APPENDIX A ASSIGNMENT POSTER: MEASUREMENT

PLAGIARISM DECLARATION¹⁴

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You are planning to teach an aspect/aspects related to the MEASUREMENT LO to your learners.

• Design a poster that you could use to help you to teach it. Please look at the rubric below to guide you (what you need to do). The size of the poster must be 4 times the size A3.

NB: DO NOT PRINT FROM THE INTERNET and paste

PLEASE INCLUDE A COPY OF THE ASSESSMENT RUBRIC & the ABOVE WHEN YOU HAND IN YOUR ASSIGNMENT (Both Pages!!)

¹⁴ I acknowledge Dr Les Meiring: This is based upon his work

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STUDENT NO:	

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POSTER RUBRIC

CRITERIA	MARK ALLOCATON	WEIGHTING	STUDENT SELF ASSESSMENT MARK	TUTOR"S MARK
POSTER &WRITTEN IMPLEMENT	ATION (20)			
Correct paper size	(1)	X 1		
Easy to see, clear headings and well- spaced on poster. Neatness, Creativeness and Attractiveness	(1234)	X 1		
Content well explained on poster. Clear that the poster will be useful in the classroom to teach the topic decided upon related to measurement. No cutting and pasting from internet texts, etc.	(12345)	X 3		
TOTAL:			_20	_20
REMARKS:				

¹⁵⁵

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APPENDIX B ASSIGNMENT: POSTER & IMPLEMENTATION

This assignment consists of <u>TWO SECTIONS</u>. Please ensure that you hand in both sections at the same time.

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- This essay on implementation is my own work. I did not use another student's work from a previous year or from this year
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SIGNATURE:

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SECTION 1

You are planning to teach an aspect/aspects related to the MEASUREMENT Learning Outcome (Content Area) to your learners.

- Design a poster that you could use to help you to teach it. Please look at the rubric to guide you (what you need to do).
- Be creative: You could even have objects that can move, be stuck to the poster, etc.
- The size of the poster must be <u>A1 size (see dimensions below)</u>. This is similar in size as FOUR A3 pages.

A1	841 x 594 mm
A2	594 x 420 mm
A3	420 x 297 mm
Α4	297 x 210 mm

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STUDENT NAME:	
STUDENT NO:	

CRITERIA	MARK ALLOCATON	WEIGHTING	STUDENT SELF ASSESSMENT MARK	TUTOR"S MARK
POSTER &WRITTEN IMPLEMENT	ATION (20)			
Correct paper size	(1)	X 1		
Easy to see, clear headings and well- spaced on poster. Neatness, Creativeness and Attractiveness	(1234)	X 1		
Content well explained on poster. Clear that the poster will be useful in the classroom to teach the topic decided upon related to measurement. No cutting and pasting from internet texts, etc.	(12345)	X 3		
TOTAL:			20	20
REMARKS:				

SECTION 2

- Report in 900-1200 words [typed Arial 11, 1 ½ space between lines] how you would use (implement) the poster to teach this aspect that you have identified. The suggested number of lines for each section has been indicated on the rubric.
- Write a suitable <u>introduction, main body and conclusion</u>. Look at the rubric to determine what is expected for each section and the required number of lines for each section.
- <u>Introduction:</u> Provide the introduction that you will be doing for your lesson to introduce the concept/aspect.
- <u>Main body:</u> Written report of what will happen in the lesson, questions to be asked, activities, etc. is well organized, clear and well written. Person who reads the report can clearly see what is happening in your class, without actually being there. Another person reading it will know exactly what to do and how to do it (implementing the same lesson). Write in narrative format. Clear description of your implementation strategies. Headings are clearly indicated.
- <u>Conclusion:</u> Wraps up the lesson in an interesting way in the conclusion. Clear description of assessment being done.
- You have to also indicate the grade of the class e.g. Grade 5 or 6 AND which LO and AS"s OR Content Area and related content you are addressing.

