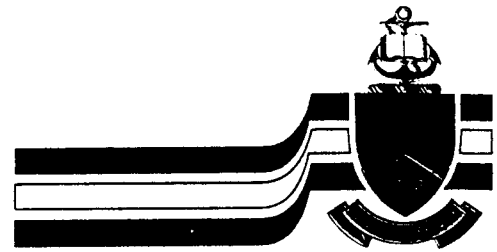


APPENDIX I :
QUESTIONNAIRE



Universiteit van Pretoria

PO Box 11103 0011 Brooklyn Telex 3-22723 SA Telegr PUNIV
Tel (012) 4202357/4202816 Fax: 43-2185

Department of Speech Pathology
and Audiology

27th March 1993

TO WHOM IT MAY CONCERN

THE MIND MAPPING APPROACH (MMA) TRAINING PROGRAMME: A CONSULTATIVE FRAMEWORK FOR TEACHERS AND THERAPISTS WITHIN THE SOUTH AFRICAN CONTEXT

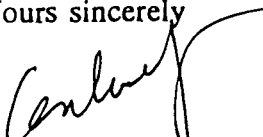
As a doctorate student in Speech-Language Pathology, I am currently busy with a research project evaluating the effect of the MMA training programme in schools and therapeutic institutions.

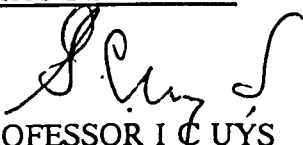
The aim of the MMA training programme is to empower teachers and therapists to incorporate the whole-brain learning concept of the MMA into the classroom/therapy room, in this way reaching large sectors of the S A population.

It would be very much appreciated if you would fill in the attached questionnaire before the course begins. In return, I will statistically evaluate the effect the MMA programme has on your pupils/clients academic results providing you with a report thereof at the beginning of 1994.

With sincere appreciation for your co-operation.

Yours sincerely


CAROLINE LEAF


PROFESSOR I C UYS
HEAD: DEPARTMENT OF SPEECH PATHOLOGY AND AUDIOLOGY
UNIVERSITY OF PRETORIA

QUESTIONNAIRE

SECTION A: BIOGRAPHICAL DATA

NAME _____

AGE _____

SEX _____

QUALIFICATIONS _____

YEARS OF EXPERIENCE _____

PRESENT POST HELD _____

NAME OF SCHOOL/ INSTITUTION WHERE EMPLOYED

REPETION NUMBER _____

OFFICE USE ONLY

V1 1-3

V2 4-5

V3 6

V4 7-9

V5 10-11

V6 12-13

V7 14-15

V8 16

SECTION B:

The following questions probe the academic learning process in school and therapy situations. There are no right or wrong answers. Please select what you feel to be the most appropriate answers according to your experience. Please mark an X in the selected column.

1. Is a knowledge of the structure of the brain and its functioning in relation to academic learning, important?
2. Is it necessary for students/ clients to know how their brains function, in order to improve their learning skills?
3. Is it necessary for students / clients to understand how memory works, in order to improve their memory?
4. Most students know a lot about how to think, create and formulate conclusions.
5. Succeeding academically takes a lot of extremely hard work.
6. Does one work better and achieve more under pressure?
7. Reading through one's work several times is memorising and learning.
8. All students have equal opportunity to succeed in all academic areas.
9. Would being relaxed enhance academic learning?
10. Is the average person, in your opinion, using limited brain potential for the academic learning process?

	YES	UN SURE	NO
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

V9 17

V10 18

V11 19

V12 20

V13 21

V14 22

V15 23

V16 24

V17 25

V18 26

11. Would music, in your opinion, influence the learning situation?
12. Would different types of music have different effects on the learning situation?
13. Would a person's mental approach to reading and studying influence learning?
14. Would reading fast reduce the comprehension of the material being read?
15. Would rereading words within a sentence improve comprehension of the material being read?
16. Does following with one's finger while reading, improve comprehension of the material being read?
17. Is making notes while learning important to memory?
18. Do you think that the more creative right hemisphere plays a role in the academic learning process?

YES	UN SURE	NO

OFFICE USE ONLY

- V19 27
- V20 28
- V21 29
- V22 30
- V23 31
- V24 32
- V25 33
- V26 34

SECTION C :

The following section also probes the academic learning process in schools and therapy situations. Please select what you feel in your opinion to be the most appropriate answer by marking an X in the selected column.

1. How much do you know about how your eyes move whilst reading and how this knowledge can be used to your advantage?
2. Do you know how to teach your eyes to take in more information than they normally do?
3. How aware are you of the chemical effects of certain foods on the learning process in the brain?
4. How much do you know about the nature of comprehension and how this can be improved?
5. How much do you know about note-making techniques that enable you to form "mental-pictures" of your thoughts?
6. How much do you know about the nature of key concepts as opposed to key words, and how they relate to note-making and imagination and learning?
7. How much do you know about creativity?
8. How much do you know about the potential of the average brain's creativity?
9. How much do you know about the differences between the functions of the left and right hemispheres of the brain?

KNOWLEDGE		
Expert	Some	Little

- V27 35
- V28 36
- V29 37
- V30 38
- V31 39
- V32 40
- V33 41
- V34 42
- V35 43

SECTION E :

Please define or describe the following concepts according to your experience.

Learning

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V52

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 1-3

Memory

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V53-57

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 4-8

Visualisation

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V58-62

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 9-13

Accelerated Learning

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V63-67

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 14-18

Super teaching

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V68-72

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 19-23

V73-77

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 24-28

SECTION F:

Please answer the following questions in as much detail as possible.

1. Have you managed to implement the concepts of the Mind-Mapping approach in your daily teaching curricula or therapy? If yes, indicate how e.g.:
"Music - used daily
Mind-Maps - teach Biology using these, etc."

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2. Have you experienced any difficulty using the concepts of the Mind-Mapping approach? If yes, specify which and how.

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3. Do you feel that your pupils/clients have benefitted from the concepts of the Mind-Mapping approach - how e.g.: *"using Mind-Maps as a study method - definite improvement in marks"* etc.

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4. Any additional comments.

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VRAELYS

AFDELING A: BIOGRAFIESE GEGEWENS

NAAM _____

OUDERDOM _____

GESLAG _____

KWALIFIKASIES _____

JARE TOEPASLIKE ERVARING _____

HUIDIGE POS _____

NAAM VAN SKOOL/WERKGEWER/INSTELLING _____

WAAR WERKSAAM _____

HERHALINGSNOMMER _____

AFDELING B:

Die volgende vrae peil die akademiese leerproses in skool- en terapie-situasies. Daar is geen regte of verkeerde antwoorde nie. Kies, op grond van u verworwe ervaring, asseblief die antwoord wat na u mening die toepaslikste is deur 'n X in die toepaslike kolom te trek.

- 1 Is kennis van die breinstruktuur en - funksionering belangrik vir die akademiese leerproses?
- 2 Is dit nodig dat studente/kliënte weet hoe geheue werk om hulle leervaardighede te kan verbeter?
- 3 Is dit nodig dat studente/kliënte verstaan hoe geheue werk om hulle geheue te kan verbeter?
- 4 Die meerderheid studente weet heelwat van hoe om te dink, te skep en gevolgtrekkings te formuleer.
- 5 Akademiese sukses verg uiters harde werk.
- 6 Werk en presteer 'n mens beter onder druk?
- 7 Die herhaalde deurlees van mens se werk is memorisering en leer.
- 8 Alle studente het op alle akademiese gebiede 'n gelyke kans op sukses.
- 9 Sal ontspanne wees die akademiese leerproses bevorder?
- 10 Benut die deursneepersoon, na u mening, beperkte breinpotensiaal vir die akademiese leerproses?

JA	ON-SEKER	NEE

SLEGS VIR KANTOORGEBRUIK

V1 1-3

V2 4-5

V3 6

V4 7-9

V5 10-11

V6 12-13

V7 14-15

V8 16

V9 17

V10 18

V11 19

V12 20

V13 21

V14 22

V15 23

V16 24

V17 25

V18 26

- 11 Sal musiek, na u mening, die leersituasie beïnvloed?
- 12 Sal verskillende tipes musiek verskillende uitwerkings op die leersituasie hê?
- 13 Sal 'n persoon se geestesingesteldheid jeens lees en leer die leerproses beïnvloed?
- 14 Sal vinnig lees die leser se begrip van die gelese materiaal verlaag?
- 15 Sal die herlees van woorde in 'n sin die leser se begrip van die gelese materiaal verhoog?
- 16 Verbeter volg lees met 'n mens se vinger tydens lees die leser se begrip van die gelese materiaal?
- 17 Is aantekeninge maak terwyl 'n mens leer belangrik om te kan onthou?
- 18 Dink u dat die kreatiewer regterbrein-helfte 'n rol in die akademiese leerproses speel?

JA	ON-SEKER	NEE

- V19 27
- V20 28
- V21 29
- V22 30
- V23 31
- V24 32
- V25 33
- V26 34

AFDELING C:

Die volgende vrae peil ook die akademiese leerproses in skool- en terapisituasies. Daar is geen regte of verkeerde antwoorde nie. Kies die antwoord wat na u mening die toepaslikste is deur 'n X in die toepaslike kolom te trek.

- 1 Hoeveel weet u van u oogbewegings terwyl u lees en hoe dié kennis tot u voordeel ingespan kan word?
- 2 Weet u hoe om u oë te leer om meer inligting in te neem as wat hulle normaalweg inneem?
- 3 Hoe bewus is u van sekere kosse se chemiese uitwerking op die leerproses binne die brein?
- 4 Hoeveel weet u van begrip se aard en hoe begrip verbeter kan word?
- 5 Hoeveel weet u van aantekening-tegnieke wat u in staat stel om "geestesprentjies" van u gedagtes te vorm?
- 6 Hoeveel weet u, in teenstelling met sleutel woorde, van sleutelbegrippe se aard en hoe hulle met aantekeninge maak, verbeelding en leer verband hou?
- 7 Hoeveel weet u van kreatiwiteit?
- 8 Hoeveel weet u van die deursneebrein se kreatiwiteitspotensiaal?
- 9 Hoeveel weet u van die linker- en regterhelftes van die brein se onderskeie/verskillende funksies?

KENNIS		
Deskundig	Gemiddeld	Bepaald

- V27 35
- V28 36
- V29 37
- V30 38
- V31 39
- V32 40
- V33 41
- V34 42
- V35 43

AFDELING D:

Die volgende is 'n lys leerkenmerke. Wat-
ter waarde sal u, op grond van u verworwe ervar-
ing, aan hulle relatiewe belangrikheid in die
onderrig-/leeromgewing toeken?

- 1 = van geen belang nie
2 = matig belangrik
3 = baie belangrik
4 = uiters belangrik

- 1 Die leeromgewing moet stil en stemmig wees.
- 2 Leer verg baie inspanning en harde werk.
- 3 Die goeie student moet sy bes probeer en goed meeding.
- 4 Sommige vakke/begrippe is uiters moeilik om te bemeester.
- 5 Konsentreer deur stil te sit in 'n stil kamer sonder enigiets wat 'n mens se aandag aftrek, is belangrik.
- 6 Kuns en musiek help die leerproses aan.
- 7 Verbeelding, intuïsie/aanvoeling en spelerigheid binne die klaskamer is belangrik.
- 8 Logiese en geordende onderrig en leer is belangrik vir die akademiese leerproses.
- 9 Gevoelens en willekeurige assosiasies is deel van onderrig/leer.
- 10 Gelag, spelery en grappe kan 'n welkome blaaskans tussen moeilike, vervelige lesse bied.
- 11 Speletjies, grappies en pret is deel van die klaskameronderrig-situasie.
- 12 Akademiese leerdery behoort maklik en prettig te wees.
- 13 Sommige mense leer makliker as ander.
- 14 Die onderwyser is baie belangrik vir die leer-situasie.
- 15 Koöperatiewe (samewerkende) leerwerk tussen onderwyser/terapeut en leerling/kliënt is noodsaaklik.

1	2	3	4

- V36 44
 V37 45
 V38 46
 V39 47
 V40 48
 V41 49
 V42 50
 V43 51
 V44 52
 V45 53
 V46 54
 V47 55
 V48 56
 V49 57
 V50 59
 V51 1 59

AFDELING E:

Omskryf of beskryf asseblief die volgende begrippe aan die hand van u verworwe ervaring:

Leer

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.....

