



## Chapter 7 – Appendix V – Mack

### 7.6. Mack - Learning task – Blood Groupings

#### 7.6.1. Step 3: Planning Action

##### 7.6.1.1. *Learning task design*

##### 7.6.2.1. b. *Learning task assessment*

(i) *Self-assessment*

(ii) *Peers*

(iii) *Teacher educator*

(iv) *Specialisation lecturer*

#### 7.6.3. Concept map



## Learning Task Design

**Date of Design:** July 2004  
**Learning Area:** Biology  
**Learning Grade:** 11  
**Content Area:** Tissues, Cells and Molecular Studies

### Learning Outcomes and Assessment Standards:

Learning Outcomes:	Assessment Standards:	Competency:
<b>LO<sub>1</sub>:</b> Confidently explore & investigate phenomena related to Life Science by using inquiry, problem solving, critical thinking and other skills	<b>AS<sub>1/1</sub>:</b> Identifying & questioning phenomena & planning an investigation	Identify and question phenomena <input type="checkbox"/>
		Plan an investigation using instructions <input type="checkbox"/>
		Consider implications of the investigate procedures in a safe environment <input type="checkbox"/>
	<b>AS<sub>2/1</sub>:</b> Conducting an investigation by collecting & manipulating data	Systematically and accurately collect data using selected instruments and/or techniques and following instructions <input checked="" type="checkbox"/>
		Display and summarise the data collected <input checked="" type="checkbox"/>
<b>AS<sub>3/1</sub>:</b> Analyzing, synthesizing, evaluating data & communicating findings	Analyse, synthesise, evaluate data and communicate findings <input checked="" type="checkbox"/>	
<b>LO<sub>2</sub>:</b> Access, interpret, construct & use Life Sciences concepts to explain phenomena relevant to Life Sciences	<b>AS<sub>1/2</sub>:</b> Accessing knowledge	Use a prescribed method to access information <input type="checkbox"/>
		Identify concepts, principals, laws, theories and models of life science in the context of everyday life <input type="checkbox"/>
	<b>AS<sub>2/2</sub>:</b> Interpreting and making meaning of knowledge in the Life Sciences	Describe and explain concepts, principals, laws, theories & models <input type="checkbox"/>
		Organise, analyze & interpret concepts, principals, laws, theories & models of life science in the context of everyday life <input type="checkbox"/>
<b>LO<sub>3</sub>:</b> Able to demonstrate an understanding of the nature of science, the influence of ethics & biases in the Life sciences, & the interrelationship of science, technology, indigenous knowledge, the environment & society	<b>AS<sub>1/3</sub>:</b> Exploring & evaluating scientific ideas of the past and present cultures	Identify and investigate scientific ideas & indigenous knowledge of past & present cultures <input type="checkbox"/>
		Describe different ways in which resources are used and applied to the development of products, & report on their impacts on the environment & society <input type="checkbox"/>
	<b>AS<sub>3/3</sub>:</b> Compare the influence of the different beliefs, attitudes & values on scientific knowledge	Analyze and describe the influence of different beliefs, attitudes and values on scientific knowledge and its application to society. <input type="checkbox"/>





### The Learning Task:

**Problem Statement:**

What is the blood group composition of you class?

**Category of Learning Task:** World of Work

**Format of Learning Task:** Research \_\_\_\_\_

**Subtasks of Learning task:**

Group member 1:	Test whether blood type is A+, A-, B+, B-, AB+, AB-, O+ and O-. Also determine whether blood is Rh positive or negative
Group member 2:	no cooperative groups
Group member 3:	no cooperative groups
Group member 4:	no cooperative groups

**End Product Outcome:** Decision

**Specify:** Able to decide which blood type can be donated to which individual and which blood type the learner can receive

### Authentic Learning Context:

Authentic Resource List:	Quantity	Cost
A, B, AB tesing kit	1 of each	0
RH testing kit	1	0

Authentic Apparatus / Materials	Quantity	Cost
paper towl	1	R2-00
matchsticks	10 boxes	R5-00
glass microscope slides	70	

Class Organization: Cooperative Learning Groups		
Group 1	Group 2	Group 3
no cooperative groups	no cooperative groups	no cooperative groups
Group 4	Group 5	Group 6
no cooperative groups	no cooperative groups	no cooperative groups