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DUPLICATE COPIES

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SIGNATURE: _____

STUDENT NAME:	
STUDENT NO:	

ASSESSMENT CRITERIA	LEVEL 0	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL
Introduction: Provide the introduction that you will be doing for your lesson to introduce the concept/aspect. (5-10 lines)	No introduction and / or no conclusion 0 marks	Introduction is unclear. ½ mark	Introduction is clear and sets the scene for the lesson. 1 mark	Excellent introduction. Really gets the reader's interest. Very creative. 2 marks	2
2. Written report of what will happen in the lesson, questions to be asked, activities, etc. is well organized, clear and well written. Person who reads the report can clearly see what is happening in your class, without actually being there. Another person reading it will know exactly what to do and how to do it (implementing the same lesson). Write in narrative form Clear description of your implementation strategies. Headings are clearly indicated.	No discussion or Not clear at all. 0-4 marks	Writing is unclear and not very logical. Does not really show reasonable novel and critical thinking. 7-10 marks	Writing is clear, logical, and with headings. Shows reasonable novel and critical thinking. 11-17 marks	Writing is fresh, clear and logical, grouped with headings and shows deep, novel, creative and critical thinking. 18-25 marks	25
 3. Conclusion: Wraps up the lesson in an interesting way in the conclusion. Clear description of assessment being done. (5-10 lines) 	No conclusion 0 marks	Conclusion is unclear and the assessment done at the end of your lesson is not very clear. ½ mark	Conclusion is clear and the assessment at the end of the lesson is clear too. 1-2 marks	Excellent conclusion. The assessment at the end of the lesson is very creative and novel. 3 marks	3
TOTAL:					30

COMMENTS:

APPENDIX C ASSIGNMENT: MATHEMATICAL GAME

Design a mathematics board game related to topics related to Space and Shape and Data Handling & Probability outcomes of this module. It should contain the following:

- A game board,
- Cards with questions,
- Clear instructions,
- One die or two dices or any other suitable device which the learners can use to move from one block to the next one.
- Player position indicators
- Creativity & originality, etc.

Please consult the rubric for additional information.

We are going to play these games during one session in class. This will be the time when the assessment will be completed.

DUPLICATE COPIES

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CONTINUE ON NEXT PAGE

STUDENT NAME:	
STUDENT NO:	

Please type your assignment (no handwritten ones will be accepted). Use Arial 10 font and 1.5 spacing on your cards. Please hand in on the due date!!

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ASSESSMENT CRITERIA	LEVEL 0	LEVEL 1	LEVEL 2	LEVEL 3	SELF	GROUP	LECTURER / TUTOR	TOTAL
Instructional effectiveness	The content is incidental. One can play without learning much. 0-1 marks	Significant cognitive effort is spent on things that have nothing to do with the content. 2-7 marks	Winning and learning are closely entwined, though some mental effort is spent on aspects that are just about the game. 8-11 marks	Winning the game requires learning the content. The two are matched completely. 12-16 marks				16
Flexibility	The game can only be played in one way. There's no way identified to optimize the match with the players' skill level or different contexts. 0 marks	There might be a way to vary the game, but it's not clearly spelled out. 1 mark	There is at least one way to vary the game to meet different needs. 2 marks	Several variations are clearly identified that make the game playable in a number of ways to meet different needs. 3 marks				3
Instructions and rules	No instructions at all. No rules. 0 marks	Instructions not easy to follow. Rules and directions were written, but people had some difficulty figuring out the game. 1 mark	Instructions quite easy to follow. Rules and directions were written, but one part of the game needed slightly more explanation. 2 marks	Instructions very easy to follow. Rules and directions were written clearly enough that all could easily participate. 3 marks				3

