Science Teacher SOS project begins exciting new stage

ASE's retention programme wins funding to begin a pilot programme in selected schools

Keeping the best teachers inside education is one of the key challenges the entire sector faces, and here at ASE we are determined to do our part to make this happen. One of our responses to the challenge has been the Science Teacher SOS campaign, which is about to enter its second stage.

The ASE lead on the project is Dr. Andy Chandler-Grevatt, senior lecturer in Education at Brighton University, who explains why the programme is so important and what we at ASE hope to achieve for the science education community. 'Science education is a right for all children, and we need good quality science teachers with lots of experience to be able to give them the education they deserve. We don't want to be losing science teachers after a short period of time, which is unfortunately often happening now, so we need to find ways - both short-term and long-term - to improve the retention of science teachers.'

The SOS project is one of the short-term measures that ASE is supporting in order to do just that. The initial Science Teacher SOS document launched in 2018 was written specifically for science teachers who were thinking of leaving the profession, particularly for those who might feel they had no one to talk to about their dilemma.



Following the success of this document, which has been downloaded more than 3,000 times and is supported by the teaching unions and professional associations, Andy is delighted to be able to kick off the second stage of the project – and is grateful for the support of the Gatsby Charitable Foundation in rolling it out.

The project involves a science teacher from each participant school being part of a training programme that will help them utilise the Science Teacher SOS framework and develop strategies to deal with some of the issues that affect retention in their school. Each participant teacher will also be allocated a designated contact within ASE who will support them in suggesting ways to introduce these strategies and to liaise with senior school leadership.

'We've now got to the point where we have some funding to pilot an end-use and effectiveness study of the SOS document principles in schools, 'added Andy. 'The whole thing is going to be anonymous, the report will be written in a way that no schools are identified, and it will give us really useful insights into how we can best help schools retain their science teachers.

'In addition to getting two free memberships of ASE, the schools involved will get a full report on their individual retention challenges and anonymised feedback from their staff, which should help give them a better understanding of their retention issues. They'll also be able to acquire a number of strategies which we will develop across schools to help keep science teachers in science teaching.'

For more information about Science Teacher SOS – including the full selfhelp document – visit the ASE website (www.ase.org.uk).

Feeding in to a wider ambition of retention

With an eye on improving science teacher retention, new physics and chemistry graduates training as teachers in England will receive 'staying on' bonuses of up to £9,000 from next year as part of the government's promise of increased school funding for schools.

Commenting on the announcement, ASE CEO Hannah Russell said:

'ASE welcomes this announcement regarding 'staying on' bonuses... Evidence shows that pay is a significant factor in improving science teacher retention and any moves to narrow the gap between what graduates with STEM degrees can earn inside and outside teaching are to be welcomed.

'Of course, pay is not the only factor

contributing to science teachers leaving the profession and it is crucial that this move is considered alongside other changes, such as reducing workload and increasing access to subject-specific CPD.

'That's why ASE is supporting projects such as the Science Teacher SOS document and forthcoming pilot study.'

UK teachers fly flag for Science on Stage in Portugal

After an utterly rewarding, but very exhausting four days in Cascai, Portugal, the UK delegation to the Science On Stage (SoS) Europe Festival returned to these shores proclaiming the expedition a great success – with a number of UK-based teachers singled out for special recognition.

Founded in 2000, on the basis that best way to improve science teaching and to encourage more schoolchildren to consider a career in science or engineering is to motivate and inform their teachers, the not-for-profit SoS Europe Festival brings together science educators from across the continent to exchange best practice and teaching ideas and concepts.

This year's event saw 400-plus teachers from over 30 countries come together to present and exchange their innovative teaching concepts at a fair, workshops and in short lectures – with the UK represented by 13 primary and secondary teachers, plus an additional support team.

Three of the UK teachers – Sharon Durant, David Rigmand and Adrian Allan – were selected to be part of the highlights package shared on the main stage at the end of each day, meaning that teachers from the UK comprised a full quarter of the Festival's bestregarded ideas!

On top of that, the collaborative project between Emma Crissell and Italian teacher Frederico Andreoletti was awarded 'Highly Commended' in the joint projects category.

From a German team's suggestions of new ways to show how light travels in straight lines, to a Slovakian representative's range of simple experiments using clothes pegs demonstrating conductivity of materials, the range of insights that can be applied in the classroom was impressive. As too were the singing efforts of a multinational choir of teachers following Sharon's 'Sing A Song For Science' presentation on the main stage!