Geheue

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Visualisering

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Versnelde leer

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Superonderrig

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V52

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 1-3

V53-57

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 4-8

V58-62

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 9-13

V63-67

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 14-18

V68-72

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 19-23

V73-77

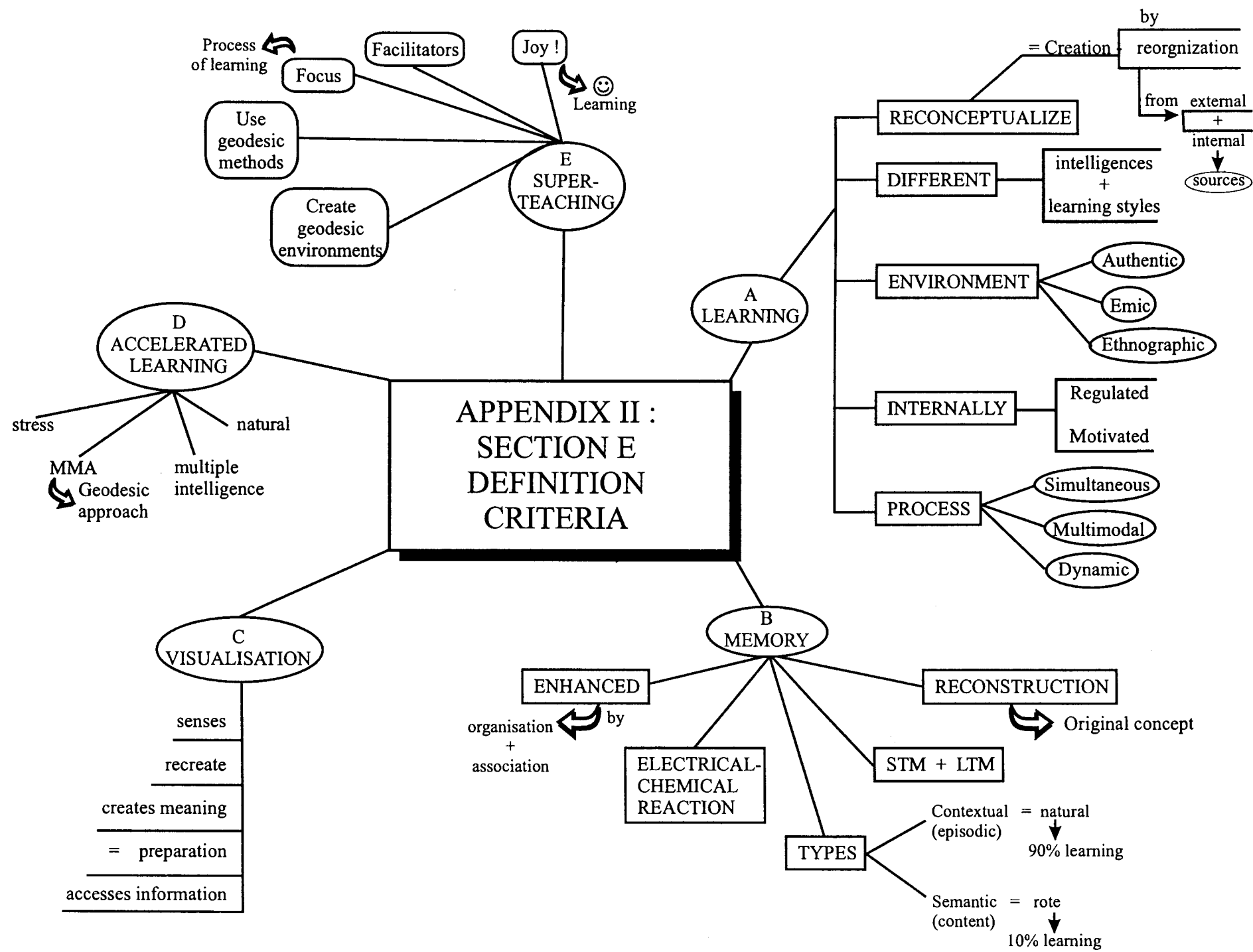
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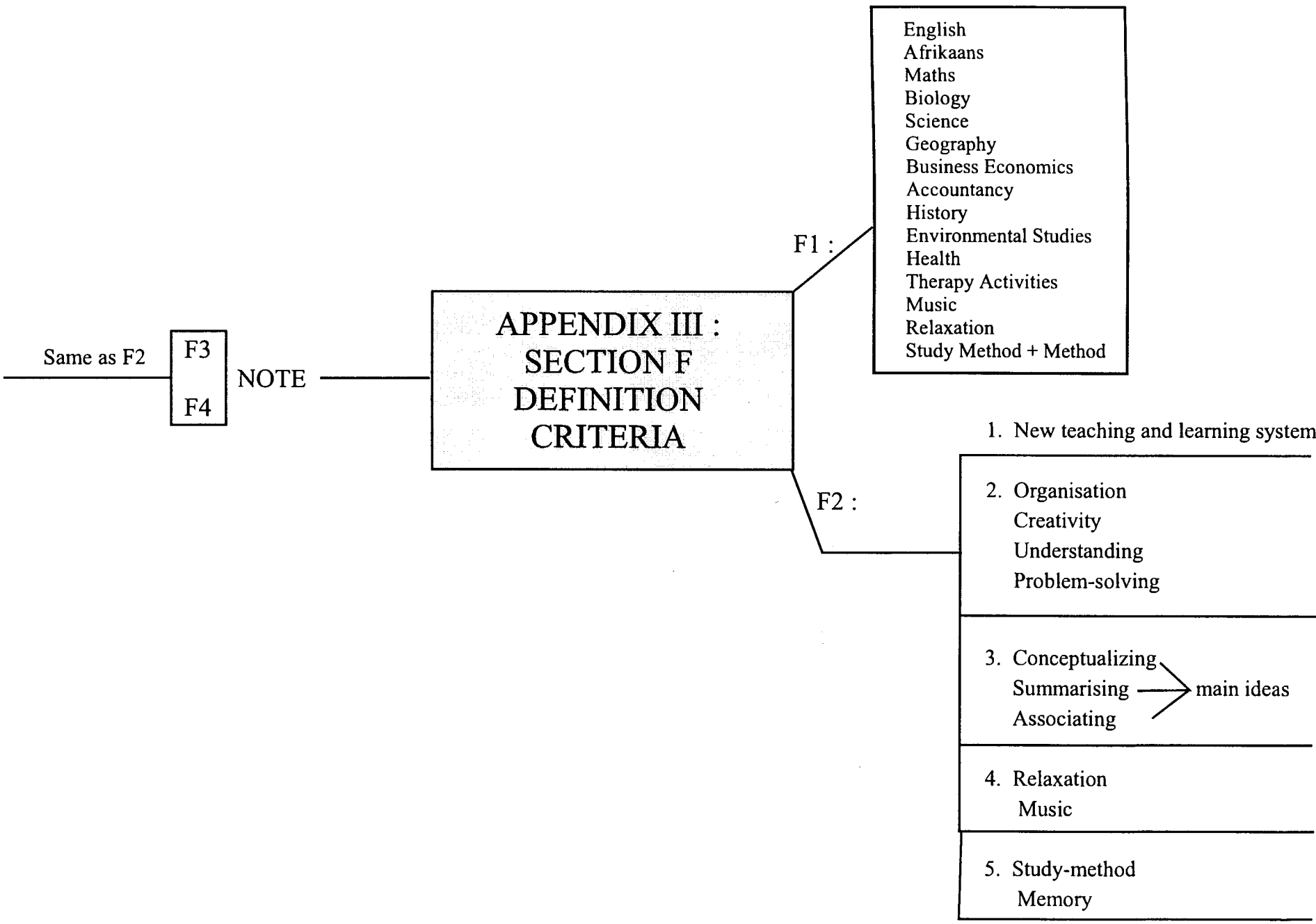
 24-28