CONTINUE ON NEXT PAGE

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ASSESSMENT CRITERIA	LEVEL 0	LEVEL 1	LEVEL 2	LEVEL 3	SELF	GROUP	LECTURER / TUTOR	TOTAL
Attractiveness	Little or no colour or fewer than 3 graphics were included. 0 marks	Contrasting colours and "borrowed" graphics were used to give the cards and tame board visual appeal. 1 mark	Contrasting colours and at least 1 original graphic were sued to give the cards and game board visual appeal. 2 marks	Contrasting colours and 3 original graphics were used to give the cards and game board visual appeal. 3 marks				3
Quality of Work	Little or no effort was put forth in creating quality work. Messy or not typed. Game board not coloured. 0-1 marks	Some effort put forth in creating quality work. Typed, but with several mistakes. Game board not coloured neatly. 2 marks	Good effort was put forth in creating quality work. Cards have been typed with few mistakes. Game Board coloured. 3 marks	Excellent effort was put forth in creating quality work. Cards have been typed with no mistakes. Game Board coloured neatly. 4 marks				4
Accuracy of Content (Cards)	Several information cards made for the game are not accurate. 0-1 marks	All but two of the information cards made for the game are correct. 2 marks	All but one of the information cards made for the game is correct. 3 marks	All information cards made for the game are correct. 4 marks				4
Legibility Proof reading/Editing	Writing and typing is hard to read. No evidence of proof reading and editing. 0-1 marks	Writing and typing is hard to read but still understandable. Some evidence of proof reading and editing. A number of mistakes. 2 marks	Writing and typing is quite clear and reasonable easy to read. Obvious evidence of some proof reading and editing. 3 marks	Writing and typing is very clear and very easy to read (very user friendly). Obvious evidence of good proof reading and good editing 4 marks				4
Durability & Packaging (Box)	The board game is not very durable at all. 0 marks	The board game is durable to some extent. 1 mark	The board game is durable. Box supplied. Can be improved. 2 marks	The board game is very durable. Great Box. 3 marks				3
Overall impression and enjoyment	Boring. We did not enjoy it at all. 0-1 marks	An effort was made to create a game, but a number of aspects are lacking. A great deal of improvement is required. Somewhat enjoyable to play. 2-4 marks	Great game. Very enjoyable to play. However, there is room for improvement. 5-7 marks	Excellent game. Extremely enjoyable to play. 8-9 marks				10
TOTAL: (Mark	may be conv	verted to 30 f	or example)					50

50

ASSESSOR"S / GROUP COMMENTS AND SIGNATURE:

APPENDIX D ASSIGNMENT DEVELOP A SET OF MEASUREMENT CARDS, DESIGN AND IMPLEMENT A LESSON AND REFLECT ON IMPLEMENTATION

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GENERAL REQUIREMENTS

- Use a ring file or plastic/pocket file that will hold all the evidence with ease.
- Make sure the assignment is neat and well organized
- Make sure the outside cover of your file is clearly marked with the following information:

Your initials and Su	Irname
Your student numb The module code:	er PICM202
The name of the m	odule: ASSIGNMENT: MEASUREMENT
	CARDS, IMPLEMENTATION &
	REFLECTION
The initial and surn	ame of your lecturer:

- Ensure that the file is complete. Ensure that you have included all the evidence required.
- Hand in your file to your lecturer on the due date.

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SECTION A:

- Develop a set of <u>FIVE</u>A5 size measurement question cards with six to eight appropriate questions written on the reverse side of each card. NB: Write also the answers at the back of the card.
 - Select your set of measurement cards carefully to include varied sets of questions.
 - THUS: Try to develop aspects related to one aspect in Measurement for example Time. OR concentrate on perimeter and area, including some conversions. Or focus on the Angles section.
 - IMPORTANT: Variety within the aspects you choose, are important. Do not just have for example six conversion questions one every card. This is not what is supposed to be happening!!
 - TAKE NOTE: These cards are intended to develop the understanding and application as well as revision of measurement related concepts/aspects/applications. So think carefully about the questions you ask. You may also include drawings/pictures and base questions on the drawings/pictures.

SECTION B:

<u>Design a lesson</u> in which you use the Number Cards that you have created. You will have to decide whether you are going to use the Number Cards for whole class teaching, group work, pair work or individual work. This lesson you add as an Appendix to show that you have planned for the lesson and that you know what to do, etc. <u>Teach this lesson and report on the following:</u>

Write reports on the following:

- Report 1 (1 ½ page):
 - > Write a detailed report of how you introduced the number cards to the learners as well as all the instructions that you gave.
 - What kind of approach did you use?
 - Explain why you chose this approach. How did you explain your expectations to your learners?
 - Provide as much detail as possible in order that your tutor / lecturer can understand your teaching techniques as if he/she was in your classroom like a "fly on the wall".
- Report 2 (1 ½ page):
 - > Explain whether your learners enjoyed the activity or not. Give as much detail as you can.
 - > What problems did you encounter?
 - > What problems did your learners encounter?
 - > What will you do differently next time? Explain.

