

Olympiad Teacher Voices

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

To challenge my able students. It is really important for the students and prepares them for Oxford and Cambridge interviews as the interview questions can be very similar. I also advocate it for helping students to get A* at A-level. Also for developing problem-solving skills – those intangible things you cannot actually quantify. But if you regularly try something very difficult it changes your brain. So I push that tough problem-solving. We have a whole mixture of students – a lot start off doing Olympiad and drop out when they realise how difficult it is, though this year I still have a third of my Year 12 cohort coming to lunchtime classes.

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

Often they are motivated by interest – they are very bright, motivated students. Some of them are competitive, so they want to get a bronze, silver or gold award. Some of it is just pushing yourself – we are a sixth form college and they have a lot of study periods. I run a lunchtime Olympiad class, just for half an hour each week to get students tackling difficult problems. Those students are looking at getting awards, looking at going to the very good universities, so they are better prepared. And the questions are interesting in themselves as well.

When they start in Year 12, I look at their average GCSE score, we have all that information when they enrol, so I have a good idea of those who have got A*s and 9s in sciences and maths. And also we set lots of class tests so the ones that have got high marks in those. But sometimes you can get some students who are maybe very good at maths and have not done so well in other subjects at GCSE who really shine, and the Olympiad can be brilliant for those because they do really well at it. So, it is a combination of their GCSE results and the class tests and I have a letter, which I encourage them to take home to their parents. It says, 'You've been doing very well, would you like to come to this extra class to do the Olympiad?' Then lots of them come, and often they drop out because they find it very challenging, but the ones that stick with it get something out of it.

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

Olympiad past paper questions are what we use for the preparation. But when we are doing Olympiad questions I will pull things out to talk about how it affects the A-level questions as well, and sometimes bits of interesting chemistry. It is all about the questions, which are interesting and wide-ranging.

How do you prepare for round 1?

We have a lunchtime club – I have half an hour for Year 12 and half an hour for Year 13, we separate them because they have done such different chemistry. It is quite a lot of work for me.

What do your students find most challenging and how do you overcome this?

Just getting them to come along to lunchtime classes. I think a lot of the students going in for the Olympiad come from selective schools, and my students do not have the experience of working beyond the specification that a lot of those students do. Students going into sixth form are not used to the independent study expected, and it can be difficult to motivate yourself to go to extra classes. They are doing well and they do not see that they need to do any extra. Many of the students are very hard working, but it is perhaps the lack of experience in tackling very difficult questions that is the main challenge that I face in getting larger numbers to attempt the Olympiad. They are not used to encountering questions they cannot do.

In the Olympiad itself, the organic questions are very challenging for the Year 12 students and many of the Year 13 students. We do practise organic questions, and relate them to the A-level syllabus, but most students still struggle with them in the actual Olympiad. Usually the best marks are achieved by those students taking further maths, and any not taking maths A-level usually drop out of the sessions.

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](https://www.rsc.li/olympiad)

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

I think they need to have some formal classes, because otherwise, as the questions are so much harder than A-level and so different, it can be disheartening for the students. You have really got to do some preparation, but all that has to involve is the past questions, and do not worry about doing them all. Just pick out the easier bits, because you do not have time to do everything.

When I start with the Year 12s we actually do some questions I have got from a book, before we start on the Olympiad. The first thing I do is show them the examiners' report and point out that in order to get a bronze award you need about 20% of the marks. There's always lots of comment at that, they are just not used to such a tough challenge where 20% is a real achievement. To get a gold you need about 50%.

You have got to have a teacher who understands the questions – some parts are quite a lot above A-level standard. I think sending a letter home to the students to say how impressive it is that they are doing this, and emphasise the building of resilience, which is a quality that universities and employers look for. I think that is good as well, so that parents are involved.

Base it on the questions because the questions are interesting – they are often based on something that has been in the news that year. And one or two of my students, in their personal statements, have mentioned an Olympiad question as having sparked some interest that they've followed up. Yes, the students find the questions interesting.

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