

Supplemental Material

CBE—Life Sciences Education

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Appendix A

Modified wording of MSLQ to fit South African Context

Question number	Modified wording
32	When I study for this course I make an outline of the material to help me organise my thoughts.
33	During class time I miss important points because I'm thinking of other things. (reverse coded)
34	When studying for this course, I try to explain the material to a classmate or friend.
35	I study in a place where I can concentrate on my course work.
36	When studying for this course, I make up questions to help focus my reading.
37	I feel so lazy or bored when I study for this course that I give up before I finish what I planned to do. (reverse coded)
38	I find myself questioning things I hear or read in this course to decide if I find them convincing
39	When I study for this course, I practice saying the material to myself a number of times.
40	Even if I have trouble understanding the material in this course, I try to do the work on my own, without help from anyone. (reverse coded)
41	When I become confused about something I'm reading for this course, I go back and try to figure it out
42	When I study for this course, I go through the content material and try to find the most important ideas
43	I make good use of my study time for this course.
44	If course content is difficult to understand, I change the way I study the material.
45	I try to work with other students from this course to complete the course assignments.
46	When studying for this course, I work through my class notes and the course materials a number of times
47	When a theory, interpretation, or conclusion is presented in course or in the course materials, I try to decide if there is good supporting evidence
48	I work hard to do well in this course even if I don't like what we are doing.
49	I make simple charts, diagrams, or tables to help me organise course material.
50	When studying for this course, I set aside time to discuss course material with other students from the class.
51	I treat the course material as a starting point and try to develop my own ideas about it.
52	I find it hard to stick to a study schedule. (reverse coded)
53	When I study for this course, I make use of information from different sources, such as lectures, course material, and discussions.
54	Before I study new course material thoroughly, I page through it to see how it is organised.
55	I ask myself questions to make sure I understand the material I have been studying in this course.
56	I try to change the way I study in order to fit the course requirements.
57	I find that I study for this course but don't know what it is all about (reverse coded)
58	I ask the lecturer and tutor to clarify concepts I don't understand well.
59	I memorise key words to remind myself of important concepts in this course.

60	When course work is difficult, I either give up or only study the easy parts. (reverse coded)
61	I determine what I am supposed to learn from the material before I start studying
62	I try to relate ideas in this subject to those in other courses whenever possible.
63	When I study for this course, I go over my class notes and make an outline of important concepts
64	When studying for this course, I try to relate the material to what I already know.
65	I have a regular place set aside for studying
66	I try to play around with ideas of my own related to what I am learning in this course.
67	When I study for this course, I write brief summaries of the main ideas from the textbook and my class notes
68	When I can't understand the material in this course, I ask a tutor in this course for help.
69	I try to understand the material in this course by making connections between the course materials and the concepts from the lectures.
70	I make sure that I keep up with the assigned work for this course.
71	Whenever I find a claim or conclusion in this course, I think about possible alternatives
72	I make lists of important items for this course and memorize the lists.
73	I attend all classes for this course
74	Even when course materials are boring and uninteresting, I manage to keep working until I finish.
75	I try to identify students in this course whom I can ask for help if necessary.
76	When studying for this course I try to determine which concepts I don't understand well.
77	I find that I don't spend much time on this course because of other activities.(reverse coded)
78	When I study for this course, I set goals for myself in order to direct my activities in each study session.
79	If I get confused taking notes in this course, I make sure I sort it out afterwards.
80	I rarely find time to review my notes or course material before a test. (reverse coded)
81	I try to apply ideas from course material in other course activities such as lectures and discussions

Appendix B

Summary of subscale ANOVA analysis with mean and standard deviation.

Scale	Group	Mean	Standard Deviation	Significance of ANOVA	Tukey <i>post hoc</i> (Group 1 & 2)	Tukey <i>post hoc</i> (Group 2& 3)
Rehearsal (4 items)	1	7.1	2.59	0.005	0.037	0.840
	2	7.8	2.38			
	3	7.9	2.39			
Organisation (4 items)	1	7.7	1.91	0.053	0.425	0.494
	2	7.9	1.93			
	3	8.2	1.87			
Metacognitive self-regulation (12 items)	1	24.9	4.22	0.002	0.165	0.216
	2	25.7	4.00			
	3	26.5	3.82			
Elaboration (6 items)	1	12.7	3.17	0.013	0.880	0.065
	2	12.9	3.19			
	3	13.7	2.98			
Critical thinking (5 items)	1	8.9	2.75	0.021	0.314	0.399
	2	9.3	2.78			
	3	9.7	2.70			
Time and study environment (8 items)	1	21.1	3.56	0.013	0.463	0.207
	2	21.6	3.77			
	3	22.3	3.33			
Effort regulation (4 items)	1	10.4	1.99	0.000	0.145	0.010
	2	10.8	2.20			
	3	11.5	1.89			
Peer learning (3 items)	1	6.3	1.85	0.015	0.311	0.350
	2	6.6	1.67			
	3	6.8	1.64			