

Physics Teaching in Schools Module

WEEKLY LOG SHEET 4

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Week from 28th Jan 2013 **to** 3rd Feb 2013

What have you done?

Provided assistance and gave help to those who needed it while a year 12 class were doing a practice exam. Since it was the first such test they had attempted, the students were allowed to ask for help. I used suggestions and gave only minimal hints to small groups at a time so that the students could work out the correct answers themselves.

I also helped to lead a year 10 lesson where the students were beginning work on a piece of Astronomy coursework. This involved research using the internet and the use of the Liverpool Telescope website to apply for observation time. I helped to organise the class during their work and to explain the aims and direction of the coursework as well as helping with any problems that arose when using the LT system.

What have you learnt?

When in the year 12 lesson, it is very easy to just reply to questions with the answer and then move on. I found however, that the students themselves respond much more eagerly, after some encouragement, if only a clue or suggestion in the right direction is given so that they can reach the answer themselves. I found that this has to be balanced with concerns of speed, so that an teacher does not spend of their time with one group, as well as judging student by student, how much help to give and when they need more information.

With the year 10 group, I was impressed with the teacher at how he was able to use the facilities available, the Liverpool Telescope and website, to engage the students in a way that would be very difficult otherwise. The professional nature of the booking system, combined with the results that each were separately waiting to receive from their application to the telescope meant, that they were much more eager to engage in the coursework. The later details of the coursework will be heavily influenced by the decisions and results that they get near the start, so they were able to see how what they were doing was to be helpful to them. This feedback between different parts of an extended project is important to maintain enthusiasm.

Outline any problems encountered:

Due to the type of lesson, the assistance that I was able to provide for some of the year 12 period was limited to answering questions where asked and giving help where needed. The lesson was led by the teacher, but the majority involved the pupils answering questions about a previous practice they had performed. However, I was able to participate much more fully when in the second lesson since this was a more interactive activity.

There was a slight learning curve that was required when helping in the year 10 class since they had all used the Liverpool Telescope before whereas this website and its capabilities were completely new to me. However, it is a well designed site and most of the questions/problems that the pupils encountered were not related to the website, but the theory involved.

How did you meet last week's objectives?

I have compiled a set of questions that will be offered to the students in 2 weeks. Next week, during lunch, I will hold an informal session for those who are interesting in studying physics to ask questions and discuss any topics they are interested in. Here, I will give out some of the questions ready for the following week where we shall discuss them.

This week, I was able to get more involved in the second lesson I attended. Though I did not teach any content, due to the lesson contents, I was able to play a more leadership role and will develop the opportunity to teach in the following weeks.

What are your objectives for the coming week?

Engage in teaching small groups where appropriate, taking on more responsibility where possible.

Talk to students about doing a physics degree, get their opinions on further study and discuss future meetings to look at degree style questions

Write a short questionnaire to be used at the end of the term to gauge the response of the question sessions.