Supplemental Materials

for

Increasing Student Metacognition and Learning through Classroom-Based Learning Communities and Self-Assessment

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APPENDIX 1: Electronic Learning Portfolio (ELP) prompts

Questions marked with * were taken directly from (3). All other questions were written for the purpose of this study.

<table>
<thead>
<tr>
<th>Week of semester</th>
<th>ELP prompts</th>
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| 5                | Please answer each of the following in regard to your exam:  
*1) Give one example of a successful response on your exam. Try to explain what you did to make this response successful (it may be helpful to compare to a less successful response).  
*2) Give one example (if relevant) of a less successful response. Can you explain what you did wrong/failed to do in this example?  
3) What topic area did you feel most confident about going into the exam? Did you feel that way after the exam? Why or why not?  
4) Were there any “surprises” (i.e. things you didn’t expect to see) on the exam? Why were you surprised to see this material? |
| 6                | Think about the activities that we did in class this week:  
1) What contributions did you make to your group this week? How did your out-of-class preparation/study impact your role in the group?  
2) What study techniques have you been using to study the information from chapters 5-7?  
3) What is one question that you still have about the material from chapters 5-7? How could you get an answer to this question? |
| 7                | Think about your preparation for Exam2:  
1) What study techniques have you been employing? How do these differ from your preparation for Exam 1?  
2) Name one or two things that we did in class over the last couple weeks that positively contributed to your learning. Explain how these things helped you learn. |
| 8                | 1) After taking the exam, did you feel like you had adequately prepared? Why or why not?  
2) Can you think of any in-class activities (1 or 2) that would help you to learn more effectively? Explain why these would be beneficial to your learning. |
| 9                | Please answer each of the following in regard to Exam 2:  
*1) Give one example of a successful response on your exam. Try to explain what you did to make this response successful (it may be helpful to compare to a less successful response).  
*2) Give one example (if relevant) of a less successful response. Can you explain what you did wrong/failed to do in this example? |
| 10               | 1) What are one or two aspects of this class that contribute positively to your learning?  
2) What are one or two suggestions you have for how the class might better facilitate your learning? |
| 11               | Look back at your entries and the responses to the entries from the last month.  
1) What changes have you made to your learning strategies during that time?  
2) What have you learned about yourself as a learner over the course of the last month? |
| 12               | This week’s entry is about making the connection between your study and class behaviors and your exam performance.  
Find the category that describes your performance on Exam 3 and answer the corresponding question.  
If your score increased over Exam 2: please identify at least 1 change that you made in your study habits since Exam 2 and how you feel this helped you improve your score. Will you continue this habit(s) in preparation for the final exam?  
If your score decreased compared to Exam 2: please identify at least 1 possible cause for the decrease in your score. Explain how/why this impacted your performance on this exam. What action could you take so that this isn’t an issue for you on the final exam?  
If your score was essentially the same (within 5 points of your Exam 2 score) as Exam 2: can you think of at least 1 thing that you could change to help improve your score? What action could you take to improve your score on the final exam? |
APPENDIX 2: Learning Strategies Inventory

Directions: Listed below are statements about behaviors that impact learning. For each one of the statements, choose the letter (A-E) that applies to your current practices. Each number means the following:

- “E” means “I never or almost never do this”
- “D” means “I do this occasionally”
- “C” means “I sometimes do this” (50% of the time)
- “B” means “I usually do this”
- “A” means “I always do this”

Clearly mark your choice on the provided scantron form.

1) I ask myself periodically if I am reaching my goals.
2) I consider several alternatives to a problem before I answer.
3) I try to use strategies that have worked in the past.
4) I pace myself while learning in order to have enough time.
5) I understand my intellectual strengths and weaknesses.
6) I think about what I really need to learn before I begin a task.
7) I know how well I did once I finish a test.
8) I set specific goals before I begin a task.
9) I slow down when I encounter important information.
10) I know what kind of information is most important to learn.
11) I ask myself if I have considered all options when solving a problem.
12) I am good at organizing information.
13) I consciously focus my attention on important information.
14) I have a specific purpose for each strategy that I use.
15) I learn best when I know something about the topic.
16) I know what the teacher expects me to learn.
17) I am good at remembering information.
18) I use different learning strategies depending on the situation.
19) I ask myself if there was an easier way to do things after I finish a task.
20) I have control over how well I learn.
21) I periodically review to help me understand important relationships.
22) I ask myself questions about the material before I begin.
23) I think of several ways to solve a problem and choose the best one.
24) I summarize what I’ve learned after I finish.
25) I ask others for help when I don’t understand something.
26) I can motivate myself to learn when I need to.
27) I am aware of what strategies I used when I study.
28) I find myself analyzing the usefulness of strategies while I study.
29) I use my intellectual strengths to compensate for my weaknesses.
30) I focus on the meaning and significance of new information.
31) I create my own examples to make information more meaningful.
32) I am a good judge of how well I understand something.
33) I find myself using helpful learning strategies automatically.
34) I find myself pausing regularly to check my comprehension.
35) I know when each strategy I used will be most effective.
36) I ask myself how well I accomplished my goals once I’m finished.
37) I draw pictures of diagrams to help me understand while learning.
38) I ask myself if I have considered all options after I solve a problem.
39) I try to translate new information into my own words.
40) I change strategies when I fail to understand.
41) I use the organized structure of the text to help me learn.
42) I read instructions carefully before I begin a task.
43) I ask myself if what I’m reading is related to what I already know.
44) I reevaluate my assumptions when I get confused.
45) I organize my time to best accomplish my goals.
46) I learn more when I am interested in the topic.
47) I try to break studying down into smaller steps.
48) I focus on overall meaning rather than specifics.
49) I ask myself questions about what I am doing while I am learning something new.
50) I ask myself if I learned as much as I could once I finish a task.
51) I stop and go back over new information that is not clear.
52) I stop and reread when I get confused.

Listed below are statements about approaches that students might employ while reading and studying for classes. For each one of the statements, choose the letter (A-E) that corresponds to your current approaches. Each number means the following:

- “E” means “I never or almost never do this”
- “D” means “I do this occasionally”
- “C” means “I sometimes do this” (50% of the time)
- “B” means “I usually do this”
- “A” means “I always do this”

Clearly mark your choice on the provided scantron form.

**Reading strategies**

53) Highlighting text
54) Reading section of text followed by closing book and writing take-home points
55) Previewing the text to see what it is about before reading it
56) When text becomes difficult, reading aloud to help understanding
57) Thinking about whether the content of the text fits my reading purpose
58) Critically analyze and evaluate the information presented in the text

**Study strategies—things you do to learn material in preparation for an exam**

59) Re-reading book chapters and class notes
60) Using flashcards
61) Testing myself (i.e. covering labels on diagrams with post-its and walking through diagram; writing my own figure legends to text/lecture figures)
62) Integrating my class notes with my notes from the text
63) Working with a study group or partner
64) Seeking assistance from tutor
65) Talking through concepts or answering questions aloud (even to myself)
66) Writing out processes, concepts, diagrams, etc. in my own format/words (i.e. not just copying from book or class notes)
67) Writing exam questions
68) Utilizing online text resources