5458 | .93000 | 251 |

## Tests of Between-Subjects Effects

Dependent Variable: Writing labels or captions

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corrected Model | $.943^{a}$ | 3 | .314 | .361 | .782 |
| Intercept | 1546.983 | 1 | 1546.983 | 1774.918 | .000 |
| FME | .002 | 1 | .002 | .002 | .962 |
| Gender | .883 | 1 | .883 | 1.013 | .315 |
| FME *Gender | .001 | 1 | .001 | .001 | .979 |
| Error | 215.280 | 247 | .872 |  |  |
| Total | 1843.000 | 251 |  |  |  |
| Corrected Total | 216.223 | 250 |  |  |  |

a. R Squared $=.004$ (Adjusted R Squared $=-.008$ )

## Profile Plots

Estimated Marginal Means of Writing labels or captions


## Appendix 23 - Anovas for High and Low FME Overall Attitudes

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 171 |
|  | 3.00 | High | 109 |
| Gender | 1.00 | Boy | 137 |
|  | 2.00 | Girl | 143 |

## Descriptive Statistics

Dependent Variable: Do you like learning french

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 2.4767 | .99086 | 86 |
|  | Girl | 2.7294 | .86449 | 85 |
|  | Total | 2.6023 | .93607 | 171 |
| High | Boy | 2.6667 | .93095 | 51 |
|  | Girl | 2.8621 | .90705 | 58 |
|  | Total | 2.7706 | .91927 | 109 |
| Total | Boy | 2.5474 | .96992 | 137 |
|  | Girl | 2.7832 | .88126 | 143 |
|  | Total | 2.6679 | .93155 | 280 |

Tests of Between-Subjects Effects
Dependent Variable: Do you like learning french

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $5.651^{\mathrm{a}}$ | 3 | 1.884 | 2.199 | .088 |
| Intercept | 1912.921 | 1 | 1912.921 | 2232.795 | .000 |
| FME | 1.727 | 1 | 1.727 | 2.016 | .157 |
| Gender | 3.333 | 1 | 3.333 | 3.890 | .050 |
| FME *Gender | .054 | 1 | .054 | .064 | .801 |
| Error | 236.460 | 276 | .857 |  |  |
| Total | 2235.000 | 280 |  |  |  |
| Corrected Total | 242.111 | 279 |  |  |  |

a. R Squared $=.023$ (Adjusted R Squared $=.013$ )

## Profile Plots

Estimated Marginal Means of Do you like learning french


## Perception of difficulty

Between-Subjects Factors

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| FME | 1.00 | Low | 171 |
|  | 3.00 | High | 110 |
| Gender | 1.00 | Boy | 139 |
|  | 2.00 | Girl | 142 |

## Descriptive Statistics

Dependent Variable: How did you find learning French

| FME | Gender | Mean | Std. Deviation | N |
| :--- | :--- | ---: | ---: | ---: |
| Low | Boy | 3.0233 | .75110 | 86 |
|  | Girl | 2.8471 | .79441 | 85 |
|  | Total | 2.9357 | .77571 | 171 |
| High | Boy | 3.1698 | .91433 | 53 |
|  | Girl | 2.9298 | .92311 | 57 |
|  | Total | 3.0455 | .92256 | 110 |
| Total | Boy | 3.0791 | .81707 | 139 |
|  | Girl | 2.8803 | .84620 | 142 |
|  | Total | 2.9786 | .83639 | 281 |

## Tests of Between-Subjects Effects

Dependent Variable: How did you find learning French

| Source | Type III Sum <br> of Squares | df | Mean Square | F | Sig. |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Corrected Model | $3.716^{\text {a }}$ | 3 | 1.239 | 1.785 | .150 |
| Intercept | 2395.806 | 1 | 2395.806 | 3453.638 | .000 |
| FME | .879 | 1 | .879 | 1.268 | .261 |
| Gender | 2.896 | 1 | 2.896 | 4.175 | .042 |
| FME * Gender | .068 | 1 | .068 | .098 | .754 |
| Error | 192.156 | 277 | .694 |  |  |
| Total | 2689.000 | 281 |  |  |  |
| Corrected Total | 195.872 | 280 |  |  |  |

a. R Squared $=.019$ (Adjusted R Squared $=.008$ )