UK SoS representative Stuart Farmer said: 'The Festival brings together educationalists from across Europe in a way that allows them to share ideas together and break down borders. It's really interesting to hear the perspectives of teachers from other countries – especially coming, as we do, from a country where we have an extremely proscribed curriculum in comparison with most places.

'The whole Festival was really well organised – it was a great venue and it was by far the best team spirit we've had as a UK delegation at the festival'.

We'll have a more detailed look at the UK team's projects and experience in future issues of *EiS*, and there will be a number of special sessions featuring the Festival at the 2020 ASE Annual Conference in Reading.

Bangkok bound for the ASE South East Asia conference

Following our first large-scale conference in Hong Kong last year, we at the Association For Science Education are delighted to be able to announce that we are returning to the region in first part of next year for another three-day exploration of all that is great in the field of science education.

The three-day ASE South East Asia Conference – *Targeted Excellence In Science Learning* – begins on Friday 21st February in Bangkok, hosted by our partners at the prestigious Bangkok Patana International School and in association with Phillip Harris.

The ASE's remit to promote excellence in science education does not stop at the borders of the UK, so the aim of the Conference is both to explore cross-regional alternative strategies to promote Excellence in Science Learning, and to provide a superb opportunity for science-specific professional development within the South East Asia area.

Both primary and secondary workshops are framed by the seven recommendations from the Education Endowment Foundation (EEF) report for *Improving Secondary Science*.

A host of leaders in the field of science education, led by ASE President Sir John Holman, will be delivering keynote addresses, while there will also be a host of workshops designed to help delegates engage and put into practice in their own classrooms the insights offered. Friday is also the dedicated Technician Day, with an exciting programme of workshops organised by Philip Harris, including new equipment demonstrations and great opportunities for networking for all science technicians.

Invitations for session proposals will remain open to British or overseas science educators until 22nd November, while delegate tickets are on sale now. You'll find more information and ticket details on the events page of the ASE website.

There will also be an exhibition for providers of school science resources – please e-mail enquiries to cpl@patana.ac.th should you be interested in exhibiting.

The latest Green Tick evaluation summary

GCSEPod

www.gcsepod.com

GCSEPod is an online, multi-subject learning platform that is underpinned by short videos called 'Pods' complemented by online assignments. This evaluation focuses on the science content on the platform.

GCSEPod is accessible on any device connected to the Internet, including Smart TV, desktop/laptop computer, tablet or Android/Apple phone. It is widely accessed by students' mobile phones and the website functionality fully supports their use. Pods can be downloaded for later viewing, with file sizes being typically about 8Mb: one Pod is about the same file size as 2-4 typical digital photos.

Each Pod last from 3-5 minutes and consists of narration and accompanying graphics. Subtitles can be turned on, making it a very accessible resource. Each individual Pod is mapped to each of the English, Welsh and Northern Irish GCSE single science and combined science specifications and IGCSE syllabuses. Not all content for each specification is covered, although GCSEPod is committed to adding new content each month. The Pods tend to favour supporting AO1: Demonstrate knowledge and understanding of scientific ideas. However, GCSEPod is currently undertaking a review of the science Pods in partnership with ASE to improve quality of existing Pods and develop new Pods that address other AOs.

Pods are automatically arranged into groupings to match the school's chosen specifications, which makes selecting relevant Pods very simple



and avoids teachers and students selecting irrelevant Pods. Teachers can select Pods to create playlists for students to support revision, current learning, or to introduce future learning in a flipped learning approach. Students can watch the relevant playlists set by their teachers and can also select Pods and create playlists for themselves.

Individual teachers can use GCSEPod flexibly, tailoring it to suit the subject(s) and groups they teach. They can create playlists and assignments specifically tailored for their students and they can be shared with colleagues. Similarly, teachers can use and modify playlists and assignments created by others. End of topic assignments are easy to administer and self-marked, saving teachers time. There is good support and guidance for teachers in the form of training Pods, 'How to' Pods and support documents for teachers, parents and students.

In conclusion, GCSEPod offers good quality curriculum and assessment support for schools. It facilitates independent learning through short, engaging videos that students can view both online and offline. Effective teacher assessment and student self-assessment is supported through multiple-choice assignments and effective teacher feedback, and student response is supported through dialogue about answers to free text questions.