So how would you be able to get data to write about the above? Reflect after the implementation by asking and answering the questions above.

Learner reflection questions to help you with the above: Ask the learners to complete the following evaluation questionnaire (Include this as part of your assignment as an appendix at the back. Remember that you use the learners' completed questionnaire to assist you in reporting for Report 2. For example, you could ask the learners at the end of the activity to reflect and write on the following:

- What did you find easy? Why?
- What did you find difficult? Why?
- > Was this type of activity different from how you learn at school? Explain.
- > Did you enjoy this activity? YES or NO? Give a reason(s) for your answer.
- What was interesting for you?
- What was not interesting or boring?
- > How do you think can this activity be improved?

Include the following:

• At least 5 examples of your learners' work to show that have implemented the number cards **HOW YOU WILL BE ASSESSED? (See Rubric)**

You will be assessed as follows:

- Presentation of your cards
 - Well phrased questions
- Variety of measurement questions
- Accuracy of your answers
- Written report 1
- Written report 2.
- Submit at least 5 examples of your learners' work to show that have implemented the measurement cards
- Learner completed evaluation questionnaire as an Appendix
- Completed lesson plan as an Appendix

STUDENT NAME:	
STUDENT NO:	

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ASSESSMENT CRITERIA	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	SELF	TUTOR	TOTAL
Presentation of measurement cards	Untidy, writing not uniform, uncovered, not user friendly	Fairly neat, writing legible, but not sufficiently user friendly	Size of paper correct. or writing, but could still be improved	Size of paper correct. Bold, clear, neat numbers and writing. Covered with plastic for protection			5
	ттак	2 marks	3 marks	4-5 marks			
Phrasing of questions	Inappropriate questions. Not applicable to grade. No original thinking 1 mark	Questions need to be rephrased. Sometimes unclear or inappropriate 2 marks	Mostly appropriate questions, clearly stated & applicable to grade	Good variety of questions, appropriate, clearly stated and applicable to grade. 4-5 marks			5
Variaty of	Measurement	Measurement related	Most measurement	Very good variety of			
variety of measurement questions	questions all from the same kind/type. Questions are stereotyped	questions are not sufficiently varied	related questions are varied: A good variety of questions	to grade			4
	1 mark	2 marks	3 marks	4 marks			
Accuracy of answers	Totally incorrect 0 marks	Many answers are incorrect 1 mark	Mostly correct answers 2 marks	All the answers are correct 3 marks			3