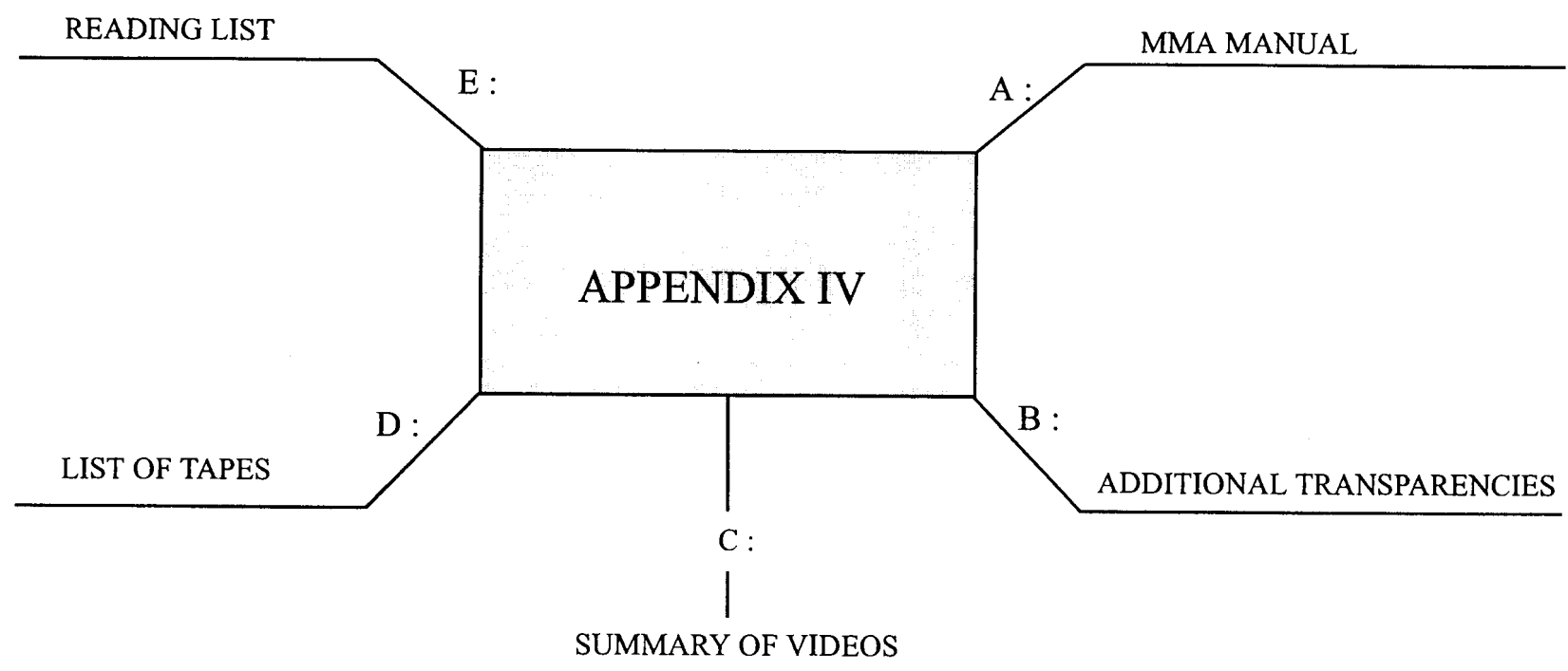
V78

2

 59



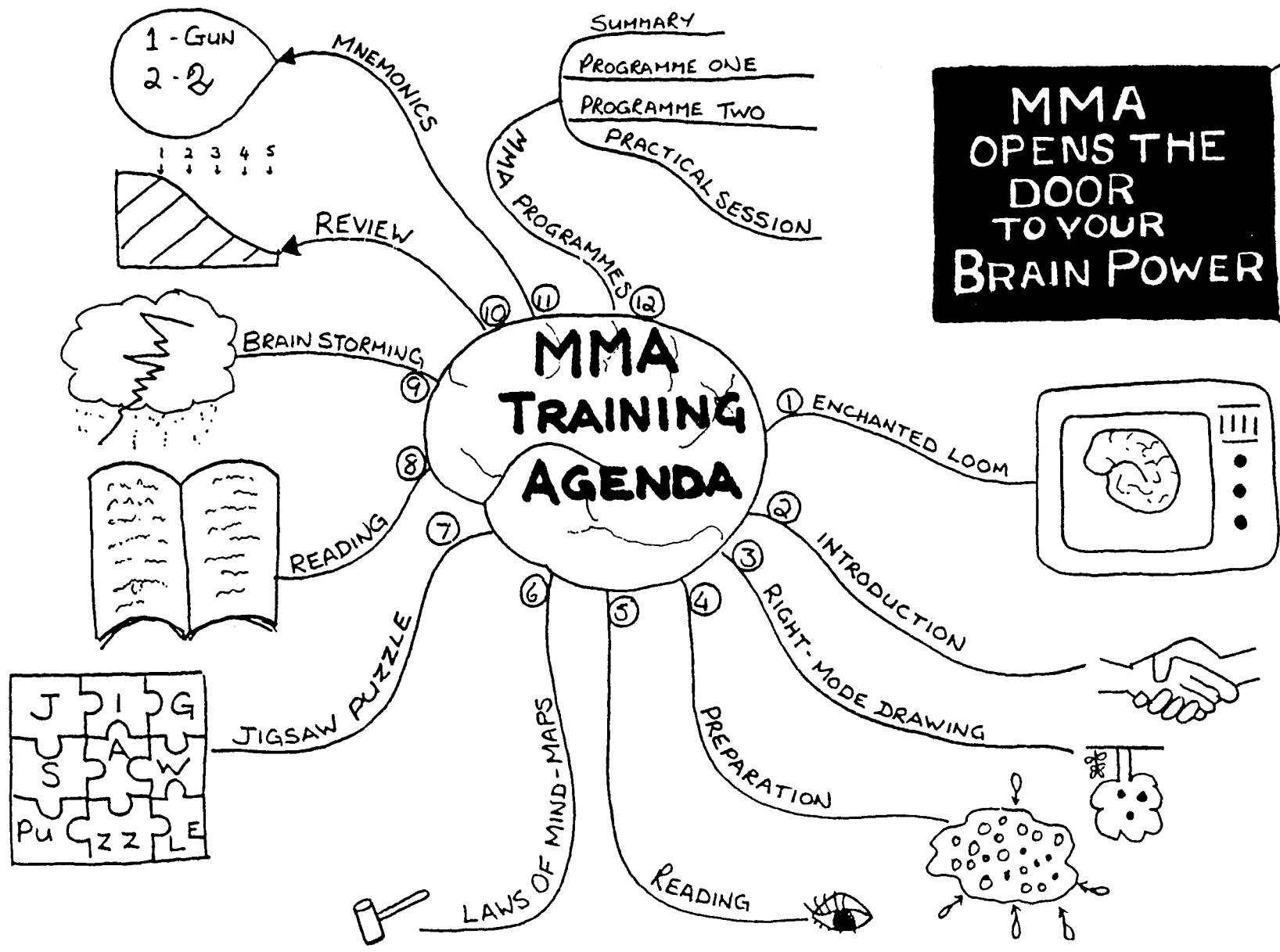


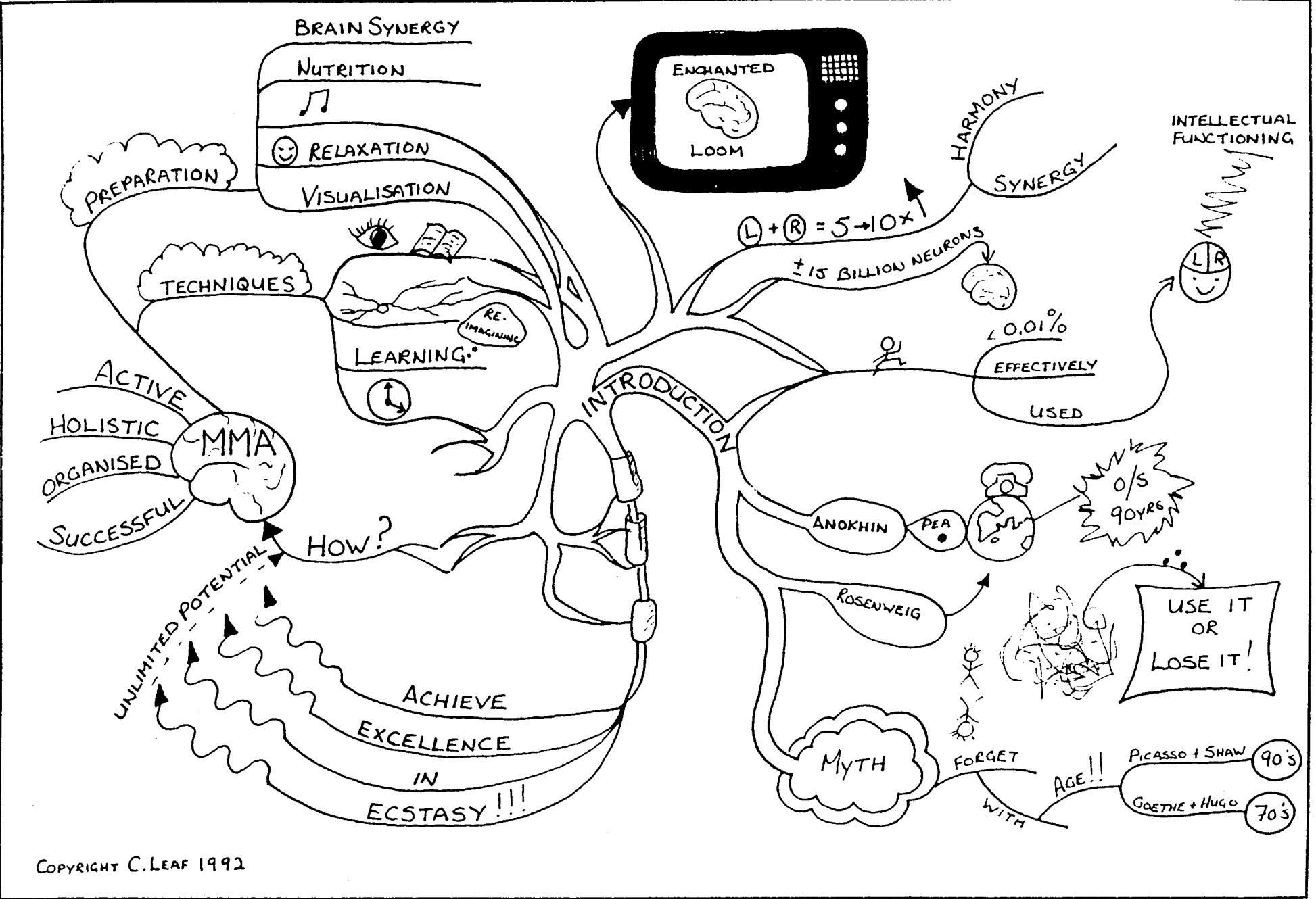


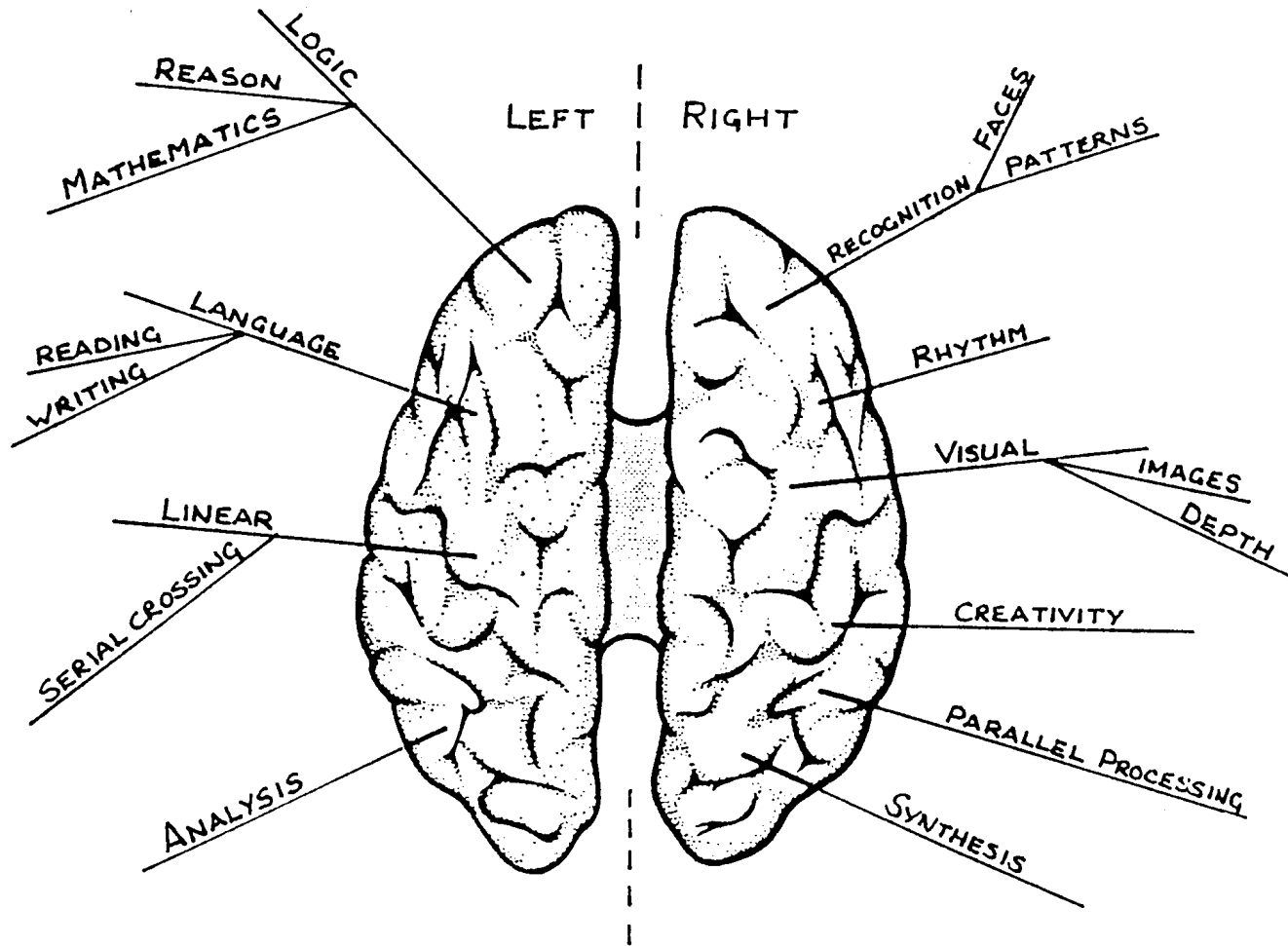
**APPENDIX IVA :
MMA MANUAL**

**MMA
OPENS THE
DOOR
TO YOUR
BRAIN POWER**

**MMA
TRAINING
AGENDA**







Specialisations of the Left and Right Brain

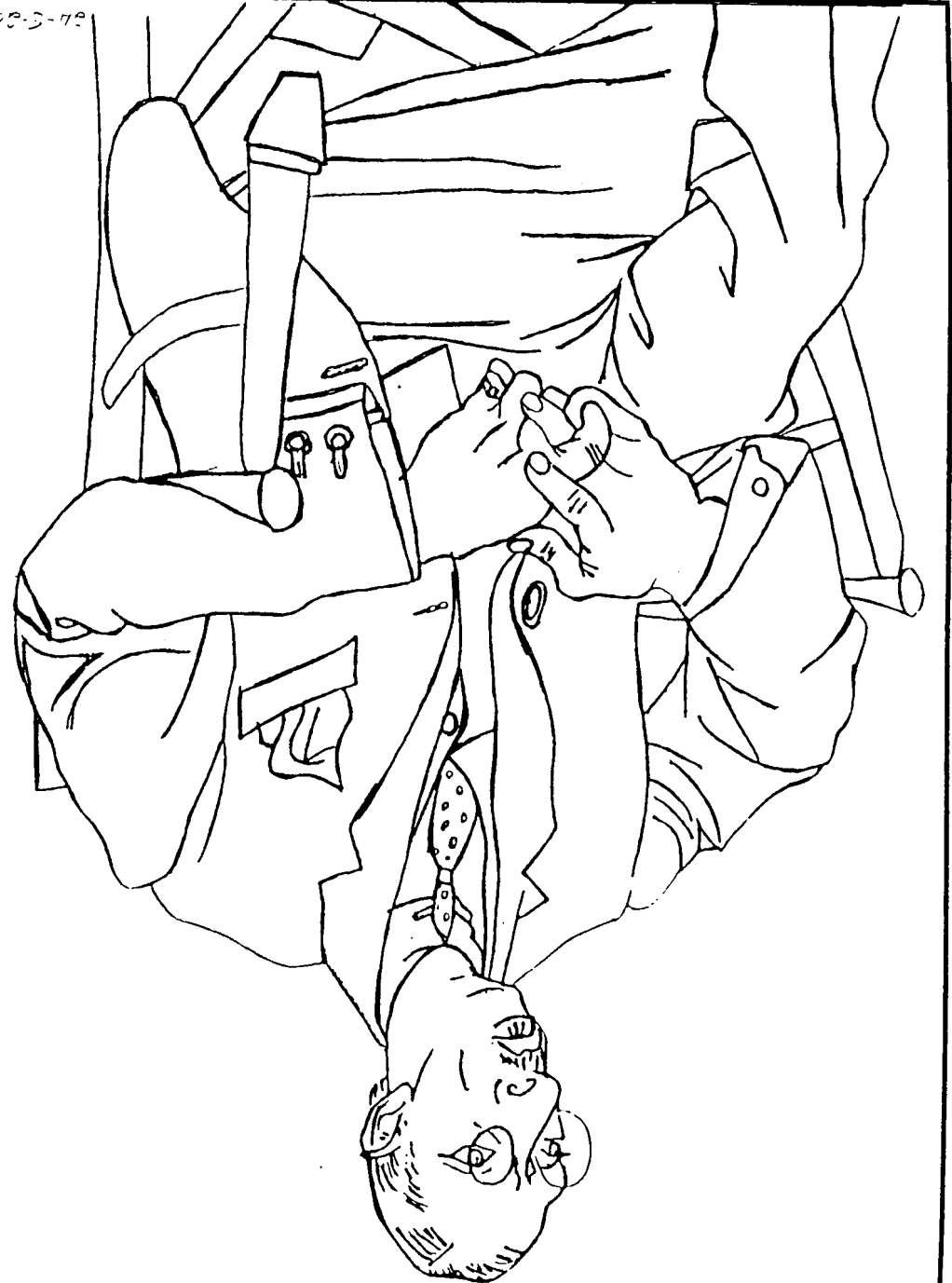
Upside-down Drawing

Learning To Experience The Right Mode

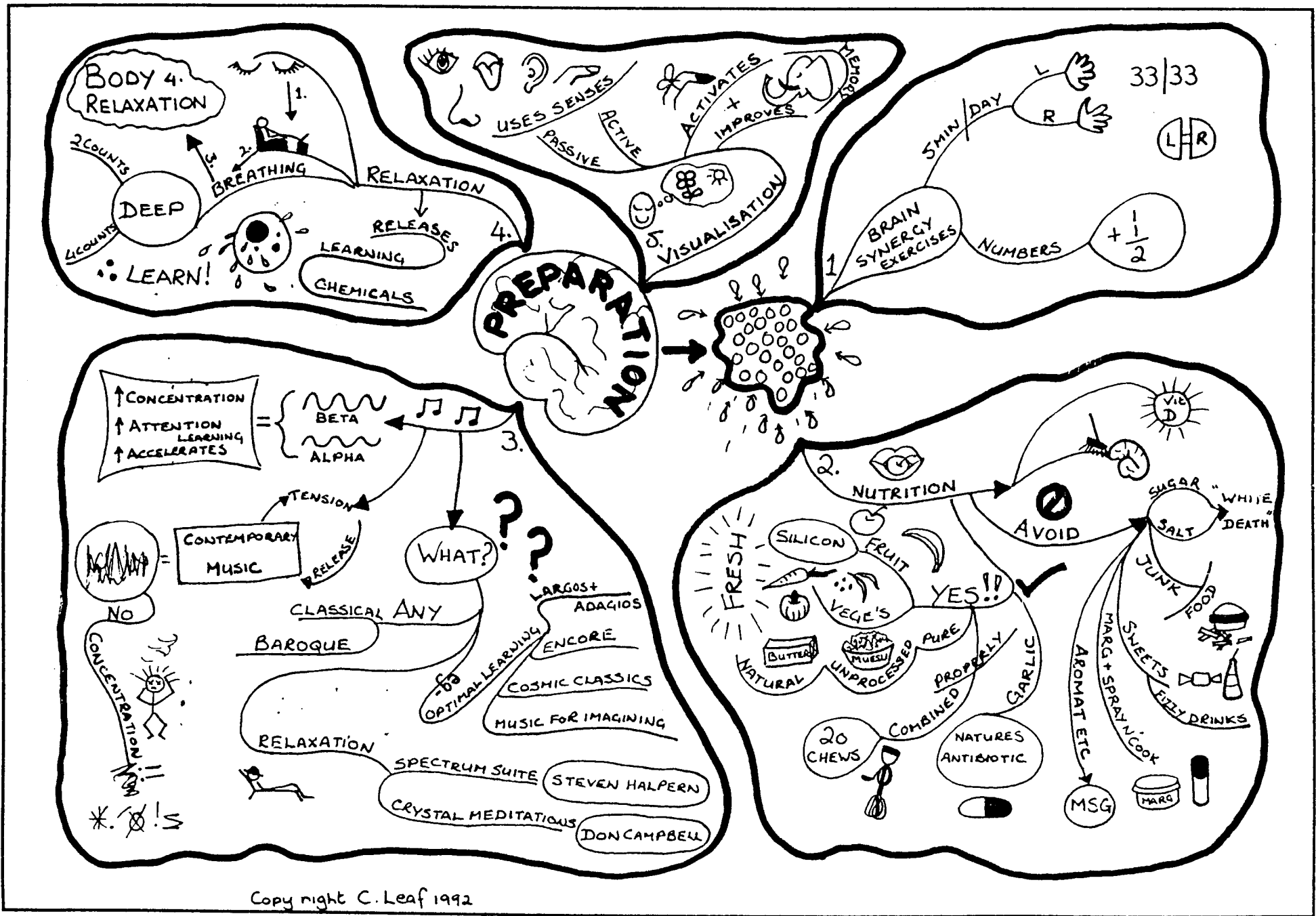
The figure is a reproduction of a line drawing by Picasso, of the composer Igor Stravinsky. The image is upside-down. You will be copying the upside-down image. Your drawing will therefore be upside-down.

- You have \pm 20 minutes in which to complete the drawing.
- Do not turn the drawing right side up until you are finished, this will cause you to shift back into the left mode.
- Look at the upside-down drawing for 1 minute.
- Now start drawing, begin at the top, copying each line, moving from line to line. Don't name things, ie hands etc. Just copy the lines.
- Once you have started drawing, you will find yourself becoming very interested in how the lines go together — your left hemisphere will switch off as the task is too slow and it is too hard to recognise anything. Your right mode will be working.

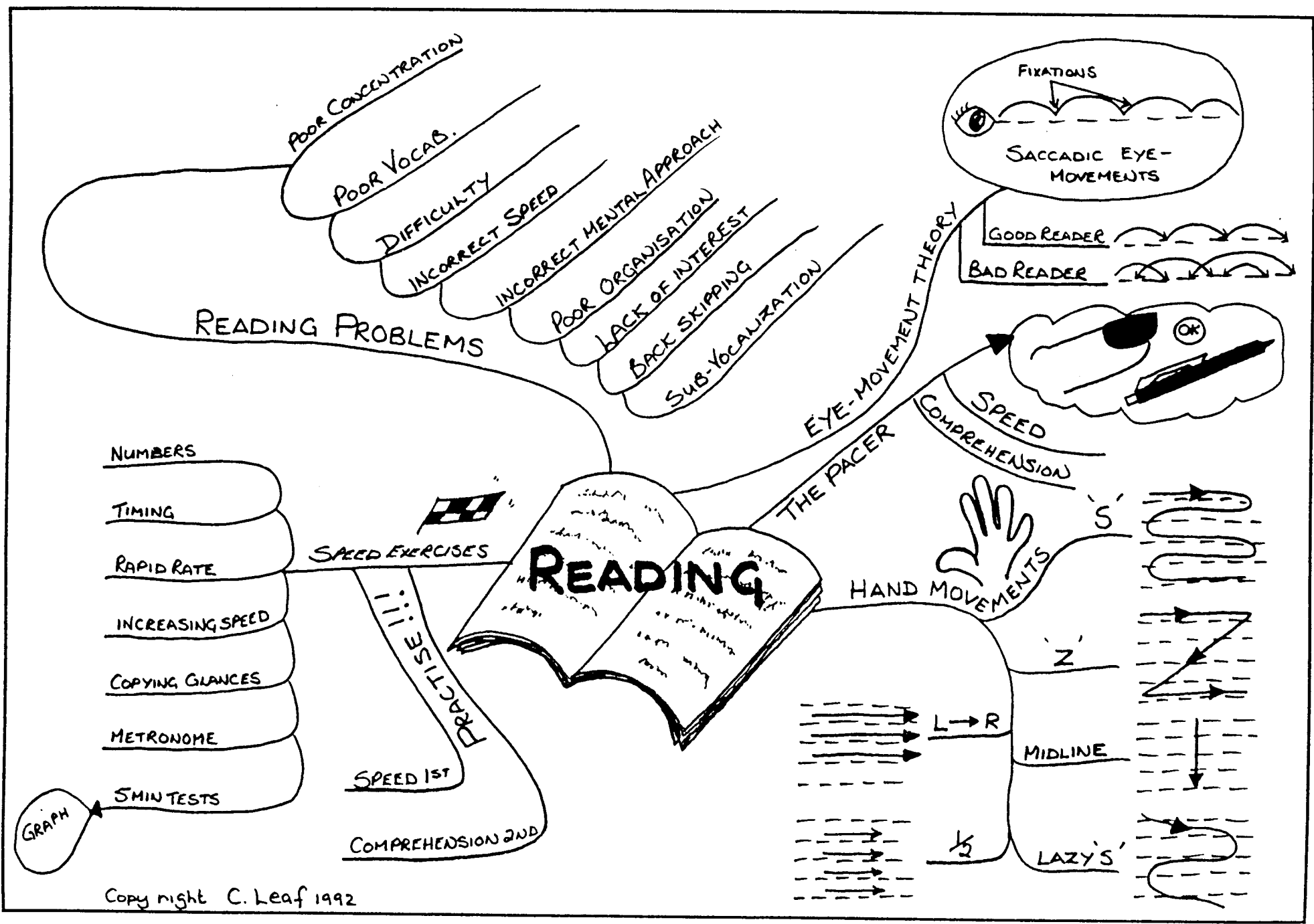
88-3-78



X



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SPEED READING EXERCISES

7401	_____	2753	_____
8764	_____	1172	_____
2876	_____	4827	_____
7654	_____	8566	_____
7601	_____	9862	_____
8754	_____	8421	_____
8110	_____	46532	_____
8765	_____	64321	_____
5492	_____	98010	_____
3346	_____	66254	_____
5443	_____	65432	_____
4455	_____	27548	_____
1877	_____	86421	_____
7550	_____	08435	_____
4466	_____	18642	_____
7701	_____	74322	_____
5420	_____	52740	_____
6243	_____	79284	_____
6421	_____	29476	_____
4429	_____	13654	_____
3327	_____	29370	_____
8761	_____	35726	_____
0185	_____	64651	_____
8242	_____	456095	_____
5530	_____	825469	_____
9872	_____	214193	_____
7049	_____	475381	_____
7285	_____	497624	_____
0423	_____	950787	_____
4671	_____	916365	_____
9014	_____	260902	_____
4185	_____	141601	_____

SPEED READING EXERCISES

516	615	516	893	625	847	782
827	827	651	825	837	653	445
745	873	754	745	755	432	891
653	763	563	566	653	365	871
874	198	235	471	874	236	714
654	564	445	645	654	348	251
843	256	345	761	918	843	348
118	881	818	453	116	118	342
822	522	782	282	882	822	768
845	352	764	238	845	458	326
874	187	874	784	237	453	267
187	234	118	553	178	187	456
465	345	564	456	465	234	265
876	456	345	234	237	876	678
781	871	765	187	465	781	118
123	132	123	546	781	432	234
567	543	234	567	765	576	891
562	562	265	256	786	198	234
776	667	676	891	776	453	234
765	664	678	765	654	367	918

TIME.....

