

Dimensions of Learning: Pragmatism

The most disgusting incident was when somebody wrote over thirty pages for an experiment worth 20% of the exam. The mark distribution is preposterous. Would you write 150 pages for an exam? (2.3)

To leave all doors open (4.3)

Since our mark is mainly represented by our lab work, this group work becomes very important (4.4)

Unfair marks in group work for partners who don't work (6.2)

(in lab) spend too much time on things of little importance and not enough time on important issues (7.5)

Coverage in group learning (7.6)

Valuable time lost in group learning by explaining to others resulting in a grade (7.6)

Conflicts in lab group disrupts working (9.5)

Lab groups because its faster (8.4)

Gets job done on time (6.3)

Partner doesn't work, one or two members who do all the work (6.2) (6.3)

Dimensions of Learning: Epistemic

Interest (epistemic) (4.3).

Students are encouraged to think of their own experiments and take their results and apply them to their next question (4.4)

Finding answers to questions about the universe (10.2)

Understanding concepts vital to life (10.2)

I am part of this universe . . . lured me into physics (10.2)

Science is a field where an individual can never know everything . . . excites me about it (10.6)

the joy of discovery, the thrill of comprehension drives me on in my futile search for total knowledge (15.3)

physics is done by inquiring into the way the world works and seeking an answer (15.4)

through the study of physics I can understand the fundamental processes of the universe (18.1)

I find that I enjoy doing extra work or working late at night in order to figure out the exact relationship or what exactly the error of my results are (36.5)

I enjoy physics because I am curious about the world which is around me, as well as the surrounding universe. I always ask the question "why" and "what" to the unknown, trying to find an explanation to the unexplained. (18.3)

with the knowledge of physics we can harness the natural world (39.7)

helps me understand things which happen in my daily experience (28.1)

more on epistemic: Todd, Patrick, Matt, Patrick, Alex. Does students' thinking that physics discovers the laws that govern the universe affect their epistemic concerns. A number of students seem to go into physics for this very reason, to discover the unknown, hidden knowledge about the functioning of this world.

Dimensions of Learning: Technical

Learning how to use instruments (6.2)

learn about computers, graphics calculators (10.3)

Learning to use computer for graphing and interfacing (15.6)

all of these gadgets and devices (air track, computers, and technical instruments) is what makes physics exciting (19.2)

