THE ASSOCIATION FOR SCIENCE EDUCATION

England & Wales · Charity number 313123

Details

Other names	ASE
Status	Registered
Legal form	Trust
Company number	RC000805
Registered	1964-01-07
Register	View on the Charity Commission register

Contact

Address	Association For Science Education 483 Green Lanes London
Phone	01707283000
Email	info@ase.org.uk
Website	www.ase.org.uk

Activities

Objects: TO PROMOTE EDUCATION BY THE FOLLOWING MEANS:- (A) BY IMPROVING THE TEACHING OF SCIENCE; AND (B) BY PROVIDING AN AUTHORITATIVE MEDIUM THROUGH WHICH OPINIONS MAY BE EXPRESSED ON EDUCATIONAL MATTERS AND (C) BY AFFORDING MEANS OF COMMUNICATION AMONG ALL PERSONS AND BODIES OF PERSONS CONCERNED WITH THE TEACHING OF SCIENCE IN PARTICULAR AND WITH EDUCATION IN GENERAL.

Activities: Improving science education for all young people, primarily but not exclusively across the UK. This is achieved by supporting science educators, including trainees, teachers, technicians, initial teacher educators and others in the sector through conferences, journals and resources, curriculum and professional development programmes and contributions to research and policy debates.

Downloaded from opencharities.uk/ew/313123

Classification

- **How:** Provides Services, Provides Advocacy/advice/information, Sponsors Or Undertakes Research, Other Charitable Activities
- **What:** Education/training
- **Who:** Children/young People, Other Defined Groups, The General Public/mankind

Geography

- China
- Northern Ireland
- Scotland
- Thailand
- Throughout England And Wales

Finances

Period end	Income	Expenditure	Assets	Employees
2025-07-31	£915,286	£909,688	£264,083	13
2024-07-31	£1,477,881	£1,559,447	£258,485	23
2023-07-31	£1,566,275	£1,574,498	£340,051	34
2022-07-31	£1,822,078	£1,706,361	£348,274	35
2021-07-31	£1,095,153	£1,003,157	£286,723	27

Downloaded from opencharities.uk/ew/313123

Trustees

Name	Role	Appointed
Catherine Walker		2025-09-01
Corinne Stevenson		2024-09-21
David Allen		2024-08-01
Dr Susan Burr		2020-07-01
Dylan Jones		2025-09-01
Jane Oldham		2024-08-01
Manoj Chitnavis		2022-08-01
Naomi Hiscock		2025-09-01
Olivia Brenda Bussey		2023-08-01

Linked charities

- THE SCIENCE AND CITIZENSHIP FUND (313123-1)

Downloaded from opencharities.uk/ew/313123

THE ASSOCIATION FOR SCIENCE EDUCATION

England & Wales - Charity number 313123

Accounts

ASSOCIATION FOR
SCIENCE EDUCATION

The Association for Science Education

Trustees' Annual Report
and Group Financial Statements
For the Year Ended 31 July 2025

Charity Registration England and Wales No. 313123

OSCR No. SC042473

Company Incorporated by Royal Charter RC000805 (England and Wales)

Contents

An introduction from our Chair 3
About the ASE 4
Impact Report 7
Community 7
Professional Development 9
Policy and Advocacy 15
Organisational Sustainability 16
Future Plans 17
From the Honorary Treasurer 18
Trustees' Report 19
Statement of Trustee Responsibilities 22
Independent Examiner's Report 24
Financial activities 26
Consolidated Statement of Financial Activities (incorporating an income and expenditure account) 26
Charity Statement of Financial Activities (incorporating an income and expenditure account) 27
Consolidated and Charity Balance Sheets 28
Consolidated statement of cash flows 29
Notes to the Financial Statements for the year ended 31 July 2025 30
Legal and Administrative Information 43

An introduction from our Chair

This financial year (ending July 2025) has been one of continued development and adaptation as we meet members' needs and respond to the ongoing challenges in science education. Our focus has remained on building a strong, sustainable organisation.