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Examples of learners' work as part of the assessment Assessor's discretionary mark	0-6 marks No examples of learner completed tests included. 0 marks Not impressed at all 0-2 marks	Very logical. 7-8 marks Examples of two to four learner completed assessment tasks have been included. 1 mark Limited effort. Last minute attempt 3-4 marks	9-11 marks Examples of five completed assessment tasks that learners have completed have been included. Learners' work is marked. 2 marks An effort was made, but still some room for improvement 5-6 marks	12-16 marks Examples of five completed assessment tasks by learners have been included. Work is of an extremely high standard. Learners' work is marked. 3 marks This is a great assignment. Well done! 7-8 marks	3 8
Examples of learners' work as part of the assessment	0-6 marks No examples of learner completed tests included. 0 marks	7-8 marks Examples of two to four learner completed assessment tasks have been included. 1 mark	9-11 marks Examples of five completed assessment tasks that learners have completed have been included. Learners' work is marked. 2 marks	12-16 marks Examples of five completed assessment tasks by learners have been included. Work is of an extremely high standard. Learners' work is marked. 3 marks	3
	0-6 marks	7-8 marks	9-11 marks	12-16 marks	
Report 2: Enjoyment, problems and benefits of activity: • Punctuation & Language usage • Logical writing	No attempt was made or very weak explanations. Explanations do not make sense.	An attempt was made to explain how learners have enjoyed the lesson and what problems have been encountered by the teacher and learners. Tries to make an effort to explain what to change next time. A lot of errors in punctuation and language. Not always	Explain to what extent the learners enjoyed the lesson. Identify learner and teacher problems. Explain what to change next time. Some errors in punctuation and language.	Explain extremely well the learner enjoyment. Identify learner and teacher problems in a crisp an insightful way. Describe with insight what to change next time. Excellent punctuation and language. No errors at all.	16
Implementation of the measurement cards in class. How did you implement the measurement cards in class?: • Punctuation & Language usage • Logical writing	explanation OR explanation is lacking totally. Too many errors in language, spelling and spelling. 0-6 marks	too clear OR insufficient evidence .Explained only a little bit of how the measurement cards were introduced to the learners. Little detail of how the expectations were communicated to the learners. Provided little detail that the tutor / lecturer can understand your teaching techniques as if he/she was in your classroom. A lot of errors in punctuation, spelling and language. Not always very logical. 7-8 marks	Explained how the measurement cards were introduced to the learners. Some detail of how the expectations were communicated to the learners. Provided reasonable detail that the tutor / lecturer can understand your teaching techniques as if he/she was in your classroom. Some errors in punctuation, spelling and language. 9-11 marks	descriptive. Explained excellently how the measurement cards were introduced to the learners. Great detail of how the expectations were communicated to the learners. Provided such detail that the tutor / lecturer can understand your teaching techniques as if he/she was in your classroom. Excellent punctuation, spelling and language. No errors at all. 12-16 marks	16

APPENDIX E ASSIGNMENT: ESSAY

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TOPIC: The Mathematics crisis in South Africa cannot be "fixed"

You may argue for, against or be in the middle. Maximum of 1400 words (approximately 90-110 lines)

Introduction (10%)

You will need at least two references. (10-15 lines)

Body with headings/subheadings (70%)

You will need at least six references. (70-85 lines)

Conclusion (10%)

Wrap the discussion up (10 lines)

References (including general spelling and grammar presentation - 10%)

Here you need to have at least eight references in total. Your reference must include books, journals, newspapers and from a website. You may not have more than two references from a website where there is no author.

The rubric follows ...

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STUDENT NAME:	
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TOPIC: The Mathematics crisis in South Africa cannot be "fixed"

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- I acknowledge that copying someone else's assignment or essay, or part of it, is wrong, and declare that this is
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- I acknowledge that —cutting and pasting" from the internet without the appropriate citation and referencing is
 plagiarism.
- I also accept that the marker of this assignment might test for plagiarism using plagiarism software e.g. Turnitin.
- By submitting this essay online on LEARN OR off line, I accept all seven of the above points as applying to this
 essay and me and accept that if I have strayed on any of the above points I may be penalised and could face
 possible disciplinary action.

<u>Please use paragraphs.</u> Marks will be deducted for paragraphs that are not well written OR if you don"t use paragraphs. Use headings if you can and where appropriate e.g. Introduction and Conclusion.

Please type your assignment (no handwritten ones will be accepted). Use *Arial 11 font and 1.5 spacing and 1400 words maximum*. Space the margins 2cm top, left, right and bottom.

NB: Marks will be deducted if you don't adhere to the above.

ASSESSMENT CRITERIA	LEVEL 0	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL
1. Introduction: Provide an overview of what is going to be discussed (10-15 lines)	No introduction and / or no conclusion 0 marks	Introduction is unclear. 1-2 marks	Introduction is clear and sets the scene for the discussion. 3-4 marks	Excellent introduction. Really gets the reader's interest. Very creative. 5 marks	5
ASSESSMENT CRITERIA	LEVEL 0	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL
2. Discussion (Body of Essay) (70-85 lines)	No discussion or Not clear at all. 0-4 marks	Some evidence of discussion, but unclear and not very logical. Does not really show reasonable novel and critical thinking. 7-10 marks	Discussion is clear, logical, and with headings. Shows reasonable novel and critical thinking. 11-15 marks	Discussion is fresh, clear and logical, grouped with headings and shows deep, novel and critical thinking. 16-20 marks	20