## Profile Plots

Estimated Marginal Means of How did you find learning French


## P7. Question 1 - Key Issues. Example of Coding

## Positive

- I enjoy teaching it. The pupils love it. (T24)
- I love French, volunteered for it. (T26)
- Course was excellent. We have enough resources. (T26)
- It is a fun aspect of the curriculum. The children enjoy it. (T30)
- I enjoy teaching it. I love French. It is very rewarding seeing the development of language. (T31)
- We can see the benefits of starting at this stage. (T32)
- I enjoy teaching it. (T34)
- The training was very good. The materials are very helpful. The last 7 days while teaching the tutors were very supportive. (T36)
- The children are very receptive. They like the cultural aspects. (T36)
- The children enjoy it. (T38)
- We do songs, activities which they would not be willing to do in P7 but it is cool in French. They can be children again. (T43)


## Resources

- More resources are needed. (T28)
- There is too much in the training folder. The Council folder is sufficient. The Collins pack has been bought by the cluster as the children like to have a book. (T33)
- Glasgow folder is a great pack. (T41)
- Bought Glasgow pack which is really good. (T42)


## Time Factor

- It is 90 mins out of p.s. curriculum. We need evidence to show it is working. Has become another core thing and we need to know it is worth it. (T23)
- They are changing it. They want more written work. There is not enough time to get through the content. It was based on S \& L initially. The allotted time is not sufficient now there is more emphasis on writing. It was communication. W means something different. (T23)
- There is too much content in the pack and pressure on time. We should start at P5 to get through the content. (T24)
- I am a lot less happy about teaching French because of the time constraints. We need more time to do writing. We need to start earlier. There is too much pressure. (T24)
- Supposed to do 90 mins but we cannot. (T26)
- 45 min p.w. is given..... There is curricular overload. (T27)
- Too much in the curriculum \& Fr slips because of English, Maths etc (T28)
- We need to know what happens in S1. If it is done again in S1 we are wasting valuable curricular time. (T28)
- There is pressure on the curriculum. It is not dropped but pushed to fit it all in. (T32)
- There is not enough time. It gets put on the side eg. for school show. (T33)
- We have introduced new units from the Glasgow pack so new vocabulary has been added to the core. P6 is not nearly enough. It should be in P5. There is
too much to get through in P6/P7. There is not enough time to consolidate. The $\mathrm{T} / \mathrm{T}$ is so crammed full. (T34)
- If there is staff absence, French is the first to go as DHT needs to cover class or take over from the HT. (T35)
- Would like to start P4/P5 to give more time for each topic. There is pressure to get everything done. (T35)
- We missed out some of P6 because of teacher and curricular complications last session. (T36)
- We need time to review resources. They are bought speculatively. (T36)
- This is new pressure, added pressure. There is not enough time to do everything. We are having to find an extra slice in the day. (T37)
- There are unrealistic expectations from external sources like HMI. There is not enough time in the day for what we are trying to achieve. (T37)
- There have been $t / t$ problems so we have not done it for a couple of months. (T38)
- Teacher absence impacts on training eg. teacher going on school trip to York. (T42)


## Time/Earlier Start

- Hopefully, it will go down further in P5. (T25)
- It should go down to P4. (T30)
- We should be starting at an earlier age. The younger are more motivated. (T40)


## Time/ Work factor

- The changes are worthwhile but I am worried about the speed of changes with new packs and there is a need to review resources. (T25)
- We need time to build up resources. (T27)
- There is a need for time to meet with other colleagues teaching French. (T31)


## Changing priorities

- We need to know if we are getting results. We need research. They are moving the goalposts. It should be about confidence building. (T23)
- Is this where this W thing has come from? (T23)
- They are changing it. They want more written work. There is not enough time to get through the content. It was based on S \& L initially. The allotted time is not sufficient now there is more emphasis on writing. It was communication. W means something different. (T24)
- It was all meant to be fun. Now with 5-14 coming in there is assessment. It is not what it started as. It is becoming more formal. I have concerns about that. Formality should be in the sec. (T26)
- We need to have guidelines as to exactly what we should be doing. Should they be writing or speaking it? (T38)
- It is far more formal now. It has been hijacked. Fun was how it was introduced and it has become more formal. W. was not what it was when I started it. (T43)


[^0]:    (Repeat key reasons and say "I am writing down x or y." to ensure key reasons are noted.)

[^1]:    a. R Squared $=.008$ (Adjusted R Squared $=-.003$ )