Highlights included a growing programme of high-quality, accessible CPD and a successful January 2025 Annual Conference at Nottingham University. The event showcased what makes ASE unique; a welcoming and inspiring community of educators sharing ideas, friendships and enthusiasm. Grateful thanks go to Ali Redmore, Conference Chair, the Conference Working Group, staff, volunteers and presenters for making it such a success.

Regional activity continues to evolve, with face-to-face TeachMeets complemented by collaborative online "Hangouts" and "Idea Shares," expanding networking opportunities across the UK. ASE also consulted widely to submit a full response to the Curriculum and Assessment Review (November 2024) and looks forward to supporting members as outcomes unfold. This year also saw the refresh and redesign of all ASE journals, with Primary Science and/or School Science Review (SSR) now included as member benefits.

My focus as Chair has been on building relationships across and beyond the Association to ensure that ASE reflects and responds to the needs of all parts of the science education community – whatever your profession in science education and wherever you are located. This included establishing a Four Nations Chairs Working Group and expanding the Education Group to include representation from all four nations. It has also been a pleasure to see strengthening international ties: we welcomed once again, the President-Elect of the National Science Teaching Association (NSTA) of the USA to our Annual Conference and attended their spring conference in Philadelphia; we had a strong and vibrant presence at Science on Stage in Turku Finland and are delighted to see the science education community grow ever stronger in South East Asia as the result of another successful annual event in Bangkok.

We were delighted to welcome Her Royal Highness, the Princess Royal as our new Patron in 2024 and we look forward to a long relationship with her. My sincere thanks go to our President, Professor Louise Archer, the Chair Trio past and present, CEO, the staff team and Trustees. The ASE would not be the amazing organization it is without its members and specifically those that volunteer as committee and group members or those that volunteer in support of CPD, events, journals and activities – THANKYOU!

Finally, as the first practicing Science Technician to serve as Chair, this year has been an incredible opportunity for growth and learning. I would encourage every member to get involved the ASE truly offers something for everyone passionate about science education.

Jane Oldham
Chair of the Association for Science Education 2024/25

About the ASE

The Association for Science Education (ASE) is an active membership body that has been supporting all those involved in science education from pre-school to higher education for over 100 years; members include teachers, technicians, teacher educators, researchers and others involved in science education. We play a significant role in promoting excellence in teaching and learning of science in schools and colleges.

Working closely with the science professional bodies, industry and business, we provide a UK-wide network bringing together individuals and organisations to share ideas and tackle challenges in science teaching, develop resources and foster high quality continuing professional development.

We are a Registered Charity with a Royal Charter, owned by our members and independent of government. We seek to create a powerful voice for science education professionals to make a positive and influential difference to the teaching and learning of science throughout the UK and further afield.

Our Mission and Vision

Mission: to promote excellence in science education

Vision: All learners are engaged in appropriate, valuable and interesting science education, supported by a professional science education workforce.

"The objects and purposes for which The Association is hereby constituted are

- the promotion of education by the following means:
- by improving the teaching of science and
- by providing an authoritative medium through which opinions of teachers of science may be expressed on educational matters and
- by affording means of communication among all persons and bodies of persons concerned with the teaching of science in particular and with education in general."

ASE Royal Charter 2004

Our Values

Our values define our culture and reflect our priorities in the way we work. We are:

- **Welcoming:** we celebrate diversity and **foster an inclusive environment** in which everyone in our science education community is respected, valued and heard
- **Evidence informed:** we value **good research,** data analysis, evaluation feedback and expert opinion and use it to shape our activities
- **Passionate about science and teaching:** We inspire educators to continually evolve and grow in their understanding and teaching of science, nurturing a **culture of life-long learning** and innovation
- **Bold:** We aim to push boundaries, **embrace innovation in science education** and set ourselves ambitious objectives in pursuit of our goals
- **Environmentally sustainable:** we are dedicated to **reducing our environmental footprint** by minimising waste, conserving resources, and adopting sustainable practices.