**Assessment:**

**Method of Assessment:** Performance \_\_\_\_\_

**Tools of Assessment:** Observation sheet \_\_\_\_\_

**Techniques of Assessment:** Other: Graph

**Learning Task Presentation:**

**Clarity:**

- List all aspects which need clarity

**Importance:**

- State all reasons of importance to learners

**Urgency:**

- List all reasons for urgency

*[Attach final presentation format]*





## Individual Assessment

Name of student: \_\_\_\_\_

Grade 10 \_\_\_\_\_

Criteria	Not Achieved(1)	Partially Achieved(2)	Achieved (3)	Beyond Achieved (4)		
Neatness & decorum expressed	Very untidy with no sense of pride	Tidy and legible presentation	Well structured and neat presentation	Extremely neat presentation, table of contents, no spelling or grammatical mistakes	2	
Content (Daily food intake)	No daily food intake shown	Inaccurate daily food intake shown	Accurate daily food intake with quantities shown	Extremely accurate daily food intake with quantities shown	3	
Content (Daily Iron Intake)	No daily iron intake shown	Inaccurate daily iron intake shown	Accurate daily iron intake with calculations shown	Extremely accurate daily iron intake with calculations shown	4	
Content (Recommended Daily Allowance)	No RDA shown	RDA given without reasons	Appropriate RDA given with rationale for choice	Accurate RDA given including extensive rationale for choice	4	
References	No references listed	Inadequate reference listed	Appropriate References listed	Extensive & systematic list	2	
						60

## Individual Assessment

Name of student: \_\_\_\_\_

Grade 10 \_\_\_\_\_

Criteria	Not Achieved(1)	Partially Achieved(2)	Achieved (3)	Beyond Achieved (4)		
Neatness & decorum expressed	Very untidy with no sense of pride	Tidy and legible presentation	Well structured and neat presentation	Extremely neat presentation, table of contents, no spelling or grammatical mistakes	2	
Content (Daily food intake)	No daily food intake shown	Inaccurate daily food intake shown	Accurate daily food intake with quantities shown	Extremely accurate daily food intake with quantities shown	3	
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Content (Recommended Daily Allowance)	No RDA shown	RDA given without reasons	Appropriate RDA given with rationale for choice	Accurate RDA given including extensive rationale for choice	4	
References	No references listed	Inadequate reference listed	Appropriate References listed	Extensive & systematic list	2	
						60



## Group Assessment

Name of student: \_\_\_\_\_

Grade 10 \_\_\_\_\_

Criteria	Performance Indicator				Comments
	1	2	3	4	
Introduction	Not included	Shows partial understanding of topic	Relevant, shows understanding of topic & its importance	Relevant, shows in depth understanding of topic, its importance & effects on societies	1
Content (Recommended Daily Allowance)	No RDA shown	RDA given without reasons	Appropriate RDA given with rationale for choice	Accurate, appropriate RDA given including extensive rationale for choice	2
Content (Proposed diet)	No diet indicated	Inappropriate diet with quantities	Appropriate diet with quantities shown & reason for choice	Extremely accurate, balanced diet with quantities & reason for choice	5
Conclusion	Not included	Partially expresses what has been learnt	Expresses what has been learnt	Extensively expresses what has been learnt in a conclusive manner	1
References	No references listed	Inadequate reference listed	Appropriate References listed	Extensive & systematic list	1

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## Peer Assessment

(to be filled in by your group)

Criteria	Performance Indicator			Comments
	0	1	2	
Control within the group	Lack of discipline	Some members disciplined	All members disciplined	1
Motivation of the group	Unmotivated	Some members motivated	All members motivated	1
Mutual respect	Some disrespect towards other people	Some members show respect	All members show respect	1
Individual participation	Individual did not participate	Some participation	Actively involved	2

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**SKOOLGEBASEERDE ONDEWRWYSASSESSERING**  
**SCHOOL BASED EDUCATION ASSESSMENT**  
**Fasilitering van Leer / Facilitating Learning**

Punt toegeken  
Grade awarded

75-100

Beginneronderwyser:

Beginner Educator:

Skool:

School: \_

Spesialisierungsarea:

Specialising area: Biology

Student No:

Student Nu: \_\_\_\_\_

Graad:

Grade: 10

Datum:

Date: 28/07

Tema:

Theme: BLOOD Groups.