At around the cost of a revision guide for a single subject, GCSEPod, with 27 subjects, represents excellent value for money.

www.ase.org.uk/greentick

Beneath Strange Stars: our charity partnership

As an organisation that supports excellence in science education, we feel that any medium that has the potential to improve the public understanding of, and appetite for, education around science is a good thing. This is why we are delighted to have been chosen as the official charity partner for a new anthology of science fiction short stories.

Published by specialist charity publisher TL;DR Press, *Beneath Strange Stars* features a series of short stories from a community of amateur writers based on science fiction themes. Previous partners of TL;DR anthologies have been Doctors Without Borders and True Colours United, and we at ASE greatly appreciate the opportunity to be part of this community.

Alistair Strayton, ASE Head of Marketing and Communications, said: 'Any medium that can engage young minds in thinking about the potential around science – and encourage a desire to better understand how that potential might be realised – is absolutely something that we at the ASE support.'

HQ Christmas

ASE Headquarters will close at 16.00 hours on Tuesday 24th December and reopen at 09.00 hours on Monday 30th December 2019. The office will be closed on Wednesday 1st January 2020.

Feed into your organisation's strategy!

Headquarters is buzzing with planning activities for the ASE Annual Conference in January 2020; do take a look at the conference preview at www.ase.org.uk/annual-conference. Our committees and groups have been meeting our new CEO, Hannah Russell, and Head of Communications, Marketing and Membership Engagement, Ali Strayton, who are both keen to hear views from members and the wider community about ASE, its remit and its activities.

We hosted the Region Officers' meeting and Education Group this term, and used the opportunity to discuss current priorities in science education to feed into a refreshed strategy for ASE. They identified key priorities around support for early career teachers and technicians, linked to recruitment and retention issues that are widespread in schools and colleges. They also discussed the value of ASE membership to across a range of roles. We have a short period now (to the end of December) to provide opportunities for the our community of science educators to contribute their views to on new strategy, which will run from 2021-2024. We would like to hear views from members and non-members to inform the strategy and give us a broad view of the landscape in schools, colleges and the wider education sector. We would also appreciate feedback on the value that ASE can bring to the profession.

We are keen to hear a broad range of views from primary, secondary and post-16 colleagues, including technicians, ITE tutors, consultants, partner organisations and anyone with an interest. Please do consider these questions and also take the opportunity to engage your colleagues who may or may not already be members:

 Are you a member who experiences value from ASE membership? If so, why? How have you benefitted from belonging to ASE?

- Have you decided not to join ASE? Are you aware of the tangible and intangible benefits? Are you a member of another subject organisation? Are there barriers that prevent you from joining?
- Have you recently stopped being a member? If so, why? Do you still engage with ASE in some way? What would encourage you to join again?
- Is there anything missing from the ASE offer that you would like to see?
- Do you have colleagues who are unaware of ASE? How can we reach out to them?

Please send your views and any other feedback you collect to comms@ase. org.uk by Friday 20th December. All feedback will be treated in confidence and will help us to shape the future direction of ASE.

I hope to see many of you in Reading in January!

Janice Griffiths CSciTeach Chair of ASE 2019/20 Twitter handle @Janice_G

ASE Annual General Meeting 2020

Notice is hereby given that the Annual General Meeting of the Association for Science Education will be held on Saturday 11th January 2020 from 12.00 at the University of Reading, in Palmer G10 Lecture Theatre, for the purpose of transacting the following business:

- 1. Courtesies and apologies for absence.
- 2. To approve the Minutes of the Annual General Meeting (12/01/2019).
- 3. Presentation by the Chief Executive, including aspects of items 4 and 5 and the Strategic Plan for 2017-20.
- 4. To receive, consider and approve the Annual Report of the Trustee Body.
- 5. To receive the Annual Statement of Accounts.
- 6. To confirm the appointment of the Auditors.
- 7. To receive the Report of the Quality and Audit Committee.

8. To vote on any proposed changes to the Rules of the Association, including: *The Trustee Body proposes that the rule for the appointment of its representative on the Quality and Audit Committee be changed to allow any trustee who meets the criteria to be appointed.* See the full proposal at https://www.ase.org.uk/governance.

- 9. To confirm the election of the President for the ensuing year.
- 10. To confirm the election of Honorary Members.
- 11. To approve a series of Votes of Thanks to be proposed by the Annual Conference Secretary.
- 12. To transact any other business, which can be considered under the Rules of the Association.

All members of the Association are entitled to be present and to vote. Copies of the Annual Report, Annual Statement of Accounts and AGM minutes can be downloaded from ase.org.uk/governance or requested from ASE Headquarters.