Our Strategy 2024-2025

The ASE continues to play a positive role in supporting a committed community of science educators to deliver high quality science education to all young people regardless of background or circumstance. We provide our members and the broader community with career long opportunities for professional development, a platform to ensure their views are heard by policymakers, and a much valued and needed community of support.

Science education is facing several key challenges which we try to address through our work. These include the low levels of recruitment and retention of science teachers, a lack of specialist scientific knowledge amongst the workforce, meaning some subjects are being taught by non-specialists leading to poorer outcomes, a lack of access to affordable, high quality professional development opportunities for teachers and technicians and significant disparities in science education attainment which correlate with areas of disadvantage. We aim to address these issues through the provision of high quality, evidence based, affordable and accessible professional development opportunities, projects that prioritise and invest in areas of disadvantage, and a readily available community of support - through which our members find inspiration, motivation, opportunities for career progression and professional development which helps to support the wellbeing of science educators and encourages them to stay in teaching.

Our strategy has four key pillars:

1. **Offer a welcoming, diverse and inclusive range of professional activities, networks and opportunities** that help our members to enjoy their professional career and encourages them to stay in education.
2. **Create a comprehensive programme of professional learning for science educators** that promotes subject knowledge, improves confidence, leads to changes in classroom practices and pedagogy, improvement in outcomes and encourages educators to remain in education.
3. **Influence science education policy at national levels to achieve curriculum reform** that meet young people's needs and drives a policy and practical framework that supports science educators, encourages them to stay in practice and helps to improve outcomes.
4. **Build a strong and sustainable organisation** that meets our members' needs, ensures growth and is fit for the future.

ASE: A professional body - working with members for members

ASE thrives thanks to the dedication and support of our members and volunteers. In 2024/25 over 140 ASE members actively engaged in our National Committees and Groups, representing voices from across the education sector. Our committees and special interest groups include: Primary, 11-19, Teacher Developers (formerly known as Futures), Publications, Technicians, Health and Safety, Research, Policy Group, Conference Working Group, Editorial Boards, Registration Board, and Regional and Devolved Nation Committees – all of whom play an essential role in ensuring ASE's success and responsiveness to member needs. These groups inform our priority areas and directly help to deliver initiatives, including the curation of programmes for Annual Conference, trainers and content for our professional development programme, peer reviewing articles, guidance and resources and helping to shape policy responses to national and regional government consultations. We are a membership body and are guided by our members' needs, priorities, views and experiences. We encourage our members to get involved in their association whenever they can – this includes submission of articles to journals, presenting at events, joining our committees and responding to policy consultations. **We thank all our members, volunteers and trustees for their unremitting support. All of the work carried out by the ASE is informed and shaped by their expertise and guidance.**

The Year in Numbers

1. **6,654 members:** Up by 8% on the previous year. Membership is comprised of teachers, technicians, lecturers, academics, researchers, school leaders, teacher developers, consultants, student teachers and early career teachers
2. **13,683 CPD Hours:** 4958 teachers, technicians and students attended over 126 CPD sessions on topics such as SEND, inclusion, practical science, microscopy and physics for non-specialists.
3. **33,886 social media followers:** In October 2024, we launched our Bluesky account, which has already gained 787 followers. LinkedIn remains our fastest-growing platform, with follower numbers up 16.8% compared to the same period last year.
4. **533,383 page views**: Our website was visited by over 142,000 unique users, who visited multiple pages and downloaded key resources, journals, guidance, news and events. Whilst this represents a decrease over the previous year, we know that websites worldwide have seen substantial decreases in traffic due to AI searches.
5. **86 news stories:** Including coverage of topics such as member news stories highlighting awards and events, celebrating #Techognition and British Science Week, the Science Teaching Survey, the Curriculum and Assessment Review, as well as announcing our new Patron Her Royal Highness the Princess Royal.
6. **60 CPD updates:** tailored for our membership – highlighting key events, professional development opportunities and news.
7. **20th anniversary of our Royal Charter**: As well as laying down the structure, governance and legal status of the Association, the Charter gave us an exclusive right as a licenced body of the Science Council to award Chartered Science Teacher status (CSciTeach).
8. **Three redesigned journals** and one major new member benefit, as SSR, Primary Science become accessible within membership, and together with open access JES, all received a makeover and a fresh new design template.
9. **Two new book releases**: It's Not Fair, and Primary Science in a Nutshell published through Millgate.
10. **One office move!** After 55 years at the University of Hertfordshire, ASE moved to a fully remote working model.

