

Olympiad Teacher Voices

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Why do you, as a teacher, like to take part in Olympiad round 1?

It's mainly because we want to give our students the opportunity to stretch their chemical knowledge and tackle some new types of problems that they wouldn't encounter in their A-level course. We have lots of able students in our school and we want to give them an opportunity to stretch themselves beyond what they encounter in their normal lessons.

Why do your students want to take part in the Olympiad?

I think it depends on the year group. We always have at least ten students in each year who might enter from Year 12 and for them it's partly the challenge, and partly the thought that they can mention it in their UCAS personal statements if they are successful. But I think for most Year 13 students it's the desire for a challenge. They enjoy chemistry, they think they're good at it, and they want to see how they fare in a tough competition.

What do your students get out of taking part in the Olympiad?

Probably a variety of things. In some cases it humbles them. They realise it's very hard and I think it's a good thing for them to realise that what they do in chemistry at school is just the tip of the iceberg. I think they pick up valuable exam technique in terms of how to manage when in a very difficult situation where they're not likely to get all the questions right or even be able to answer all of them. I think it's a valuable skill to be able to pick out, 'What can I do here?' and, 'What can't I do?' Especially for Year 12 there could be half of the questions they just can't access unless they've done lots of extra reading. So they must be selective. With the new A-level syllabus there's an increased emphasis on applying what you know to novel situations and I think that's what the Olympiad does - so it's a good experience for them.

Do you use Olympiad past paper questions in any of your preparation or classes?

We run 2-3 sessions each year (we are hoping to increase it this year) to prepare the students where we use past Olympiad questions with the teacher and students working through them together. We also direct them to the Olympiad support booklet and we have a VLE page devoted to the Olympiad where we have links to the Olympiad bites, videos and other hints and tips.

How do you prepare for round 1?

It varies. We had one particularly keen student who took the Olympiad in Year 11, 12 and 13, and the year after he ran an after school session to train the students from a students-eye view of

how to tackle the questions. He came in with lots of tips about using your calculator memory and particular types of questions which he thought were accessible to the students, so he was a real blessing to us.

As a teacher I have certainly invested a bit of time, and I try to complete the round 1 paper every year. I have compiled a grid of which topic areas come up and then we target our preparation sessions at those. We'll give them a lunchtime session for an hour on the physical chemistry type questions, we'll try to give them a bit of background on how to answer questions involving crystal lattices, and then we'll do an organic chemistry session as well. So rather than working through a paper, which I have done in the past, I try to distil out what types of questions tend to come up and then give them some more general strategies to try to tackle them.

What advice would you give a school that was thinking of taking part in Olympiad round 1 for the first time?

I'd definitely encourage them to give it a go, I don't think there's much to lose. I think it's worth trying to familiarise the students with the type of material that's going to be involved. It's worth the students being aware of the scale of the challenge and having an idea of what types of questions they might be comfortable addressing.

It's very organised and straightforward and not an enormous administrative burden. If you want to actually help your students to do well then it's good to encourage them to speak to each other about their experiences in previous years, but I think also as the teacher it's quite good to be familiar with the questions yourself. I think it helps as a teacher to force yourself to answer some hard questions because you learn new things. I make mistakes on Olympiad papers and often they become helpful teaching points. I have enjoyed doing the papers myself from that point of view.

I think as teachers it's really important that we are challenging ourselves - we need to remember what it's like to be doing something that's difficult. Sometimes when we are teaching material that we have taught a lot of times before, it's easy to lose sympathy with the students because we think, 'Oh well I've done this one a hundred times and it's easy.' I think it's helpful to put ourselves in a position where we are saying, 'Ahh, okay, how am I going to do this?' which the students are in, in our lessons, day by day.

The Chemistry Olympiad is the leading chemistry competition for students in the UK. To find out more about this opportunity to challenge your chemistry students visit rsc.li/olympiad