22 I acknowledge Dr Les Meiring: This is based upon his work

4. Conclusion: Wrap up the discussion in an interesting way in the conclusion (10 lines)	No conclusion 0 marks	Conclusion is unclear and the conclusion does not wrap up the discussion in a clear logical manner. 1 mark	Conclusion is clear and wraps up the discussion in a reasonable logical manner. 3-4 marks	Excellent conclusion. Summarises the findings in an excellent manner. 5 marks	5
Language (grammar) and spelling & Neatness	Language usage does not make sense at all and spelling and punctuation is non- existent. Writing is illegible OR typing is not up to standard. Looks unprofessional 0	Language usage is unclear and spelling and punctuation needs serious attention. Writing is mostly eligible OR typing is readable. 1-2 mark	Language is used in a clear manner, only a few spelling and punctuation errors. Writing OR typing is reasonable. Spacing correct and it looks neat. Some layout problems. 3-4 marks	Language and punctuation usage is outstanding with virtually no spelling or punctuation errors Very neat. Excellent spacing. Looks very professional. 5 marks	5
References					5
Assessor''s discretionary mark: Presentation, language, spelling and argumentation	This really needs much more work. It is not logical OR it is difficult to understand. 0-3 marks	I feel that an effort was made, but some aspects are still lacking. 4-5 marks	This is good. It has potential. It could be developed into a great assignment. 6-7 marks	In like to read this essay. It can serve as an example. Excellent. 8- 10 marks	10
TOTAL: (Mark may be converted to 30 for example)					

ASSESSOR"S COMMENTS AND SIGNATURE:

APPENDIX F Misconceptions in Mathematics and how to deal with them

ASSIGNMENT: Misconceptions of learners in Mathematics at school (Interviews, Strategy and Reflection)

PLAGIARISM DECLARATION²³

- I know that plagiarism is wrong. Plagiarism is using another's work and to pretend that it is one's own and this includes just changing the order of words in a sentence.
- I have used the Chicago or (APA) as the convention for citation and referencing. Each contribution to, and quotation in, this essay from the work, or works of other people has been attributed and has cited and referenced (including from the Internet).
- This essay is my own work. I did not use another student's work from a previous year or from this year
- I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.
- I acknowledge that copying someone else's assignment or essay, or part of it, is wrong, and declare that this is my own work.
- I acknowledge that —cutting and pasting" from the internet without the appropriate citation and referencing is plagiarism.
- I also accept that the marker of this assignment might test for plagiarism using plagiarism software e.g. Turnitin.
- By submitting this essay online on LEARN OR off line, I accept all seven of the above points as applying to this essay and me and accept that if I have strayed on any of the above points I may be penalised and could face possible disciplinary action.

DUPLICATE COPIES

Always make a duplicate copy of your assignments. This will assist if an assignment disappears, for example, your lecturer's house has been damaged by fire/rain or his/her car or briefcase —disappearsII or whatever reason.

²³ I ACKNOWLEDGE DR LES MEIRING: THIS IS BASED UPON HIS WORK

DUPLICATE COPIES

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GUIDELINES

Use the guidelines below for the completion of this assignment and look carefully at the rubric to see how your assignment will be assessed. Write a three page report (no more than 1500 words) **typed in Arial 11 and 1.5 spacing**. **Use the headings as indicated in each section** of this assignment.

1. Introduction [Heading in assignment]

Introduce the reader to what you are going to do for this assignment. Mention the purpose of this assignment. Also, be creative and capture the reader's interest.

2.1 Interview [inserted the transcribed interview as an Appendix in assignment]

Interview an Intermediate Phase teacher in a specific grade regarding at least two misconceptions their learners have had with regard to Learning Outcomes/Content Areas 4: Measurement. [SEE Attached Interview Schedule to be used]

The content in measurement includes:

- Length, Mass and Capacity
- Temperature
- Problems involving length, mass & capacity.
- Perimeter, Area and Volume
- Problems involving. Perimeter, Area and Volume
- Ratio and Rate related to measurement
- Money and Solving problems involving money
- Measuring angles (and constructing it. It is also in the Space and Shape Learning Outcomes/Content Area)
- Time

Record the interview and transcribe it or allow the teacher to complete the interview schedule. Write the name of the teacher interviewed; the school and grade of class in which he/she teaches. This is then inserted as an Appendix.