Impact Report

Community

1. The ASE: a welcoming community that seeks to support educators so that they enjoy their profession and stay in education

From local level 'hang outs' and teach meets to international conferences; from in depth discussions on Zoom and Teams, to debates and chat on our social media channels, our community of support has continued to help providers of science education from all over the world feel less isolated, able to reach out, seek guidance, find encouragement, and access more professional opportunities. This year saw strong regional collaboration to support teachers and technicians, enhance member engagement, and expand community networks across the organisation.

Our Regional Networks

The ASE's active English regions have continued to provide networking opportunities for the science education community locally and more widely online, sharing knowledge, expertise, ideas and insights. In total regional activities attracted 465 attendees across 15 online and face to face events.

Following the challenge of attracting teachers to face-to-face sessions in previous years, the Southern Counties region introduced a new approach: Their 'Idea Share' in February evolved into a short, focused 'How to Teach' series of 30-minute sessions in Biology, Chemistry, and Physics. This more practical, time-efficient format has proven popular, with attendance rising from an average of 2–10 participants to 50–70 attendees consistently across May, June, and July. In the Northern regions, collaboration between three regional committees has strengthened community ties through monthly 30-minute 'Sci-led Hangouts'. The Anglia region continues to deliver successful seasonal primary focused Teach Meets' and the West Midlands, now with a new chair, and the West of England and South West are also exploring partnerships to increase connections and support in the year ahead.

Participant feedback includes:

- "Nice and short session, focused and straight from school."
- "I like the 30-minute approach – I'm more likely to join these at the end of a teaching day."
- "Just starting my teaching career and I'm so grateful to have resources like that – thank you!"
- "Having no experience in this field, it was such an excellent experience. Well worth the trip."

The ASE Community in Scotland

Our ASE Scotland community continues to be led by an active committee who meet at least once a month online to connect and to organise events and initiatives. Highlights this year include the one-day ASE Scotland Conference at Kinross High School with a focus on practical work and inclusion. The keynote from Education Scotland, presented on the Curriculum Improvement Cycle. His address emphasised the importance of aligning curriculum design, pedagogy and assessment to support all learners from early years through secondary. The conference included 16 workshops for primary and secondary teachers and technicians. These included sessions on Science on Stage, using squid as a teaching tool, and using BSL to introduce science concepts. The day included a small exhibition and was an opportunity for all to meet, connect and to enjoy a day of networking and science professional development.

Scottish members also attended the Science in the Parliament event in November and held their online AGM with a talk from the Royal Meteorological Society on Climate change.

Facilitating Professional networks

Alongside our regional networks, ASE supports members to connect with their professional peers which is a vital part of our community and helps to foster collaboration, reduces isolation, and enhances wellbeing. Our Teacher Developer Community hosted four online reading community events, as well as a session on mentoring and a network event on climate change. The Technicians Network met seven times during the year, using these sessions to discuss their roles, share good practice, and explore topics such as raising professional profiles, performance management, and job interview preparation.

