

Association for Science Education – Further Information

The Association for Science Education (ASE) mission is *‘to promote excellence in the teaching and learning of science’*, so that all young people are engaged in appropriate, valuable and interesting science education supported by a professional science education workforce.

The Association is structured as a charity, incorporated by Royal Charter and registered with the Charity Commission in England and with the Office of the Scottish Charity Regulator in Scotland. ASE is the largest subject teaching association in the UK, providing a network which brings together individuals and organisations to share good ideas, tackle challenges in science education, develop resources and foster high quality continuing professional development.

A brief history

ASE was formed in 1963 by the merger of the Science Master’s Association (SMA) and the Association of Women Science Teachers (AWST), but its origins date back to 1900 with a letter written by four science masters from Eton College proposing a conference for Science Masters in Public Schools. The first Annual Meeting of this association was held in January 1901. This led to the formation of the Association of Public School Science Masters. The history of the ASE can be found in the book “Interpreters of Science” by David Layton. For the fiftieth anniversary, in 2013, a further reflection of ASE’s history was written in the book “Advancing Science Education”.

Strategy

In January 2021 ASE launched the current ‘ASE Strategic Plan 2021 – 2024’. It sets out what ASE plans to achieve over the next three years and much progress has already been made. Under this Plan there are four Strategic Themes:

1. **Organisational Sustainability:** Sound leadership, financial management and project sourcing to enable innovation, enhanced membership benefit and improved science education.
2. **Community:** Increasing engagement, retaining members and growing membership.
3. **Advocacy:** Being the voice of science education professionals by promoting, influencing and contributing to science education policy at local, national and international levels.
4. **Professionalism:** Promoting, providing support and recognising professional practice in science education.

These outline the way in which the Association is currently working towards its vision. The strategy also sets out a number of key challenges facing our community. These provide a focus across all of our activities:

- **Recruitment & retention** of specialist science teachers and technicians;
- **Access to subject- and context-specific continuing professional development (CPD) for all teachers of science and technicians;**
- **Student access to frequent, varied and purposeful practical science**, led by expert teachers, with strong technical support and suitable facilities and equipment; and
- **The need for dynamic and fit-for-purpose science curricula, assessment and qualification frameworks** that prepare young people for their future lives, both within and outside STEM careers;
- Linked to many of these challenges, we believe that there is a particular need to **raise the profile of primary science**, with



an engaging, creative and appropriate curriculum and greater support for primary schools to develop science leadership, teaching and learning; and

- **Environmental sustainability**, including climate change, as a key challenge for our time, reflecting young people's needs as global citizens and recognising the role that science education can play in understanding the issues and developing solutions.
- Embedding **equality, diversity and inclusion** across our internal systems and processes and outward facing activities is also a strategic priority for the Association and significant progress has been made in this area.

As well as implementing the current plan, the successful candidate will engage in the development of the next Strategic Plan by working closely with trustees, members and the wider science community, in the context of the profound trends currently redefining education.

ASE Governance

ASE's governance was reviewed following the granting of the Royal Charter in 2004 and a revised structure was put in place to separate the governance of the charity from the high level discussions of science education.

Trustee Body

ASE's Board of Trustees comprises of up to 11 members, some of whom are directly elected from the membership and others who are appointed for their particular skills and expertise. The Chief Executive attends meetings of the Trustee Body, supported by other members of Headquarters staff as necessary. There are four face to face meetings per year; two are on Saturdays in September and March and two are on Wednesday afternoons in November and July and follow a combined staff and trustee body meeting in the morning. A Quality and Audit Committee acts on behalf of members to report back on the workings of the governance of the Association.

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Education Group

The Association's Education Group, led by the elected Chair of the Association, is the forum of elected and appointed members who meet and work to take forward science education initiatives and policies. The Group is largely autonomous but reports to the Trustee Body. There are also national Committees, one for each sector of the membership, and Specialist Groups which cover particular aspects of science education, such as Health and Safety and Publications.

Regions

ASE ensures that it represents the interests of all members, be they from England, Northern Ireland, Scotland or Wales, as well as maintaining an international perspective. The ASE's membership structure is regional. Each region promotes the objects of the ASE by promoting ASE membership, building and maintaining contact with schools, universities, institutions of higher and further education, local education authorities and other bodies concerned with the learning and teaching of science, both formal and informal, building professional relationships between teachers and technicians in schools and devising and supporting local events for members.



Key activities:

Membership and professional registration

ASE has individual and organisational members from early years through to further education. Our membership reach currently stands at just over 8,000 (made up of individual members plus registered school users). Under the Royal Charter, and under licence from the Science Council, ASE awards the professional registrations of Chartered Science Teacher, Registered Scientist and Registered Science Technician. These recognise a commitment to professional development.

