



Life as a secondary chemistry Early Career Teacher: Class of 2020-21

● Molly Westwood ● Ruth Amos

Molly Westwood, chemistry teacher and second year Early Career Teacher (ECT) at Southfields Academy, Wandsworth, reflects on her experiences as an ECT following her pandemic-impacted Initial Teacher Training in 2020-21, in a conversation with her tutor, Ruth Amos, Lecturer in Science Education at UCL Institute of Education.

Ruth Amos (RA): *How was teaching this academic year, after the unusual training that you had in 2020-21?*

Molly Westwood (MW): Well, I got through, so that's not bad! Maybe schools could have eased us in more gently with fewer teaching hours perhaps as an Early Career Teacher (ECT)? There have been wellbeing issues, and with the increased hours¹, it's hard. I felt like I was drowning a bit, but I just kept my head down. At my school, we are using the UCL (University College London) ECT framework, which initially was very paperwork-heavy. The readings and tasks took up almost the whole of the 1-2-1 mentoring time, leaving five minutes for my agenda, so not super useful. The case studies are great, but it was too much in the first term. I needed to get on with teaching. However, UCL took on the feedback and it got better each time. Personally, I don't think that the ECT framework in itself will affect ECTs dropping out.

RA: *How would you describe your experience of being a science ECT in 2021-22?*

MW: My experience in school so far has been really good. My department has let me try all the practicals that I couldn't do last year. We have three very supportive technicians – one is a chemistry specialist – and they've helped me go through the big A-level practicals and answered all my questions! I had to hit the ground running with practical work. The last session that we did at the Institute of Education last year, with all the chemistry demos, was so useful. Although I'd seen them as a student teacher, teaching them from the front was scary. At Southfields, I can use any practicals, even go off at a tangent, and it's fine. I use the chemistry practicals on the Royal Society of Chemistry website a lot: they are great resources. For example, I adapted a couple of A-level-style ones for GCSE – cracking alkanes – and I've used Kerboodle for a couple of Year 12 (age 17) A-level classes too. The students and I were in the same boat! We had to do the A-level required practicals, but hadn't touched dilute acid, never mind the concentrated stuff! They hadn't used a Bunsen burner, even to heat water! The technicians were puzzled, but the students needed simple practice. Years 7 and 8 (ages 12-13) needed a lot of confidence-building. We did little practicals to help.

¹Overall, ECTs reported (over a period of 4 weeks) an average of 3.19 hours spent on in-person training, 5 hours in self-directed study, 4.63 hours on formal mentoring support, and 4.23 hours on informal mentor support.

The majority of those involved in the Early Career Framework (ECF) provider-led training also feel the workload expected of ECTs and particularly mentors is too much. Among induction tutors, 52% think that the workload is too much for ECTs and 62% think that it is too much for mentors. Heavy workload was also a theme emerging from the annual surveys of NQTs when reviewing the previous one-year statutory induction training programme, with one quarter of NQTs finding the workload during their induction period larger than they had expected (DfE, 2022, p.14).





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RA: *What impacts were there on your students and their learning during COVID and this past year back in school?*

MW: I felt bad for my Year 13 (age 18) BTEC group. I was seeing the BTEC course for the first time and it had changed again from previous years. The Head of BTEC had left the school, so I was in the dark and had to make the new specification work. I had to navigate it as an ECT. It's still practicals and theory: in Year 12, they sit exam modules and then do the practicals in Year 13 as coursework. The Pearson BTEC course is quite technical, and the teachers hadn't had any experience of calibrating equipment in a working lab setting, so we struggled with that. It was a great bonding experience for me with the technicians as we tried to work it all out! No one could have prepared me for that (but adding it into the PGCE, if possible, would be great!). I've got a BTEC class again next year, which is good, and it's all helped me to feel valuable in the department. It's also been good writing Schemes of Work (SoW) for myself, which I can now pass on to the chemistry team. We have two chemistry ECTs and the Head of Science is also a chemist, which is great.

RA: *Have you managed to have a life outside school?*

MW: The first term is so full-on. I was working from 7am to 6pm every day, and that still wasn't enough. I did about five hours at the weekend, and I was so tired. Does the DfE have a pause button, which could be pressed on all the initiatives? In the PGCE course year, with all the restrictions, it was hard to relax. We couldn't go to the bar and I had constant worries about getting COVID, so I was very anxious most of the time. And, during December/January (2021-22), I was terrified about missing school and having to set cover for my students. The BTEC group had their exam in January. And then, eventually, I did get COVID in March! I had to have four days off. It wasn't too bad, but I got worked up again and scared about taking time off work. The students have generally been OK so far but we are very aware of their wellbeing. My Head of Department is very good on workload. Anything we do is necessary, and we have a good marking policy. It's all very teacher-thoughtful. For example, we had Year 10 (age 15) mock exams to mark this half term, so we didn't have any other major marking for other year groups.

RA: *Which learning and teaching approaches do you value most since you've become an ECT?*

MW: My department is great with using mini-whiteboards and I've had lots of chances to use discussions and models too, especially with Year 12. Models need to be age-appropriate and you need time to understand them. I'd like to use them more with younger years, but the curriculum is so jam-packed, it's hard to do so.

I've come across some good memory hooks this year, thanks to my Head of Department, who's been thinking of them for years. For example, when we were looking at intermolecular forces, covalent bonds and reactions, I used some role play, which the Year 10 students loved. We had oxygen and hydrogen molecules as pairs of students with linked arms, and another student was the energy that 'cut' the intermolecular forces. And we role-played 'pushing about' the molecules due to the weaker intermolecular forces. Now I'll see if they remember it next year in Year 11 (age 16) by bringing in a conversation about the role play.





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RA: *What do you feel benefits Year 11 students when they are preparing for their GCSE public examinations?*

MW: Year 11 GCSE revision is being taken successfully by many students – i.e. using multiple past paper questions as practice, with CGP guides and summary flash cards over the final weeks of Year 11, etc. But, also, perhaps there is more room than we think to learn and teach differently and creatively at Key Stage 4 (ages 14-16)?

RA: *Is there anecdotal evidence that school students are now feeling less inspired about learning chemistry compared with physics and biology?*

MW: I don't know but, in conversations with colleagues, students seem to always like the science of animals, and maybe plants. There's the challenge of learning the maths in physics, and of course the longer answer questions in the exams. Maybe chemistry is a bit middling, but on the plus side, my Year 10 Triple Science group going into Year 11 said that their favourite topics are in chemistry. I think the teacher factor is so important and thinking about what makes chemistry special. We don't have many chemistry teachers, but we are super upbeat! We need to think about how to inject energy and how we inspire students. The chemistry training bursary was key for me. I have a biology/chemistry degree, which is really helpful as quite a few students want to do medicine-related degrees.

I'm very relieved that I've found my feet and look forward to teaching more normally in the future, as opposed to the craziness of teaching during a pandemic. It will all hopefully settle down. I'd love to be a science mentor in future, and we will probably have a PGCE student next year.

Reference

Department for Education (2022) *Evaluation of the national roll-out of the early career framework national programmes {in England}: Interim research brief (year one)*. Government Social Research.
<https://www.gov.uk/government/publications/early-career-framework-induction-evaluation>

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