SPEED READING EXERCISES

572	256	762	572	527	653	862
782	278	872	782	433	574	276
330	303	430	330	030	764	332
319	193	391	193	319	491	339
445	545	554	445	675	465	234
354	543	334	354	345	554	435
213	231	123	213	331	112	238
435	543	334	554	434	435	534
221	112	221	321	121	212	124
736	673	376	376	673	763	736
241	241	412	214	412	240	112
567	765	567	675	657	577	651
021	210	021	102	110	201	121
227	727	772	272	722	277	227
646	664	646	661	464	446	466
189	189	918	891	981	198	819
771	117	771	717	711	171	177
926	629	962	626	966	369	926
202	022	020	202	220	210	201
356	365	563	356	765	536	635

TIME.....

SPEED READING EXERCISES

75	_____	82	_____
941	_____	457	_____
84	_____	49	_____
307	_____	562	_____
18	_____	94	_____
592	_____	165	_____
89	_____	14	_____
062	_____	830	_____
56	_____	93	_____
107	_____	724	_____
02	_____	64	_____
733	_____	190	_____
75	_____	93	_____
916	_____	076	_____
07	_____	23	_____
825	_____	196	_____
81	_____	36	_____
943	_____	741	_____
28	_____	94	_____
921	_____	566	_____
42	_____	56	_____
105	_____	029	_____
63	_____	93	_____
429	_____	575	_____
90	_____	38	_____
472	_____	470	_____
65	_____	21	_____
917	_____	349	_____

SPEED READING EXERCISES

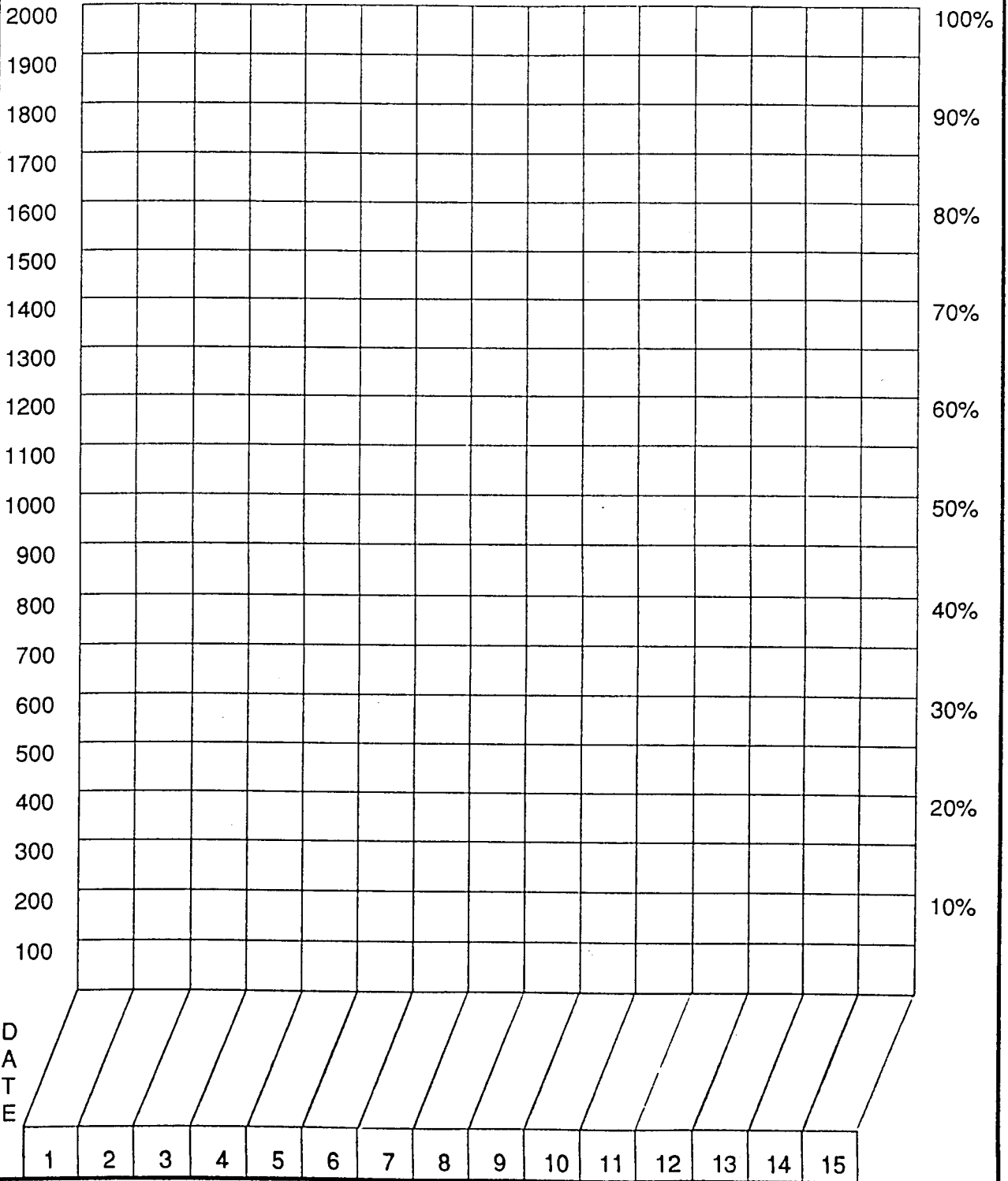
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059	_____	280	_____
45		17	
298	_____	503	_____
36		94	
275	_____	705	_____
06		19	
329	_____	062	_____
12		29	
965	_____	410	_____
94		83	
562	_____	391	_____
51		77	
379	_____	152	_____
49		71	
063	_____	926	_____
10		62	
692	_____	831	_____
694		591	
801	_____	032	_____
937		152	
804	_____	407	_____
462		915	
591	_____	862	_____
905		105	
817	_____	762	_____
952		908	
831	_____	752	_____

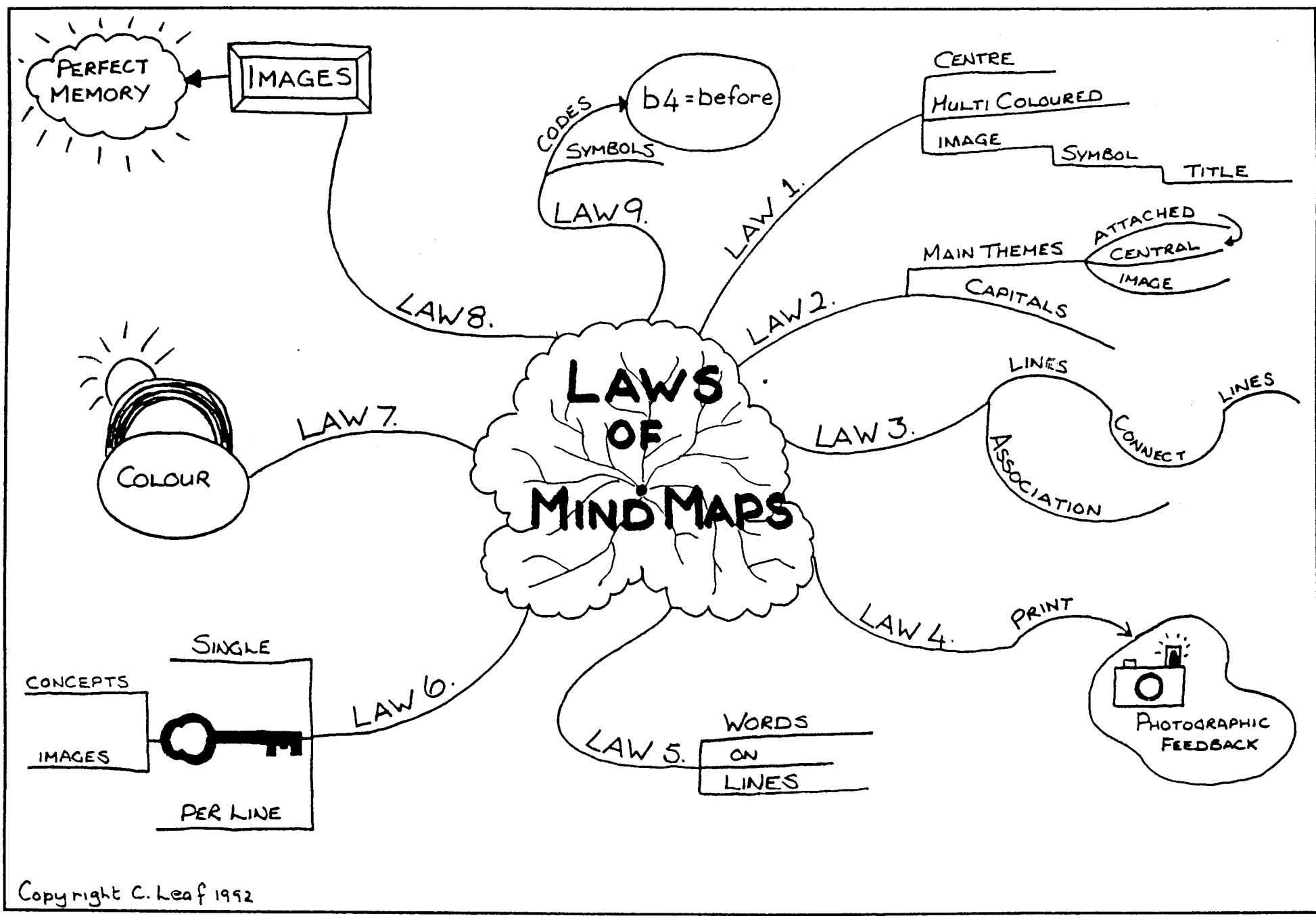
RAPID READING PROGRESS CHART

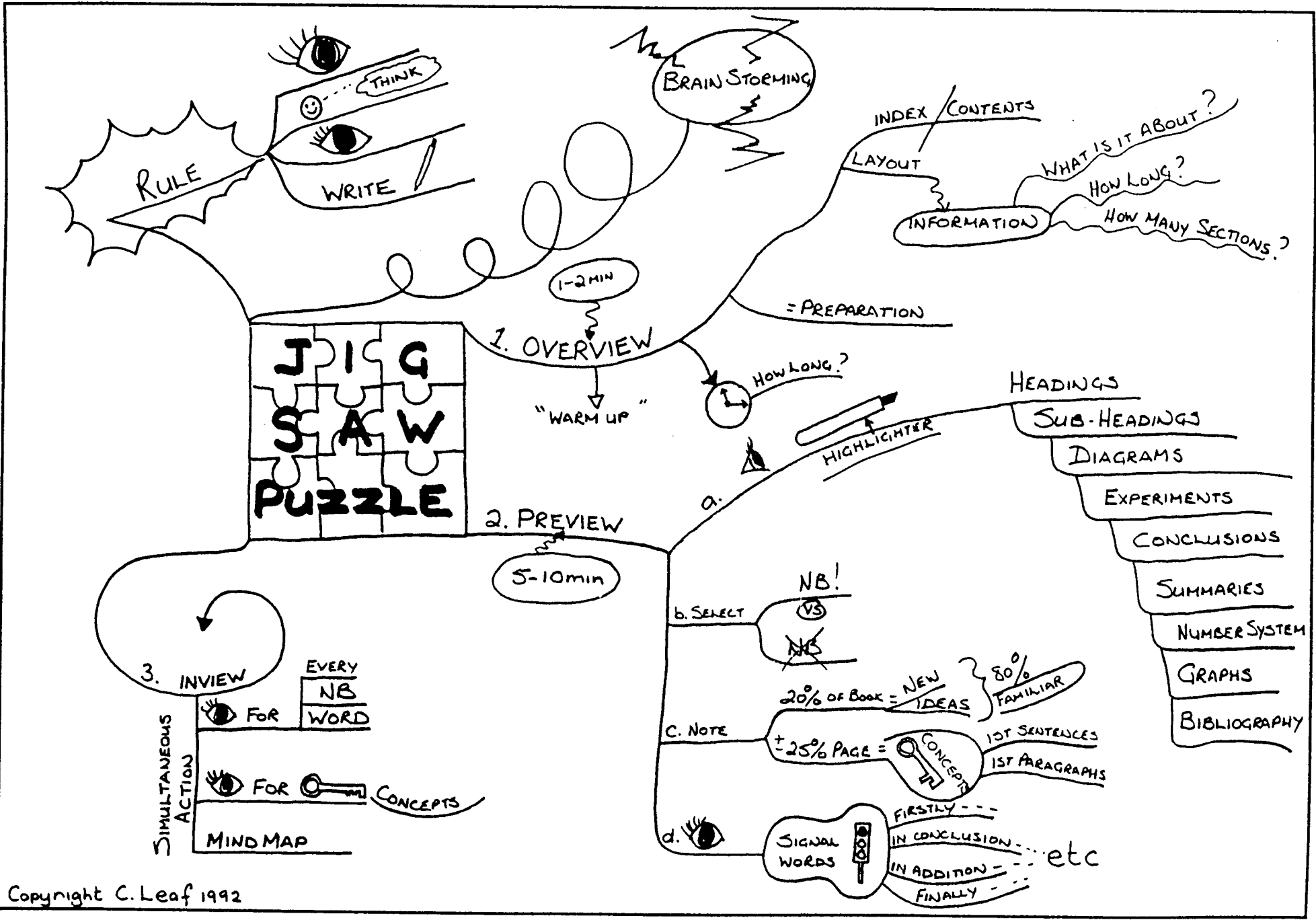
GOAL

SPEED: wpm

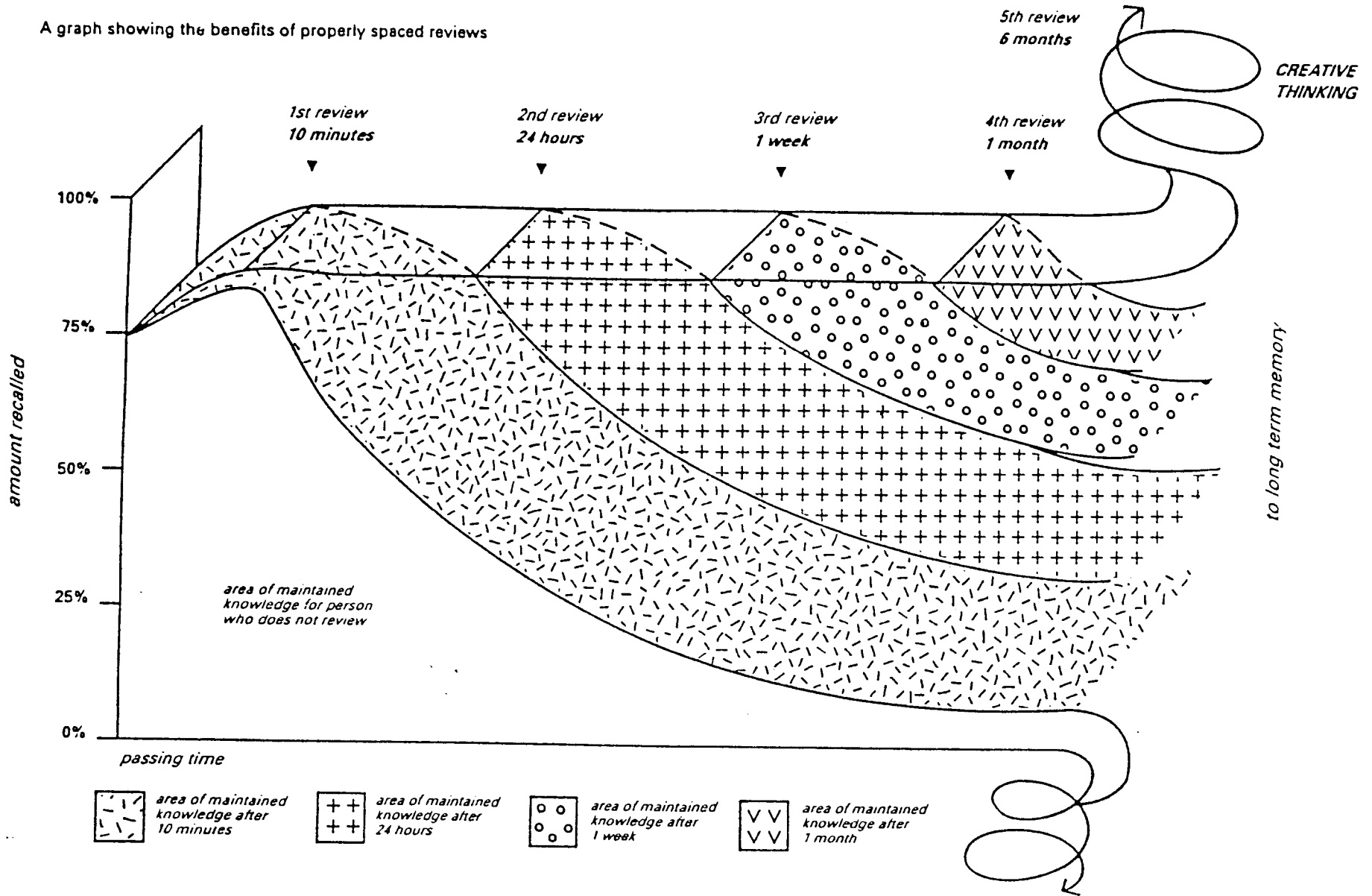
COMPREHENSION

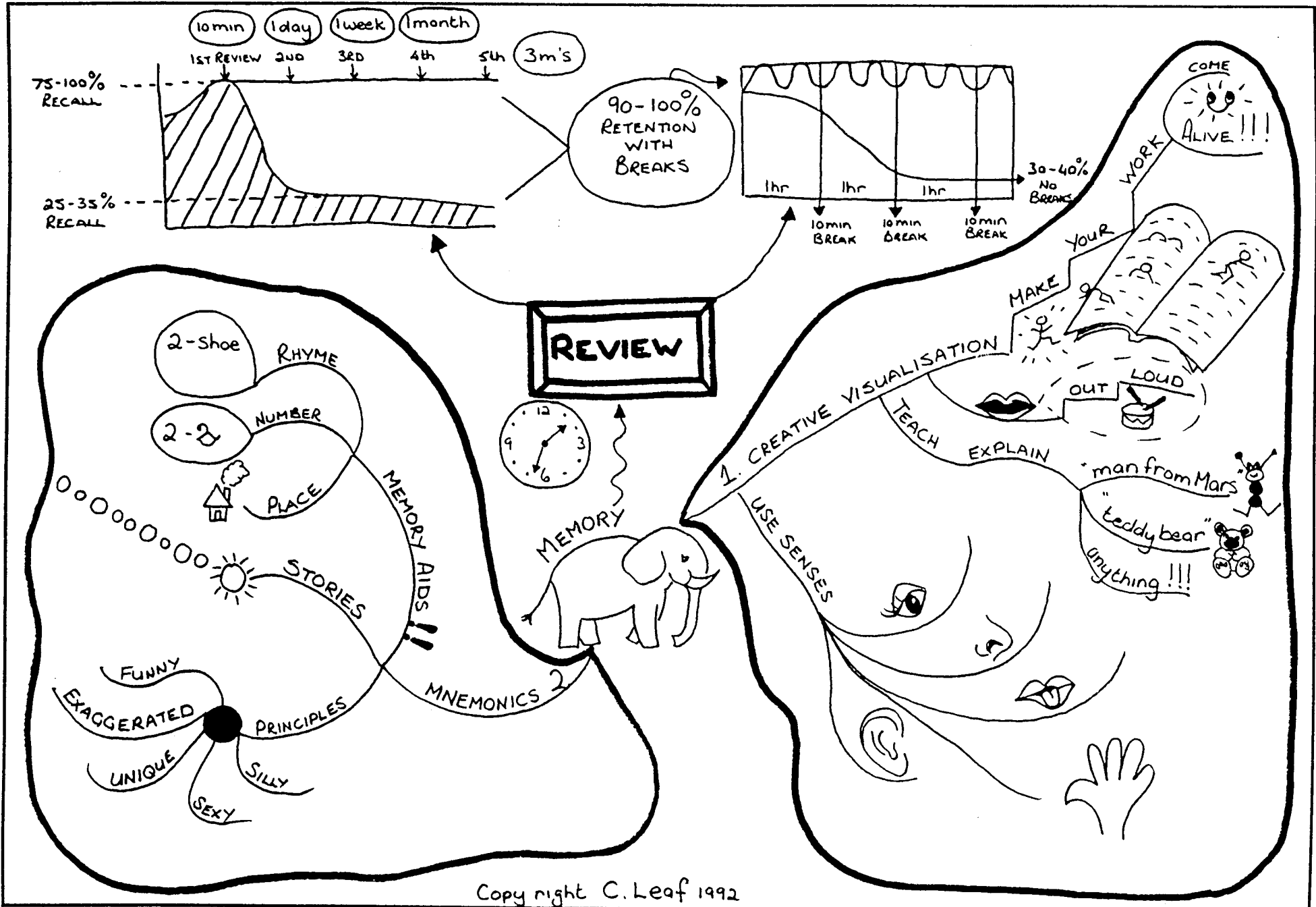






A graph showing the benefits of properly spaced reviews

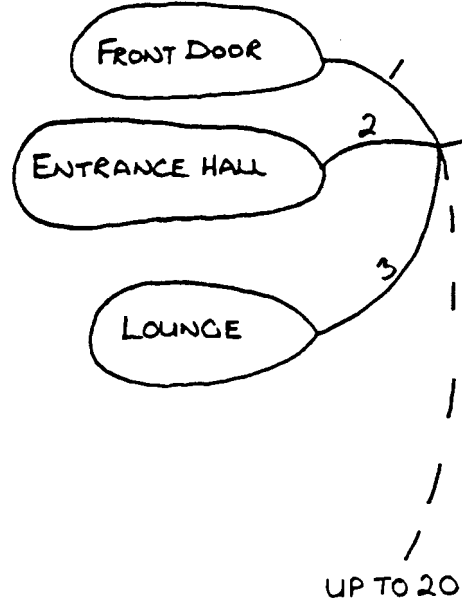




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MNEMONIC SYSTEMS

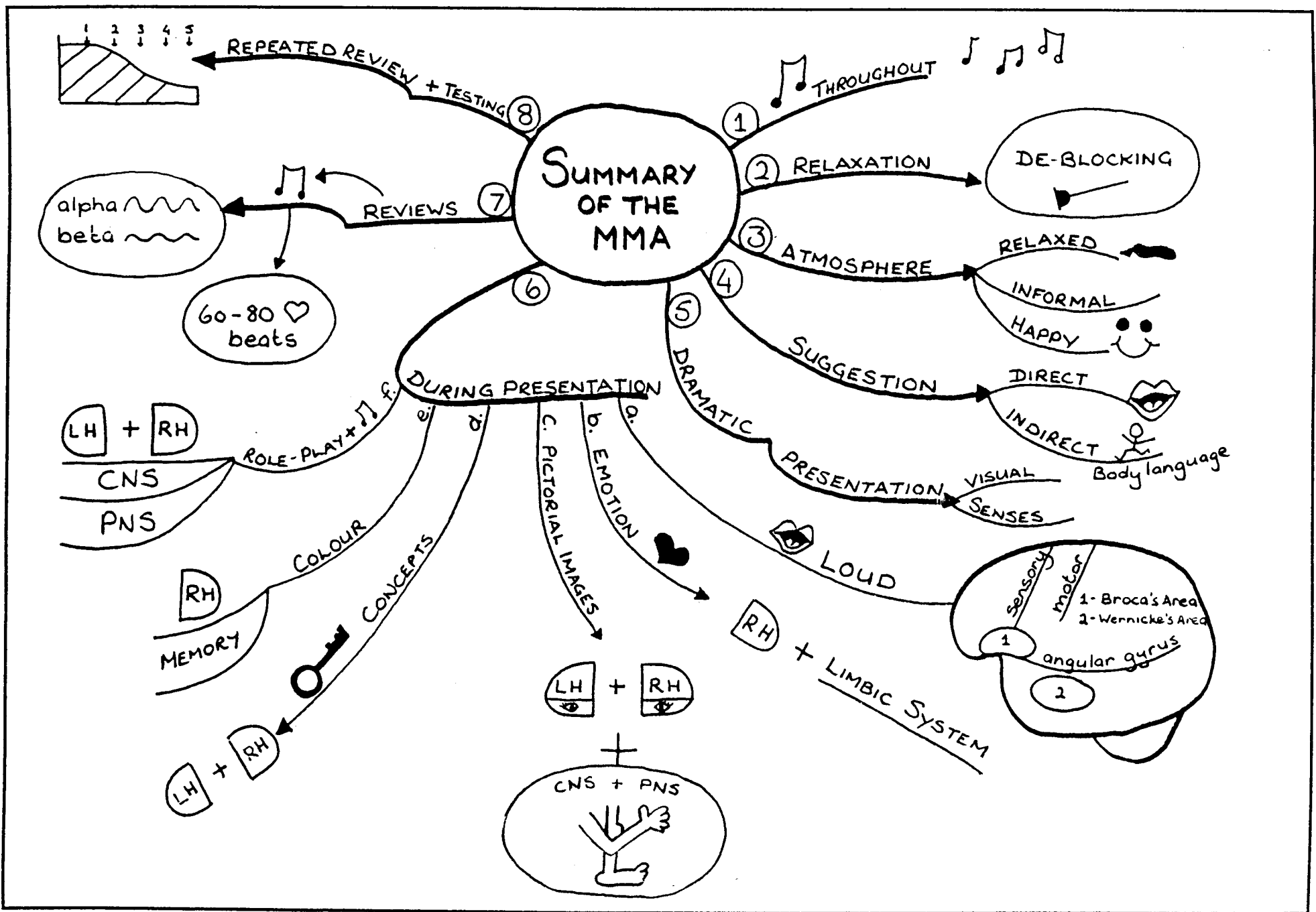
RHYME

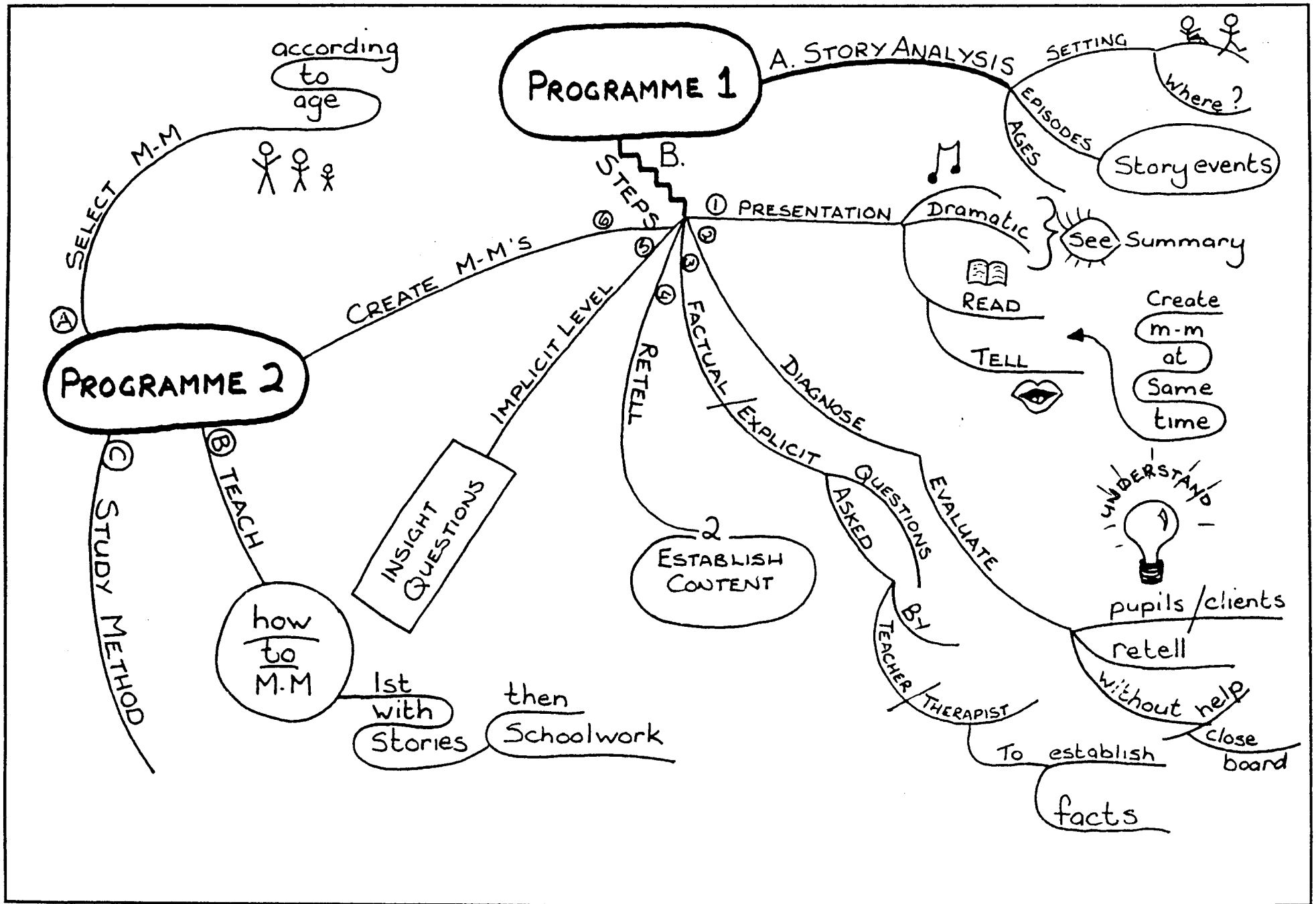


NUMBER

1	1	2	2
3	3	4	4
5	5	6	6
7	7	8	8
9	9	10	10

- 1 - GUN
- 2 - SHOE
- 3 - TREE
- 4 - DOOR
- 5 - HIVE
- 6 - STICKS
- 7 - HEAVEN
- 8 - GATE
- 9 - LINE
- 10 - PEN





SUMMARY OF THE APPLICATION OF THE MMA

- 1 Music is played throughout to create an optimal learning situation.
- 2 Each session begins with physical and mental relaxation, to literally “deblock” the learning barrier.
- 3 A relaxed, informal, happy atmosphere is created.
- 4 The art of direct and indirect suggestion is used.
- 5 Whatever material is being worked on, is presented as dramatically as possible, using the senses and visual imagery.
- 6 During therapy/teaching/learning,
 - ❖ words are read aloud. This activates Broca’s area, Wernicke’s area, the left hemisphere sensory and motor cortex, and the angular gyrus.
 - ❖ text is read with emotion and inflection. This activates right hemisphere areas for prosodic functions, the right motor and sensory cortex, and the limbic system.
 - ❖ pictorial images are developed and mind-maps used (see programmes). This involves a major portion of the primary visual cortex, the left and right motor sensory cortices and the central and peripheral nervous systems from the brain stem through the arms, hands and fingers.
 - ❖ key words are used on mind-maps, encouraging the client to tie the words to a pictorial memory, thus activating the right hemisphere.
 - ❖ colour-coding is used on mind-maps, allowing discrimination in the right visual cortex and to activate memory.
 - ❖ role-play with music, is encouraged, to activate the left and right motor and sensory cortices, the brain stem and the central and peripheral nervous system.
- 7 Reviews are done using relaxation techniques, and also Baroque music, which, lowers beta rhythms 13.30 cycles per second within the left hemisphere, allows increased alpha rhythms (8-12 c.p.s) in both hemispheres, impacts the limbic system components controlling emotion and memory, and works to lower blood pressure, heart rate and respiratory rate.
- 8 Testing is done after a review, using mind-maps. This reinforces neuronal connections established during initial learning, leading to hypertrophy and/or branching of neuron dendrites, making recall easier.

The more vivid and active the impression of what is being learned, the stronger the memory trace. The spike of electrical activity in the brain increases markedly with novel, surprising or vivid stimuli. This activity signals the hippocampus and hypothalamus to produce increased levels of neurochemicals related to memory formation.

THE MMA PROGRAMME ONE: LANGUAGE AND LEARNING DISABILITY

SECTION A: BACKGROUND - STORY ANALYSIS

(Adapted from Wallach & Butler)

- 1 **SETTING** Main Characters
 Social, physical, temporal context

- 2 **EPISODES**
- 2.1 **Beginning** - the initiating event, which could be:-
 - ❖ a natural occurrence. eg - a flood.
 - ❖ an action. eg - three pigs leaving home.
 - ❖ an internal physical state. eg - hunger, pain, sickness.
 - ❖ a perception of an external event. eg - seeing a lion.
- 2.2 **Reaction** of the characters to the initiating event. This is normally the **internal response** that is determined by **cultural experience** and **personal attributes**. The internal response can be emotion (feeling or desire) or thinking (planning how to deal with a problem)
- 2.3 **Action** - The attempt (overt action) to deal with the initiating event.
- 2.4 **Consequence/outcome** -which could be:-
 - ❖ a natural occurrence. eg - the rain stops.
 - ❖ an end state. eg - marriage.
 - ❖ an affective response. eg - They lived happily ever after.
 - ❖ an idea. eg - has a new friend.
 - ❖ an action. eg - riding off into the sunset.
- 2.5 **Ending**

3 WORLD KNOWLEDGE/VIEWS

The following concepts are needed in order to be able to tell and understand stories. They are the starting point.

linguistic knowledge
rhetorical knowledge (prosody, proverbs, poetic)
causal conceptual (lectures, expository)
intentional conceptual (narrative)
spatial knowledge
knowledge of ❖ objects
 ❖ personalities
 ❖ roles

<p>equilibrium → transition → disequilibrium = sad stories disequilibrium → transition → equilibrium = happy stories</p>
--

4 IMPORTANT AGES IN STORY DEVELOPMENT

- 4.1 ± 3 years ❖ recognise that a story is different from conversation.
- 4.2 ± 4-5 years ❖ aware actions originate around events.
- 4.3 ± 6 years ❖ expand the above idea to include mediating thoughts, actions, events.
- 4.4 ± 11 years ❖ understand/use embedded episode.
- 4.5 ± 12 years ❖ multiple embedded episodes.

SECTION B: STEPS

STEP 1 PRESENTATION LEVEL

- 1.1 Read story/section of work/newspaper article etc, to client. If the content is long, stop after each episode and ask a factual question (explicit level). eg “Who was that about?” or “What have we just read?”

NOTE: If the client can't formulate an answer, summarise the content and ask the question again.

- Aim of Step 1
- ❖ listening skills
 - ❖ attention
 - ❖ comprehension
 - ❖ memory

STEP 2 DIAGNOSTIC LEVEL

2.1 The client now retells the story/article/school-work etc.

NOTE: **Do not help via probes, questions etc, as this is on a diagnostic level.**

For remedial therapeutic purposes, record and transcribe content for analysis and comparison, as well as to get an indication of: language level, types of errors, recall/memory, sequencing abilities and logic.

Aim of step 2 ❖ diagnostic
 ❖ assimilation and accommodation
 ❖ encoding and decoding

STEP 3 EXPLICIT LEVEL

3.1 Ask factual questions (explicit level), ie who?, what?, when?, in order to establish the factual content and sequence of the story/article etc, in the client.

NOTE: **No inference/insight questions are asked at this level.**

Explain meanings of new words - provide practice (semantics)

Aim of step 3 ❖ sentence formation
 ❖ word finding - semantics
 ❖ vocabulary - semantics
 ❖ comprehension
 ❖ memory
 ❖ categorisation

STEP 4 RETELLING LEVEL/PRACTICE STAGE

4.1 The client retells the story for the second time.

NOTE: **For remedial therapeutic purposes, probes can be used but, note how many, as one aims to decrease the amount of probes used as a criteria for success in therapy.**

Make sure the patient has grasped the content of the story/article etc.

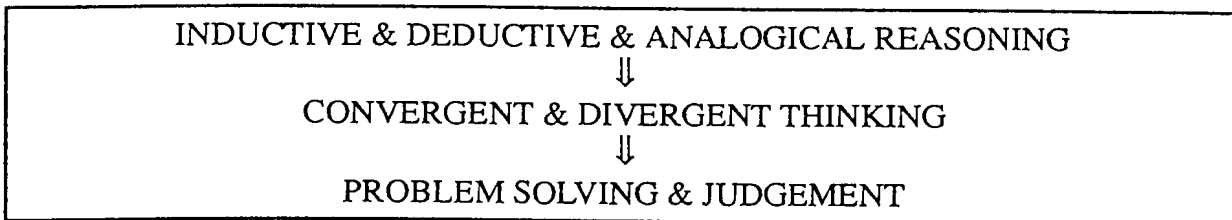
Aim of step 4 ❖ memory
 ❖ sequencing
 ❖ sentence formation
 ❖ comprehension

STEP 5 IMPLICIT LEVEL

5.1 Now ask the insight/deep questions, ie Why?, how?, what for?, What do you think?, What does it mean?, What would happen if...?, What is another title for the story?, Give reasons for.....etc.

Aim of step 5

- ❖ cause/effect
- ❖ inference
- ❖ implications
- ❖ metalinguistics - identification and discussion of:-
metaphor, simile, figurative language, use of expansion techniques, use of punctuation for effect etc.
- ❖ metacognition - thinking about thinking/internal plans eg:
 “Why did the author imply...?”
 “Why did the little girl tell stories?”
 “What were they feeling?”
 “What do you feel when you read this story?”
- ❖ reasoning, thinking, problem-solving, judgement:
on a verbal level - later with mind-maps.



NOTE: For remedial and language therapy specifically: From steps 2-4 various grammatical errors should have been noted. At this level these errors can be worked on using the content of the story as the material for therapy. Extra practice of linguistic structure with additional material can be used as well, thus errors are noted as they occur and worked on throughout therapy.

NOTE: For auditory perceptual training: This is worked on simultaneously, directly or indirectly, as errors occur, throughout therapy.

STEP 6 MIND-MAPPING

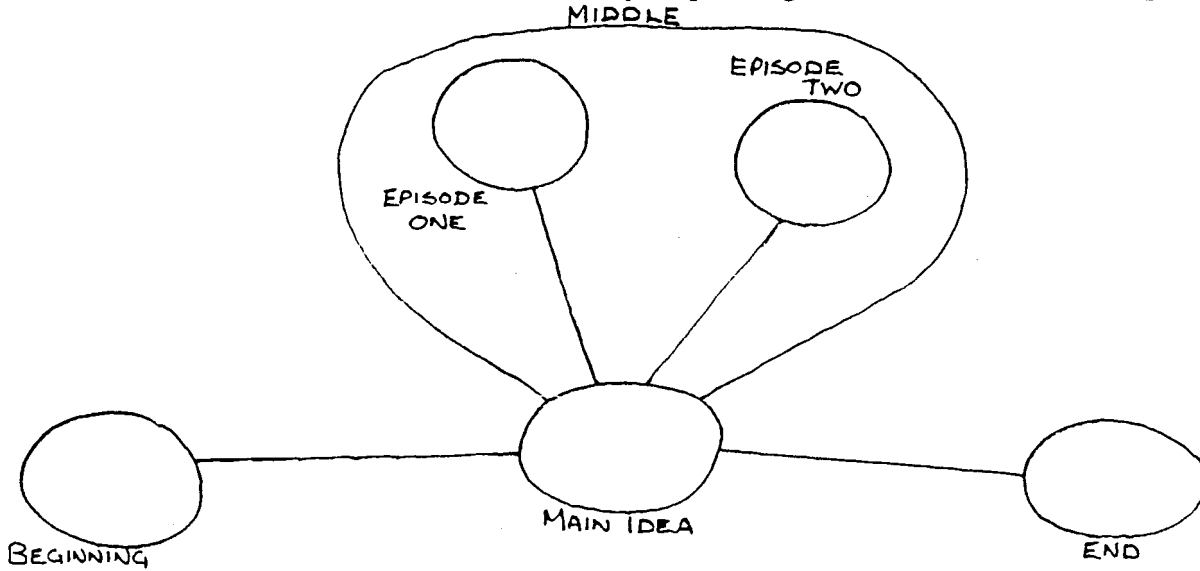
6.1 Only now is the client ready to mind-map the story. Select the type of mind-map to be done according to the age of the client.

THE MMA PROGRAMME TWO: CARRY OVER INTO THE CLASSROOM

TYPES OF MIND-MAPS

1 Pre-School, Grade One, Grade Two, 1st terms (\pm 5-8 years)

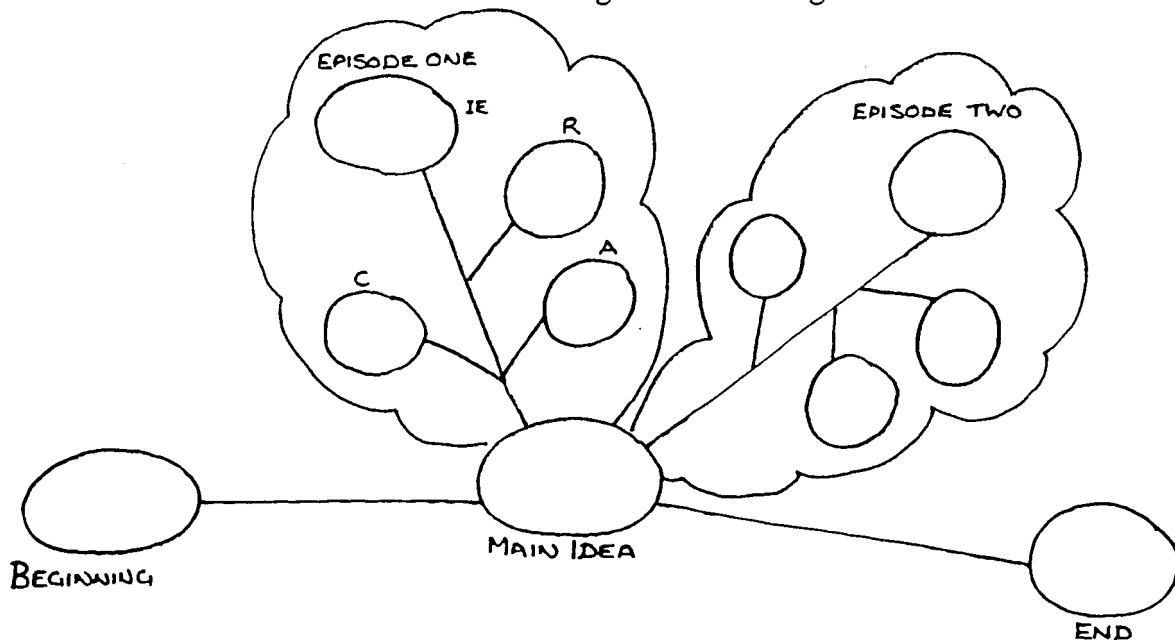
Can have up to 5 episodes in the body, depending on what the client can cope with.



2 Grade Two 2nd term (\pm 8-9 years)

There can be as many episodes as the client can cope with.

Words can be brought in at this stage.



3 Standard one onwards, mind-mapping proper is done. See Jigsaw puzzle and Laws of Mind-maps overleaf.

HOW TO TEACH MIND-MAPPING

- 1 Show the client a few mind-maps, explaining the rules simultaneously.
- 2 Now do the first mind-map, with the client following on the story or article that is been worked on. While doing the mind-map discuss how you are fulfilling the rules. **Adjust the language used to the level of the client.**
- 3 Once the mind-map is completed, go through it cloud, by cloud.
- 4 Let the client retell the mind-map. Use probes if necessary.
- 5 The client must practice retelling until he/she can do it without help. This practice familiarises the client with the concept of mind-mapping.
- 6 Now let the client draw his/her own mind-map of the story, without copying the one you have done. Help with the memory of facts/content of the story, as the emphasis here is on the creation of a mind-map, and not memory.

(1-6 can be covered in 2-5 half hour sessions)

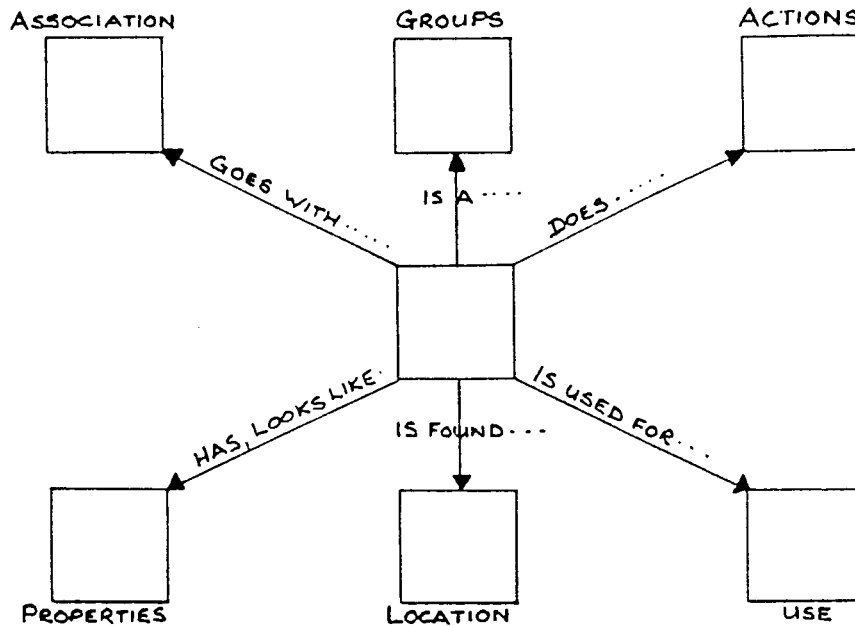
NOTE: Key concepts can pose a problem. If this appears to be the case, it is advisable to spend a few sessions working on key concept selection. When explaining what a key concept is, the following is often helpful:

Level one:	EVERY WORD	eg: The cat sat on the mat.
	↓	
Level two:	KEY WORD	eg: cat sat on mat
	↓	
Level three	KEY CONCEPT	eg: cat ⇒ mat

See overleaf - mind-maps for key concept practice.

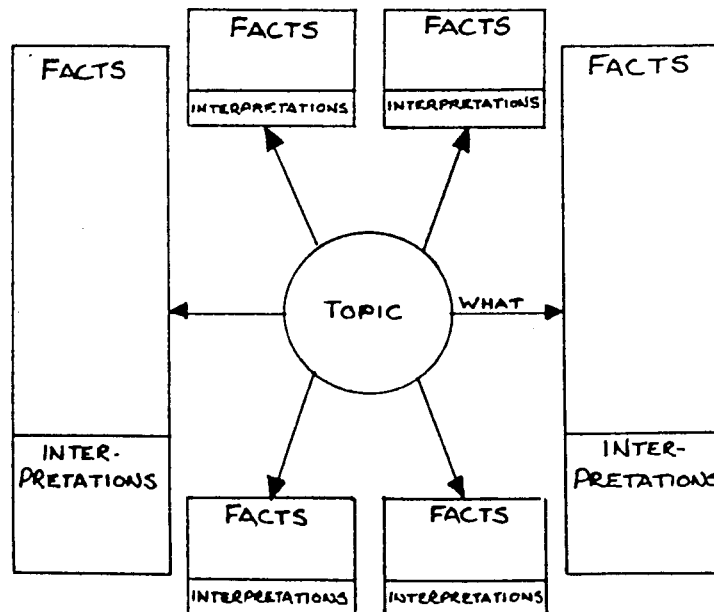
You can use the following mind-maps to do key concept practice:

1 FEATURE ANALYSIS GUIDE



This feature analysis guide not only improves key concept selection, but also categorisation, association, clustering and organisation (a cognitive skill).

2 SUN DIAGRAM



The Sun Diagram can also help with the analysis of the story, but the client must be encouraged to develop his/her own mind-map of the story, with his/her own creative structure as this one is still very linear and boring.

- 7 Using a new story, go through steps 1-7. Now get the client to create his/her own mind-map. Help where necessary.

NB!

As the client becomes more familiar with the method, decrease help gradually until the student can do a mind-map on his/her own. Once this is achieved, go onto a more complex story/article etc.

NOTE: IMPROVEMENT OF LANGUAGE USE:

This involves working on:

a) **Pragmatics** - dyad, turn-taking, topic-maintenance, listening, eye-contact.

b) **Transactional analysis** - the quality of what the patient is saying on a conversational level.

c) **Communicative functions** - informing, controlling, persuading, expressing, feelings, ritualising, imaging.

All these can be assessed and analysed constantly, throughout, as mind-mapping therapy uses functional discourse, ie narration, conversation and procedure, as its basic material. Mind-mapping therapy also works extremely well in group set ups, providing the ideal environment for assessing and remediating a,b,c.

THE SUGGESTED MMA PROCEDURE IN THE CLASS-ROOM

- 1 Baroque music and relaxed atmosphere.
- 2 Physical relaxation exercises.
- 3 Mental relaxation exercises (visualisation).
- 4 Presentation of lesson using as much of a story text as possible.
- 5 While presenting story, do mind-map on blackboard - simultaneous presentation.
- 6 Go through mind-map.
- 7 Get the students to retell mind-map, taking turns.
- 8 Remove mind map from the board, write down lesson information on the board in point form - or present on an overhead projector. Help the students select the correct key words.
- 9 Now for the classwork activity, they must each make their own mind-maps.
- 10 Homework: students must rehearse mind-maps for next lesson.
- 11 Next lesson begins with going over mind-maps, using quiz games etc.

NOTE: Present the techniques of mind-mapping in a story form first, before applying to school lessons.

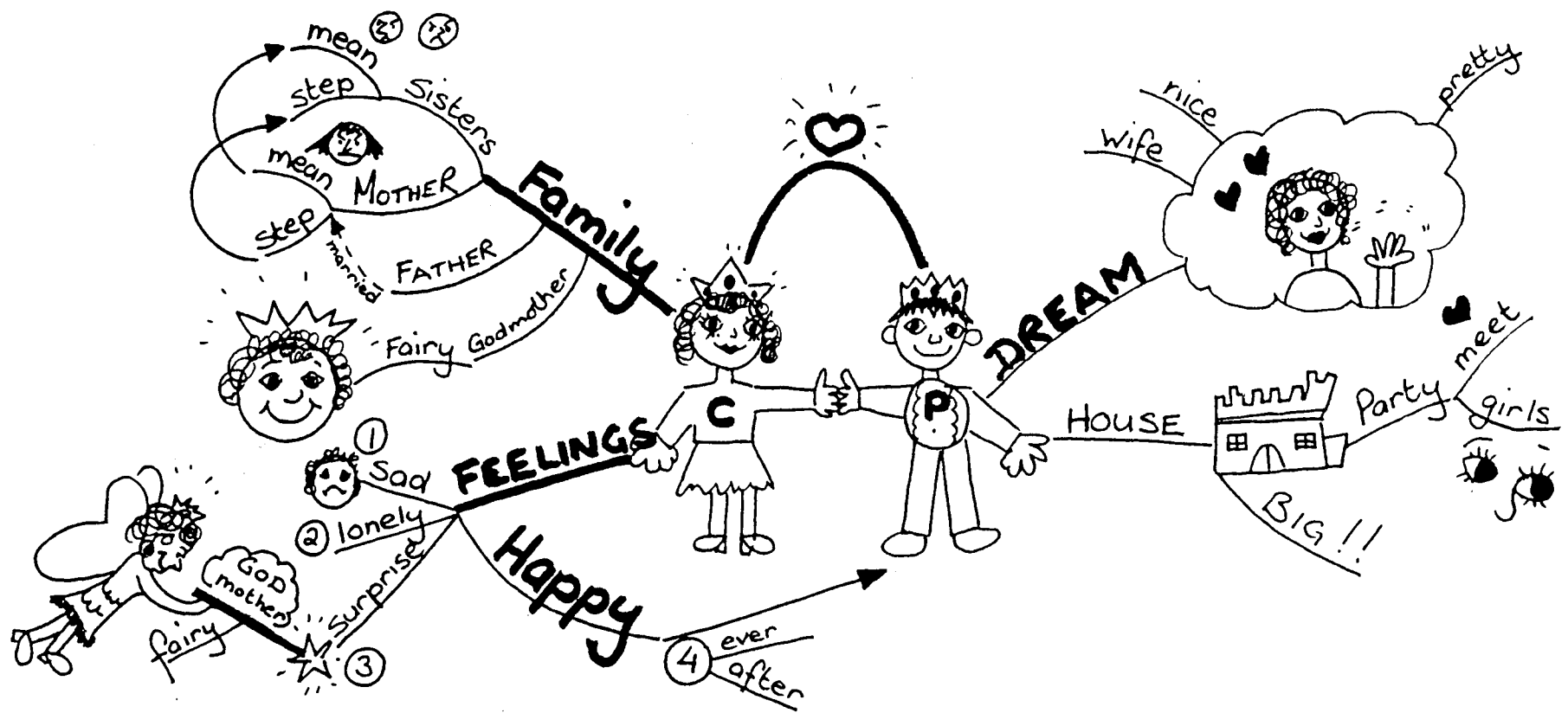
Teach Jigsaw puzzle to students as a lesson in guidance.

SAMPLE MIND-MAP

Cinderella

adapted from Tony Buzan

Here is how a child might envision the classic story of Cinderella.



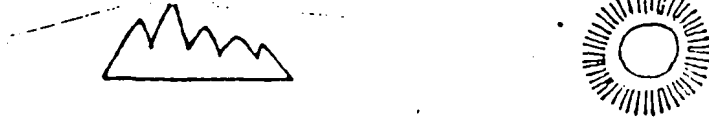
This is an example of how Mind-Maps can be used by all ages and occupations, to describe an infinite variety of subjects.

Summary

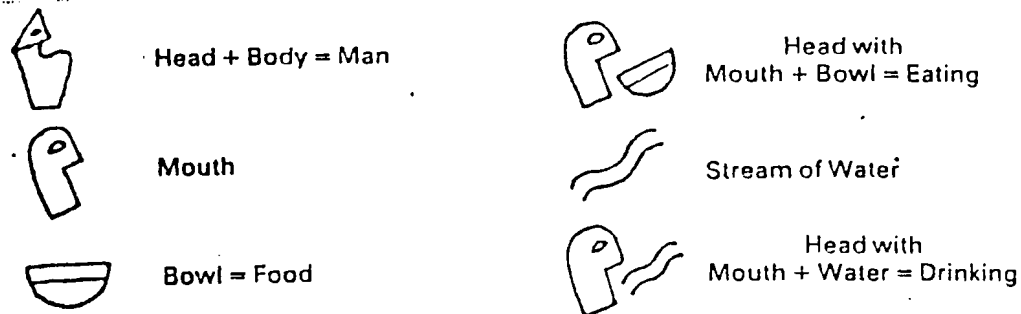
1. *Habitat*: Most frogs are land animals, but some kinds never leave the water. The eggs are laid in the water and the tadpole is aquatic.
2. *Body division*: Head and trunk.
 - (a) *Head* with:
 - wide mouth; row of teeth in the upper jaw; long, sticky tongue attached to the front of the mouth;
 - two protruding eyes with nictitating membrane;
 - two nostrils for smelling and breathing;
 - two round eardrums for hearing and balance.
 - (b) *Trunk* with two short forelegs and two large hindlegs with webbed toes.
3. *Body shape*: Short, flattened from top to bottom; no neck and a hump on the back.
4. *Body covering*: Moist, naked skin with mucous glands and pigment-cells.
5. *Locomotion*:
 - (a) Jumps with hindlegs on land.
 - (b) Swims in water with hindlegs and webbed toes.
6. *Breathing*: The adult frog breathes through his lungs, mouth and skin.
7. *Reproduction*: Oviparous. Lays eggs in water where they are fertilised externally. Tadpoles with suckers and external gills hatched by means of the heat of the sun. They develop into tadpoles with a mouth, eyes and internal gills. Hindlegs appear later and then the lungs develop. The front legs appear and the tail disappears. This change of shape is called metamorphosis.

THE ART OF WRITING (Egyptians)

As long ago as 3000 B.C. the Egyptians developed a form of writing by drawing pictures to represent objects. The great disadvantage of picture-writing is that it is usually clumsy and takes a long time to write. Eg. this mountain and sun



However, it was often necessary to refer not to a thing but to an idea, and so conventional signs were used to convey ideas: called Ideograms.



A later development was the use of signs with certain sounds to form words. These we may call Phonograms, eg. the picture of a bee and a leaf could be used to convey the idea of a "relief". This was phonetic writing and became very difficult to interpret when the meaning of the picture was lost.

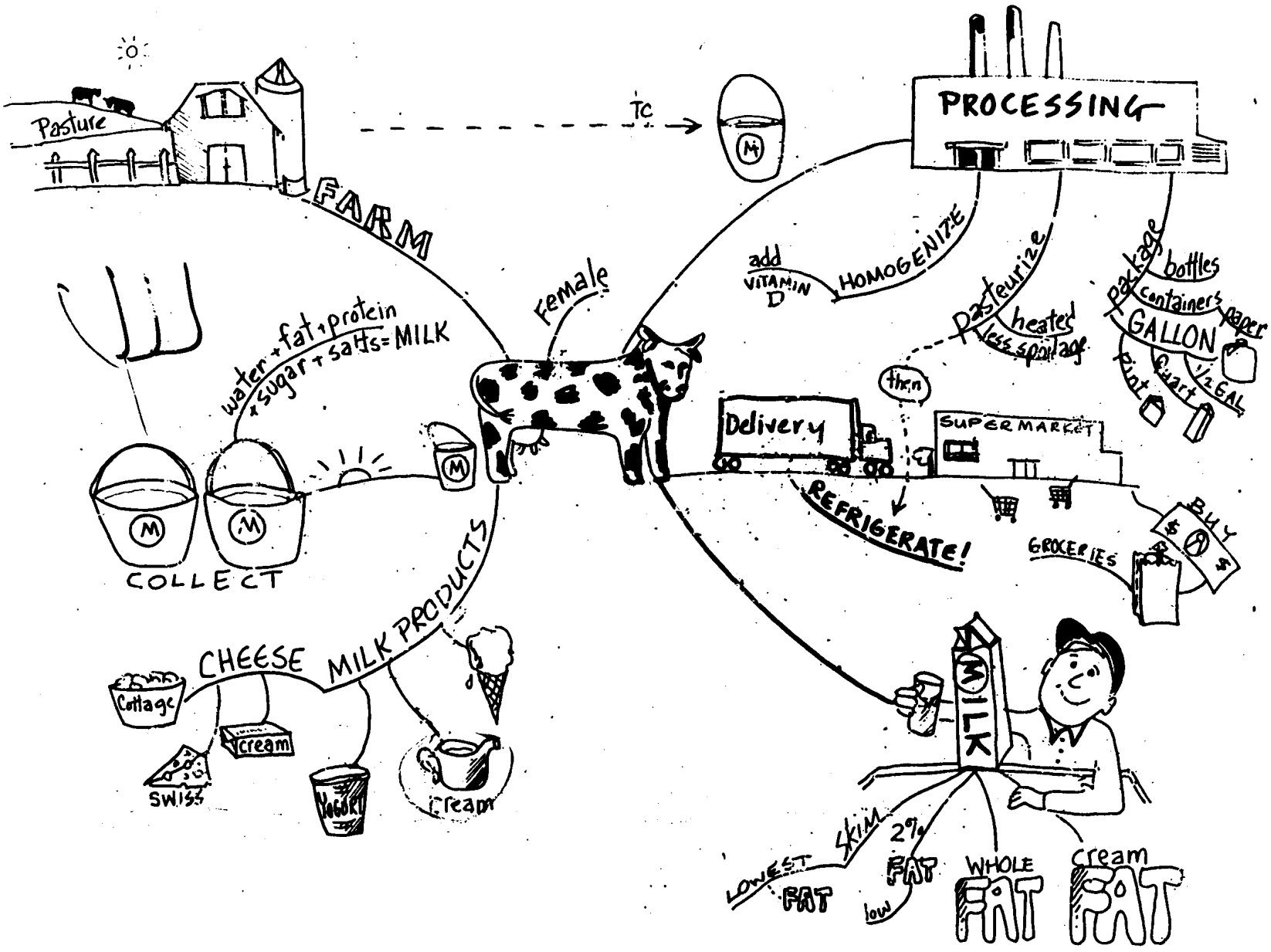
Egyptian writing had over 600 signs. This writing in its earliest form was called "hieroglyphics" which means "holy writing" because it remained the secret of the priests who used the symbols on tombs and monuments and in the temples. Later a simplified form was developed - called "demotic". Finally an abbreviated form called "hieratic" evolved.