Conferences and events

The ASE Annual Conference is the largest science education event in Europe. The January 2021 and January 2022 conferences were held online, but we hope to return to a face to face conference at Sheffield Hallam in January 2023. In addition to the Annual Conference, ASE also has a vibrant and growing programme of other face to face and online conferences (for example Scotland, Northern Ireland, Technicians and Futures), CPD courses, workshops, Teachmeets, Techmeets and webinars.

Publications and resources:

- Journals – ASE publishes six journals, reaching across our community. Over the last 12 months we have moved to a ‘digital first’ model, with individual members receiving journals online by default (with an opt-in for paper copies), while institutional members have continued to receive paper copies that can be shared with others working in the school/department.
- Books - In September 2017, ASE acquired Millgate House Education (MHE), cementing the long-standing relationship that the two organisations had enjoyed for many years. In 2021 we brought Millgate together with ASE to create a single publishing team and online bookstore – www.millgatehouse.co.uk
- Resources – As well as developing resources for our members and wider community, ASE also develops resources for other organisations and is known for its role in evaluating and signposting other high quality resources, for example through the Green Tick programme and Schoolscience website.

Projects

ASE currently has a broad portfolio of projects focused across the challenges highlighted in our strategic plan. These include:

- Practical science: *Keeping Science Practical Programme* (funded by the Wolfson Foundation)
- Diversity & Inclusion: *Inclusion in Schools Programme* (delivered on behalf of the Department for Education) + Keeping Science Practical Programme (see above)
- Teacher retention and wellbeing: *ASE RISE – Retention Initiative in Science Education* (funded by the Gatsby Foundation)
- Primary: *Key moments in history and science – a fossil hunter’s story* (funded by the Templeton World Charity Foundation) + *ASE BEST BITES* (topic-level, bite-sized online CPD) (see below)
- CPD: *ASE BEST BITES* (in partnership with the University of York, funded by Wellcome)
- Maths in science: *Advanced Maths Support Programme - Maths and Biology* (In partnership with Mathematics in Education & Industry, on behalf of the Department for Education)
- Environmental sustainability: *SEAS* (Horizon 2020)
- Curriculum and assessment: *BEST STEPS – Next Steps* (funded by the Horners Livery Company), *Post-16 resource hub* (funded by the Gatsby Foundation)



Policy, advocacy and partnerships

One of ASE's key roles is to create a powerful voice for science education professionals in order to make a positive and influential difference to the teaching and learning of science throughout the UK and internationally. Throughout its history, ASE has worked in partnership with many other organisations to maintain connections with the world of science and with educational research. ASE has also had links to government and government agencies throughout its existence.

Frequent contact takes place in England with the Department for Education and there are links with Ofqual, Ofsted, the Awarding Bodies and other agencies. In Scotland, ASE is represented on the Royal Society of Edinburgh's Learned Societies' Group on Scottish Science Education. In Northern Ireland, members work closely with the Council for the Curriculum, Examinations & Assessment (CCEA) and ASE Cymru has a high profile with regard to the Welsh Government and with elected members of the Welsh Assembly. ASE produces its own separate responses to many of the issues that our nations face, as well as working alongside other science community partners.

ASE works closely in a partnership known as the 'Alliance' that brings together the Royal Society, the Institute of Physics, the Royal Society of Chemistry and the Society of Biology with ASE to consider science education issues.

In addition to trusts and foundations such as those listed in the projects section above, we also work closely with other stakeholders across the sector, such as CLEAPSS, SSERC, the Primary Science Quality Mark and the Primary Science Teaching Trust.

ASE has an excellent reputation and science teachers from many other countries look to ASE for inspiration and advice. For example, strong links exist with the National Science Teachers' Association (NSTA) in the US and a reciprocal arrangement exists whereby the ASE Chief Executive and Chair of the Association attend the Annual NSTA Conference in spring each year and NSTA delegates attend ASE's Annual Conference in January.

ASE Headquarters Staffing structure

ASE's purpose-built headquarters is on the College Lane campus of the University of Hertfordshire. The staffing structure (see page 6) comprises the CEO and a small team where flexibility across functions is important. It is designed to be efficient and responsive with a strong sense of the importance of engagement of the membership; at the last count, over 680 volunteers and committee members were seen to be supporting the staff in various ways. More than half of the staff are home-based, including the Field Officer and Inclusion in Schools Teams.

Field Officer Team

The field officers support activity in the Regions by supporting the membership regional structure and by networking across their region. Their work is co-ordinated by the Field Officer Co-ordinator who also takes responsibility for the Southern region of England.

Inclusion in Schools Team

The Inclusion in Schools team transferred over to ASE from the Institute of Physics in September 2021, as part of our Inclusion in Schools Programme. The core team is supported by a number of consultants, who are professionally registered members of the Association.



ASE Staff organogram – May 2022

