

Appendix 4: Constructivist Learning Environment Survey–No Internship

The survey was modified based on an existing survey designed by Taylor and Fraser (1991).

Student Name: _____ Student ID: _____

Please answer this survey with honesty. All your answers are confidential.

No	Items	Very often 5	Often 4	Sometimes 3	Seldom 2	Never 1
01	In my Physics Class, I ask other students about their ideas.					
02	In my Physics Class, the teacher helps me to think about what I learned in the past.					
03	In my Physics Class, I think hard about my own ideas.					
04	In my Physics Class, the teacher gives me problems to investigate in the scientific practice.					
05	In my Physics Class, I don't ask other students about their ideas.					
06	In my Physics Class, I get to see if what I learned in the past still makes sense to me.					
07	In my Physics Class, I do investigations in my own way.					
08	In my Physics Class, the teacher expects me to remember important ideas I learned in the past.					
09	In my Physics Class, I'm not aware of other students' ideas.					
10	In my Physics Class, there's not enough time to really think.					
11	In my Physics Class, I try to find my own way of doing investigations.					
12	In my Physics Class, the activities I do are set by the teacher.					
13	In my Physics Class, I talk with other students about the most sensible way of solving a problem.					
14	In my Physics Class, I get to think about interesting, real-life problems.					
15	In my Physics Class, I decide how much time to spend on an activity.					
16	In my Physics Class, the teacher expects me to remember things I learned in the past.					
17	In my Physics Class, I try to make sense of other students' ideas.					
18	In my Physics Class, I learn about things that interest me.					
19	In my Physics Class, I decide if my solutions make sense.					
20	In my Physics Class, I learn the teacher's method for doing investigations.					
21	In my Physics Class, I pay close attention to other students' ideas.					
22	In my Physics Class, what I learn has nothing to do with real life.					
23	In my Physics Class, I decide if my ideas are sensible.					
24	In my Physics Class, the teacher insists that my activities be completed on time.					
25	In my Physics Class, I don't pay attention to other students' ideas.					
26	In my Physics Class, the things I learn about are not really interesting.					
27	In my Physics Class, I decide how much time I spend on an activity.					
28	In my Physics Class, the teacher shows the correct method for solving problems.					