2.2 Findings of Interview Process [Heading in assignment]

Write a summary of your findings based upon the interview process. Be very specific. Write your interview findings in paragraph form (See Rubric). It is about the misconceptions and the causes (questions a, b and c of the interview. See _INTERVIEW SCHEDULE'.

NB: One cannot write 5 to 8 lines for 6 to 10 marks. Keep this in mind!

3. Possible strategies to clarify learners" thinking with regard to identified misconceptions [Heading in assignment]

This is a continuation of the initial interview and again you can record and transcribe the interview or allow the teacher to complete the interview schedule. Write a summary of your findings. Describe the strategies suggested by the teacher to clarify learners' thinking around each misconception they may have. If the teacher was not able to suggest appropriate ways of dealing with the misconceptions, find possible ways of how one could deal with the misconceptions and report it. Or if you can suggest alternative appropriate suggestions, please do so.

NB: One cannot write 5 to 8 lines for 6 to 10 marks. Keep this in mind!

4. A4 Worksheet Design [Heading in assignment]

Design an appropriate worksheet suitable for learners in the grade in which the misconceptions were identified. Include this as well as a memo of the worksheet.

<u>Describe</u> how you selected/developed appropriate activities for your worksheet based on the identified misconceptions.

5. Feedback on learners" possible misconceptions [Heading in assignment]

Locate at least five learners from the grade for which the worksheet was designed. The learners complete the worksheet individually under test conditions. You must mark the learners' responses on each worksheet. Write what feedback you would give to each learner. Write what feedback you will give to each learner. The feedback must assist each learner to improve or to have a better understanding of what went wrong and how to fix it. The purpose of this exercise is to determine whether learners have similar misconceptions as those identified by the teacher and whether you, as a prospective student are able to give meaningful feedback to learners.

NBII The feedback has to be reported in writing as part of the assignment under this heading!! Be as comprehensive as possible. Comments such as <u>_</u>concentrate more' or <u>_</u>think' are not what we are looking for!!! These comments do not lead to understanding!

NB: One cannot write 5 to 8 lines for 6 to 10 marks. Keep this in mind!

6. Reflection & Conclusion [Heading in assignment]

Write a personal reflection about this assignment experience.

- How meaningful was it for you as a prospective teacher?
- What did you learn?
- What you may do differently if you had to repeat this exercise in another grade.

7. Appendices [Heading in assignment. At end of assignment]

Include the transcribe interview responses as well as the learner completed worksheets as two appendices.

[Interview schedule and rubric on following pages]

INTERVIEW SCHEDULE

Learners" Misconceptions and Errors at Intermediate Phase Level

Learning Outcomes 4 Measurement

- Length, Mass and Capacity
- Temperature
- Problems involving length, mass & capacity.
- Perimeter, Area and Volume
- Problems involving. Perimeter, Area and Volume
- Ratio and Rate related to measurement
- Money and Solving problems involving money
- Measuring angles (and constructing it. It is also in the Space and Shape Learning Outcomes/Content Area)
- (a) Select two of the content areas listed above which you perceive to be the most common topics in which misconceptions and errors occur amongst learners in your classes.

(b) Describe the identified misconceptions or errors made by learners.

(c) Why do you think (the teacher) are the reasons/causes for learners making these mistakes/errors/having these misconceptions?

(d) Describe what teaching strategies you would suggest to overcome each of the misconceptions that you have named.

