

# Appendices:

## The Achievement Emotions Questionnaire: Validation And Implementation For Undergraduate Physics Practicals

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### Appendix A

#### *AEQ-PhysicsPrac: Items and their classification as per the emotions*

<i>9 Positive items</i>				
<i>Item no.</i>	<i>Pride items</i>	<i>Short name</i>	<i>Item name</i>	<i>Change from AEQ</i>
1	During this experiment, I was satisfied with my work.	Satisfied	Pr1	T2
4	I felt elated by my accomplishments during this experiment.	Elated	Pr2	T3
8	I took pride in being able to keep up with the tasks in this experiment.	Keep up	Pr3	T2
9	I made important contributions during this experiment.	Important contribution	Pr4	T3
<i>Enjoyment items</i>				
2	For me this experiment was a challenge that was enjoyable.	Enjoyable challenges	En1	T1
6	I felt this experiment was exciting.	Exciting	En2	T2
11	I was glad that my efforts during this experiment paid off.	Efforts paid off	En3	T2
12	I enjoyed this experiment.	Enjoyed	En4	T1
17	I am happy that I could cope with this experiment.	Cope with	En5	T1
<i>10 Negative items</i>				
<i>Anger items</i>				
3	I felt annoyed by this experiment.	Annoyed	An1	T2
7	It was irritating that my efforts were not useful during this experiment.	Irritating	An2	T2
15	I resented doing this experiment.	Resented	An3	T4
<i>Anxiety items</i>				

5	I got scared that I might do something wrong while doing this experiment.	Scared	Anx1	T3
10	I felt nervous during this experiment.	Nervous	Anx2	T1
16	I felt panicky during this experiment.	Panicky	Anx3	T1
<i>Hopelessness items</i>				
13	During this experiment I felt like giving up.	Give up	Ho1	T1
22	During this experiment, I was so resigned that I felt that I had no energy.	Resigned	Ho2	T1
<i>Boredom items</i>				
18	I found this experiment dull.	Dull	Bo1	T1
19	I was bored during experiment.	Bored	Bo2	T2

## Appendix B

### *The AEQ- PhysicsPrac Survey tool*



#### Student Experience

Put your answers on the right-hand side of this form. If you feel you cannot answer a particular question, just leave it and go onto the next question. Use a dark pen or pencil to select your answer to each question. Fill in circles completely like this	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. During this experiment, I was satisfied with my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. For me this experiment was a challenge that was enjoyable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I felt annoyed by this experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I felt elated by my accomplishments during this experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I got scared that I might do something wrong while doing this experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I felt this experiment was exciting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. It was irritating that my efforts were not useful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I took pride in being able to keep up with the tasks in this experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I made important contributions during this experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I felt nervous during this experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. I was glad that my efforts during the experiment paid off.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I enjoyed this experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. During this experiment I felt like giving up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I can see the relevance of this experiment to my physics studies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I resented doing this experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I felt panicky during this experiment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I am happy that I could cope with this experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I found this experiment dull.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I was bored during this experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I found this to be an interesting experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Completing this experiment has increased my understanding of physics.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. During this experiment, I was so resigned that I felt that I had no energy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. The experiment provided me with the opportunity to take responsibility for my own learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<b>FOR THE FOLLOWING QUESTION, USE THE SCALE INDICATED</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
24. Overall, as a learning experience, I would rate this experiment as: A = 'excellent' B = 'good' C = 'average' D = 'poor' E = 'very poor'	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

On the scale below, please rate the mental effort you invested doing the experiment

*Extremely low mental effort*    1   2   3   4   5   6   7   8   9    *Extremely high mental effort*

Rate how confident you are doing the experiment


*Least confident*    1   2   3   4   5   6   7   8   9    *Most confident*

25. What aspects of the experiment did you find most enjoyable and interesting?

26. What did you think was the main lesson to be learnt from the experiment?



27. What did you think about the Lab notes of this experiment? Explain how it affected you.



28. Compare this experiment with other experiments in this course. How does it differ?