**LEERTAAKONTWERP / LEARNING TASK DESIGN**

LEVEL VLAK	Minimum vereistes teenwoordig maar die verband daartussen nie aangredui of irrelevant / Minimum requirements present but relationship between them not indicated or irrelevant	Minimum vereistes teenwoordig en die verband tussen LU'e, AS'e, Uitdaging, LTA en LT aangredui en relevant / Minimum requirements present and the relationship between the LO's, AS's, Challenge, LTP and LT indicated and relevant	Minimum vereistes teenwoordig en die verband tussen LU'e, AS'e, Uitdaging, LTA, LT, Outentieke Leeromgewing, Materiale en Toerusting/ Apparaat en Leeraksie-organisasie aangredui en relevant / Minimum requirements present and the relationship between the LO's, AS's, Challenge, LTP, LT, Authentic Learning Environment, Materials and Equipment/ apparatus, and Learning Action Organisation indicated and relevant	Minimum vereistes teenwoordig en die verband tussen LU'e, AS'e, Uitdaging, LTA, LT, Outentieke Leeromgewing, Materiale en Toerusting/ Apparaat, Leeraksie-organisasie en Resultaat van LT aangredui en relevant / Minimum requirements present and the relationship between the LO's, AS's, Challenge, LTP, LT, Authentic Learning Environment, Materials and Equipment/ apparatus, Learning Action Organisation, and Result of LT indicated and relevant
CRITERION KRITERIUM				
Ontwerp/ Design				X

**ADDISIONELE KOMMENTAAR / ADDITIONAL COMMENTARY**

- He made the effort to go to the Pretoria Academic Hospital, to the blood bank to obtain the chemicals needed to test blood groups.
- Followed strict safety precautions while the learners were working with blood.
- This was a very worthwhile learning task design, the learners enjoyed it thoroughly.

Assessor:

Self	Mede BO/Peer BE	<input checked="" type="checkbox"/> Mentor <sub>2</sub>	Dosent/Lecturer
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Naam:

Name:

Handtekening:

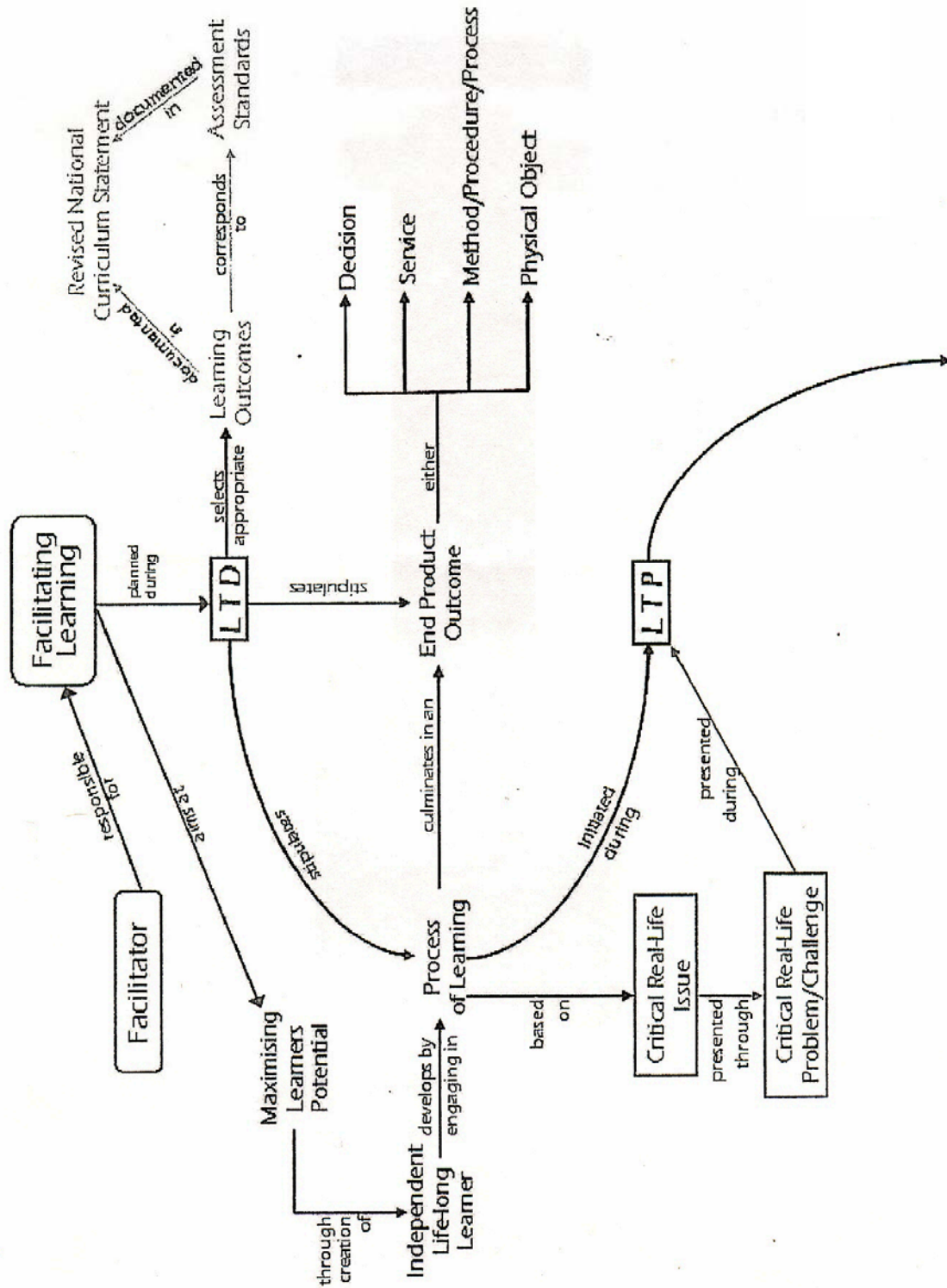
Signature:



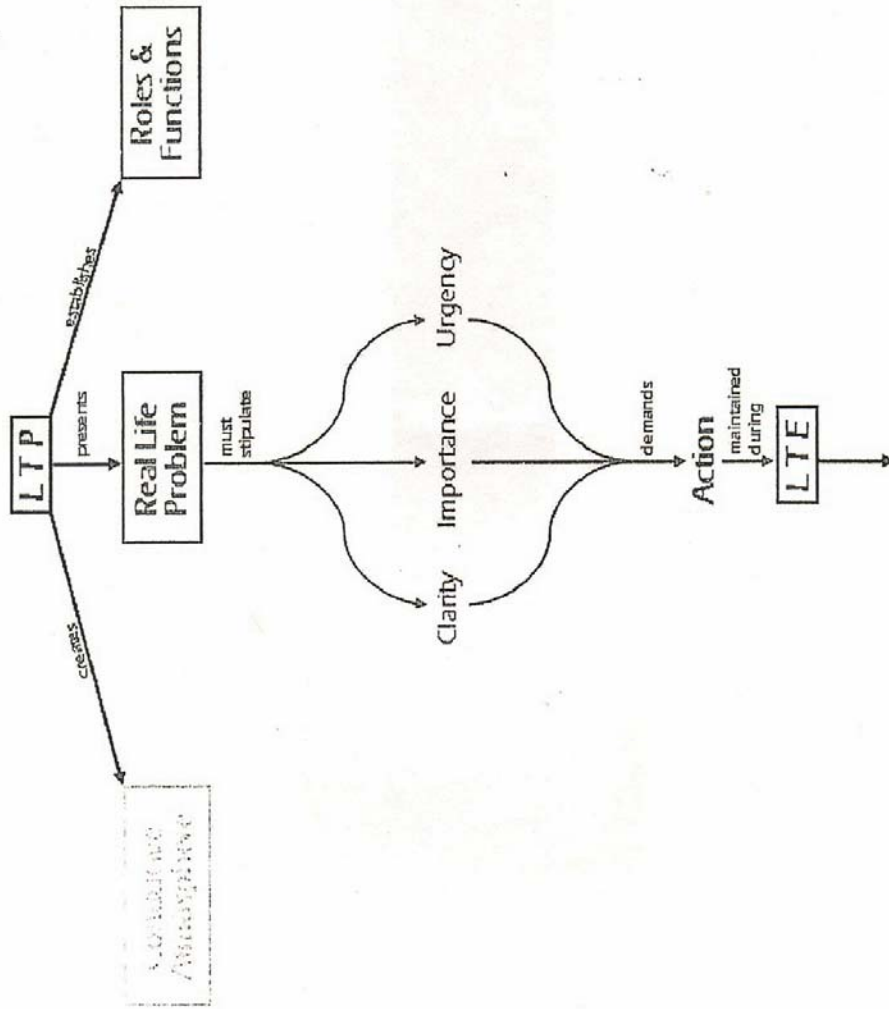




CONCEPT MAP FOR FACILITATING LEARNING (FCL)



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