MISCONCEPTION ASSIGNMENT RUBRIC

STUDENT NAME:					
STUDENT NO:					
ASSESSMENT CRITERIA	LEVEL 0	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL
 Introduction: Provide an overview of what is going to be discussed 	No introduction and / or no conclusion 0 marks	Introduction is unclear. 1 mark	Introduction is clear and sets the scene for the discussion. 2 marks	Excellent introduction. Really gets the reader's interest. Very creative. 3 marks	3
INTERVIEWS: REPORTING AND	ANALYSIS				
2.1 & 2.2 Interview findings: Identified at least two misconceptions in mathematics within a particular grade. Clear explanations of the misconceptions in the particular grade according to the interviewed teachers (Name the grades) Clear descriptions of possible reasons for the stated misconceptions.	Misconceptions identified are unclear. Not logical at all. Presentation of misconceptions need much more work. 0 marks	Misconceptions have been identified and presented to some extent, but not very logical and not very clear. 1-3 marks	Misconceptions have been reasonably well identified presented. 4-6 marks	Misconceptions have been clearly identified and have been clearly presented 7-8 marks	8
 3. Possible strategies Discuss possible teaching and learning strategies regarding how to clarify the two identified misconceptions for learners If you do you agree with their suggestions, tell us why you do not agree and what you will suggest or do. 	Strategies or/and practical solutions do not make sense. Not clear if they will work. 0 marks	Very superficial and not very creative practical solutions or practical strategies to deal with the two misconceptions. 1-4 marks	Good and reasonable creative practical solutions or practical strategies to deal with the two misconceptions. 5-7 marks	Excellent and very creative practical solutions or practical strategies to deal with the two misconceptions. 8-9 marks	9
 4. A4 Worksheet: Design appropriate A4 worksheet based upon the misconceptions identified. Describe the selection process. 	No copies have been included, or not marked, or very illogical report. 0 marks	Included interview and test. Interview reasonably well presented. Test in line with identified misconceptions. Data easily readable. Tests marked. Tried to describe the selection process, but not too clear / not too convincing. 1-2 marks	Included interview and test. Interview reasonably well presented. Test in line with identified misconceptions. Data easily readable. Tests marked. Described in a good/reasonable manner how the activities on the worksheet were developed. 3-4 marks	Included interview and test. Interview well presented. Test in line with identified misconceptions. Data easily readable. Tests have been marked. Described in an excellent manner how the activities on the worksheet were developed. 5-6 marks	6
 5. Feedback to learners: Reflective report regarding feedback to learners. Write what feedback you will give to each learner. The feedback must assist each learner to improve or to have a better understanding of what went wrong and how to fix it. 	Student not very clear at all. 0 marks	An attempt was made, but there is still great room for improvement regarding feedback and reflection. 1-4 marks	Good presented feedback. 5-7 marks	Excellent and well-presented feedback. 8-9 marks	9

ASSESSMENT CRITERIA	LEVEL 0	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL
 6. Reflection & Conclusion: Write a personal reflection about this assignment experience. How meaningful was it for you as a prospective teacher? What did you learn? Clearly explain to the reader the value of this assignment to you and what you may do differently if you had to repeat this exercise in another grade. 	No conclusion 0 marks	Conclusion is unclear and the conclusion does not wrap up the discussion in a clear logical manner. 1 mark	Good reflection and conclusion. 2 marks	Excellent reflection & conclusion. 3 marks	3
Structure of paragraphs, Language and Spelling	No paragraphs. Structure is non- existent. No headings. Language usage does not make sense at all and spelling and punctuation is non-existent. 0 marks	Partially structured: Some headings have been used. Main points and supporting points not so clearly indicated. Language usage is unclear and spelling and punctuation needs serious attention 1 mark	Reasonably well structured: Paragraphs have been used. The headings assist in a reasonable manner to convey the findings. Main points and supporting points reasonably clearly indicated. Language is used in a clear manner, only a few spelling and punctuation errors. 2-3 marks	Well structured: Paragraphs have been used in a clear and supporting manner. The headings assist the paragraphs. Main points and supporting points very clearly indicated. Language and punctuation usage is outstanding with virtually no spelling or punctuation errors 4 marks	4
Assessor''s discretionary mark: Presentation, language, spelling and argumentation	This really needs much more work. It is not logical OR it is difficult to understand. 0-2 marks	I feel that an effort was made, but some aspects are still lacking. 3-4 marks	This easy has potential. It could be developed into a great assignment. 5-6 marks	In like to read this essay. It can serve as an example. 7-8 marks	8
TOTAL:					50

ASSESSOR'S COMMENTS: