

Appendix

The following scales and items represent the Motivated Strategies for Learning Questionnaire (MSLQ) that was used in this study to measure students' motivational beliefs and self-regulated learning. The numbers next to the items reflect the item's actual position on the questionnaire. Items marked (*R) were reflected before scale construction. There were 56 items on the questionnaire, but only 44 were used in this study to form the following five scales.

Motivational Beliefs

A. *Self-Efficacy*

2. Compared with other students in this class I expect to do well.
7. I'm certain I can understand the ideas taught in this course.
10. I expect to do very well in this class.
11. Compared with others in this class, I think I'm a good student.
13. I am sure I can do an excellent job on the problems and tasks assigned for this class.
15. I think I will receive a good grade in this class.
20. My study skills are excellent compared with others in this class.
22. Compared with other students in this class I think I know a great deal about the subject.
23. I know that I will be able to learn the material for this class.

B. *Intrinsic Value*

1. I prefer class work that is challenging so I can learn new things.
5. It is important for me to learn what is being taught in this class.
6. I like what I am learning in this class.
9. I think I will be able to use what I learn in this class in other classes.
12. I often choose paper topics I will learn something from even if they require more work.
17. Even when I do poorly on a test I try to learn from my mistakes.
18. I think that what I am learning in this class is useful for me to know.
21. I think that what we are learning in this class is interesting.
25. Understanding this subject is important to me.

C. *Test Anxiety*

3. I am so nervous during a test that I cannot remember facts I have learned.
14. I have an uneasy, upset feeling when I take a test.
24. I worry a great deal about tests.
27. When I take a test I think about how poorly I am doing.

Self-Regulated Learning Strategies

D. *Cognitive Strategy Use*

30. When I study for a test, I try to put together the information from class and from the book.
31. When I do homework, I try to remember what the teacher said in class so I can answer the questions correctly.
33. It is hard for me to decide what the main ideas are in what I read. (*R)
35. When I study I put important ideas into my own words.
36. I always try to understand what the teacher is saying even if it doesn't make sense.
38. When I study for a test I try to remember as many facts as I can.
39. When studying, I copy my notes over to help me remember material.
42. When I study for a test I practice saying the important facts over and over to myself.
44. I use what I have learned from old homework assignments and the textbook to do new assignments.
47. When I am studying a topic, I try to make everything fit together.
53. When I read material for this class, I say the words over and over to myself to help me remember.
54. I outline the chapters in my book to help me study.
56. When reading I try to connect the things I am reading about with what I already know.

E. *Self-Regulation*

32. I ask myself questions to make sure I know the material I have been studying.
34. When work is hard I either give up or study only the easy parts. (*R)
40. I work on practice exercises and answer end of chapter questions even when I don't have to.
41. Even when study materials are dull and uninteresting, I keep working until I finish.
43. Before I begin studying I think about the things I will need to do to learn.
45. I often find that I have been reading for class but don't know what it is all about. (*R)
46. I find that when the teacher is talking I think of other things and don't really listen to what is being said. (*R)
52. When I'm reading I stop once in a while and go over what I have read.
55. I work hard to get a good grade even when I don't like a class.

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