Upper line: Hieroglyphics - picture-writing
 Lower line: Demotic writing - a running hand

The writing materials first used were surfaces, pieces of pottery and bone, but later they discovered they could make paper by splitting a river-reed, called papyrus, into thin strips which were pasted together to form large sheets. They made ink by mixing soot and water. A pointed reed was used as a pen.

**APPENDIX IVB :
ADDITIONAL
TRANSPARENCIES**



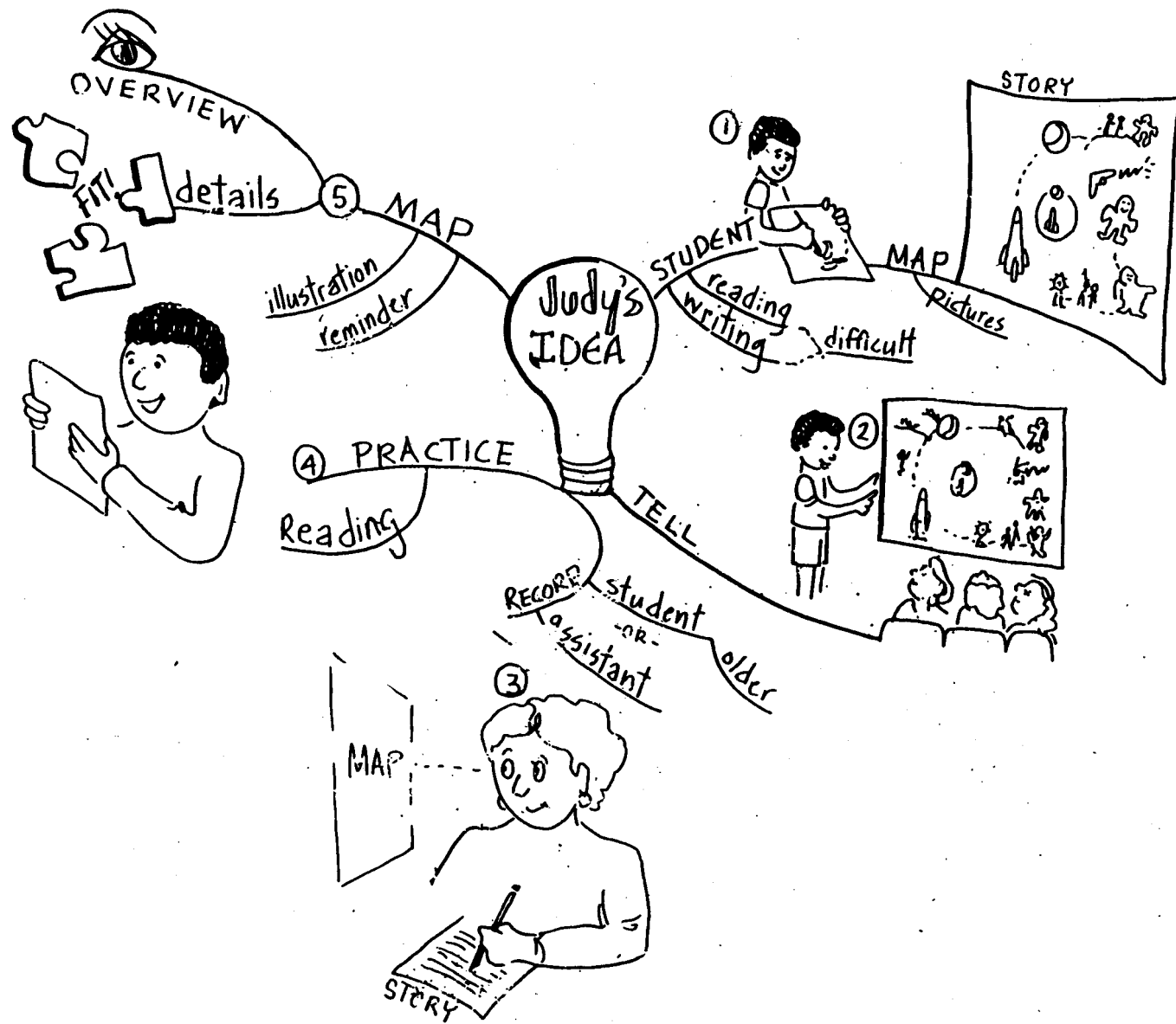
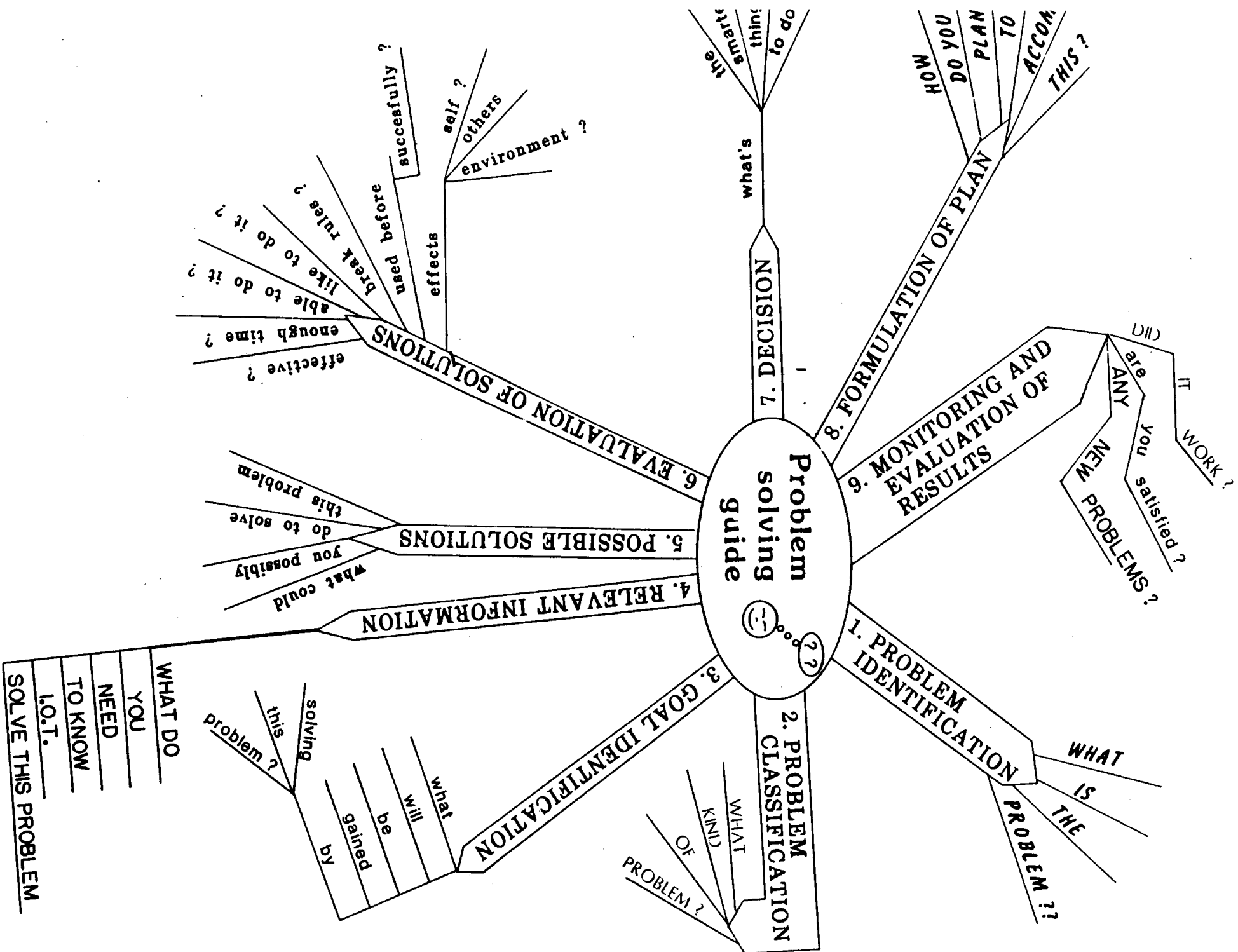
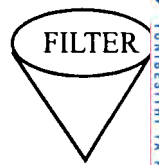


FIGURE 1 : Problem solving guide





"What today would be impossible to do in your business / profession but if it could be done, would fundamentally change the nature of what you do"

Those who say it cannot be done should get out of the way of those who can !

PARADIGM ?

APPENDIX IV C

New ideas = opportunities

PARADIGM FLEXIBILITY

NEED :

DEFINITION :

PARADIGMS =

1 :

Sets - rules + regulations

See what we want to see

Affect judgements + decisions

3 :

PARADIGM PRINCIPLES :

1. Common

2. Useful - help focus
- help identify problems
- give rules - solve problems

3. Problem = "THE" Paradigm = } new ideas
PARADIGM PARALYSIS ---- } = threats

4. Found "AT THE EDGE" - Outsiders

5. Pardigm - Pioneers ----- courage

6. YOU can CHOOSE !

2 :

PARDIGM RULE :

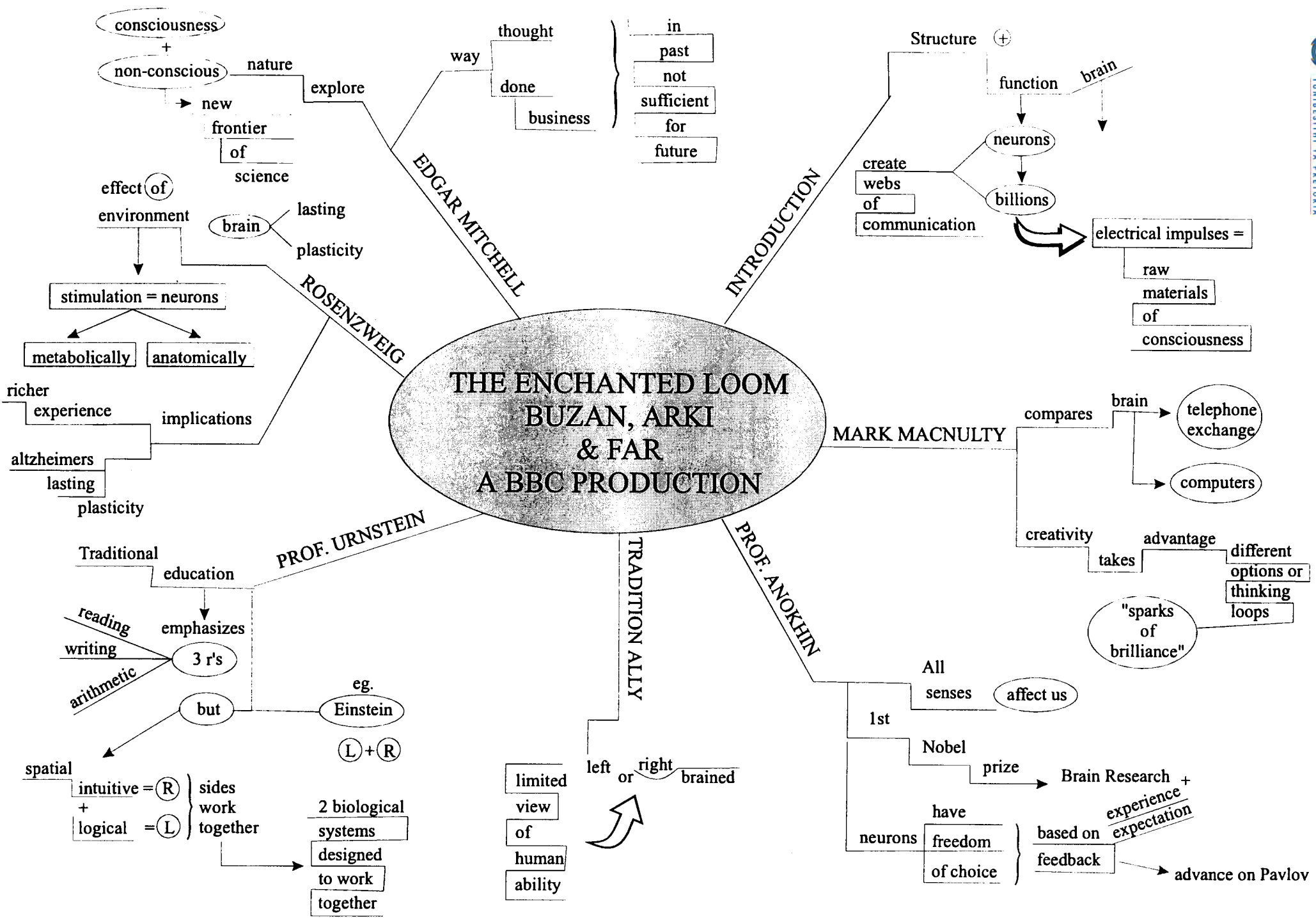
Going back to zero

Past success guarantees nothing

Successful past block future vision



Old paradigms blind us



APPENDIX IVD : MUSIC TAPE CATALOGUE

A General Relaxation and Imagery

Crystal Meditations	-	Don Campbell	_____
Crystal Rainbows	-	Don Campbell	_____

B Deep Relaxation

Eventide	-	Steven Halpern	_____
Dawn	-	Steven Halpern	_____
Spectrum Suite	-	Steven Halpern	_____
Angelic Harp	-	Steven Halpern	_____

C Awakening / Stimulation

Sun Singer	-	Paul Winter	_____
Shadowdance	-	Shadow Fax	_____

D Learning & Listening

Cosmic Classics	-	Don Campbell	_____
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E Baroque Music for Accelerated Learning & Relaxation

Music for Imaging	-	Lind Institute	_____
Romantic Interlude	-	Lind Institute	_____
Encore	-	Lind Institute	_____
Relaxing with the Classics Vol I	-	Lind Institute	_____
Relaxing with the Classics Voll II	-	Lind Institute	_____
Largos & Adagios	-	Lind Institute	_____
Andante	-	Lind Institute	_____

F Music for Kinesthetic Imagery

Lightening on the Moon	-	Don Campbell	_____
Symphony for the Inner Self	-	Don Campbell	_____

APPENDIX IVE : READING LIST

ACCELERATED LEARNING

C. Rose, 1985
Accelerated Learning Systems

MAKE THE MOST OF YOUR MIND

T. Buzon, 1977
Cox & Wyman, Reading

THANK YOU BRAIN

S. Grove, 1990
Sigma Press, Pretoria

USE BOTH SIDES OF YOUR BRAIN

T. Buzon, 1989
Penguin

THE BRAIN BOOK

P. Russell, 1986
Routledge & Kegan, London

TEACHING AND LEARNING THROUGH
THE MULTIPLE INTELLIGENCES

B. Campbell, L. Campbell & D. Dickinson
New Horizons for Learning, Seattle

SUPER-TEACHING

E. Jensen, 1988
USA

THE MIND-MAPPING APPROACH (MMA) :
A CULTURE AND LANGUAGE-FREE
TECHNIQUE

C. Leaf, 1993
S.A. Journal of Communication Disorders

APPENDIX V :
DATA CORRELATION
FORMS

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