The ASE Community in Northern Ireland

We continue to sustain a vibrant science education community in Northern Ireland. The committee includes representatives from all sectors; primary and post-primary teachers, technicians, higher education and scientific interest groups such as the RSPB. It remains open to new members and provides a valuable forum for sharing and discussing science, curriculum, and pedagogy. This year's activities included an online webinar with Amy Forrester on behaviour, motivation, and classroom teaching and ongoing Action Research Cluster meetings led by Dr Paddy Shevlin (Dublin City University). A highly successful TeachMeet at Stranmillis University College attracted over 60 delegates for talks on action research and cognitive science, with parallel primary and post-primary strands. Primary delegates also took advantage of the college grounds for outdoor learning activities. Teachers are encouraged to engage in action and outcome planning to support school improvement.

International Teacher Network

Starting a teaching career, especially when moving from abroad, can be a daunting experience. Our 'International Teacher' series combined professional development sessions with opportunities to connect, share, and exchange ideas. This year, we delivered 10 online sessions on topics including the UK science education landscape, behaviour for learning, working with technicians, SEND in science, wellbeing, and effective practical work. In total, 232 participants took part, collectively earning around 100 hours of CPD.

Science on Stage UK National Steering Group

ASE is proud to be the UK member of Science on Stage: an initiative that fosters international collaboration among teachers, promoting the exchange of ideas, resources, and teaching practices that enhance science education. The Science on Stage 2024 Festival took place at the Turku University of Applied Science, Finland, from 12–15 August, bringing together over 400 science educators from more than 30 countries, with several hundred more attending the public open day. The UK delegation of 11 teachers showcased projects on themes including STEM for Sustainable Development, Diversity in STEM, and Low-Cost Experiments, alongside four UK representatives supporting the event's organisation, the largest UK team ever to attend. UK delegates also delivered workshops such as Magnificent Moss, Replacing Plastics, and The Science Behind Magic. Participant Colleen Reesink-Wells received the European STEM Teacher Award for her project on sustainable polymers. Attendees described the event as "a big confidence boost" and "a unique platform championing educators and building a global community." The festival fostered international collaboration, innovation, and long-lasting professional connections among teachers across Europe. The Steering group is now focusing their attentions on Science on Stage 2026 which will take place in Klaipedia, Lithuania between 28th and 31st May 2026.

We are enormously grateful to all our members who sit on our regional committees and devolved nation committees and who commit a significant amount of time to helping to support activities and networking events at a local level.

Professional Development

2. **The ASE: Creating a comprehensive programme of professional learning for science educators that promotes subject knowledge, improves confidence, improves outcomes and encourages educators to remain in education.**

In 2024/25, we continued to advance the professional development of our members and the broader science education community through a wide range of events and publications. Guided by our values, ASE offers high-quality CPD designed to support members in promoting excellence in science education. Many of our expert speakers are drawn from within our own skilled membership, contributing their insights to a CPD program tailored to address key topics in science education including sessions on professional registration, practical science, curriculum planning, inclusion, SEND, leadership, 'how to teach...' AI, microscopy, maths skills, and subject-specific pedagogy.

Annual Conference 2025

For over 120 years the Annual Conference has seen teachers, technicians, research, academics, consultants, trainers, school suppliers, exam boards, charitable organisations and policy makers from across the science education sector come together to learn, share insights, connect and be inspired.

The 2025 ASE Annual Conference took place at the University of Nottingham across three days at the beginning of January. The conference, curated by ASE committees offered 270 sessions including tailored programmes for post-16 educators, technicians, Early Career Teachers (ECTs), and teacher trainers, primary and secondary teachers, as well as sessions on research and international science education. Key themes this year included: AI to deliver the science curriculum, assessment, inclusion and diversity including SEND, practical work, professional journeys, sustainability and climate change, wellbeing and effective working practices.

- 1,356 registered participants
- 270 sessions
- 47 exhibitor stands
- 9,762 CPD hours

Feedback was overwhelming positive, with 88% agreeing or strongly agreeing that the event had a positive impact on their professional development. 85% agreeing or strongly agreeing it had a positive impact on professional practice. 81% agreeing or strongly agreeing it had improved understanding of subject matter and 84% agreeing that they would incorporate ideas into personal practice.

Thank you to our conference partners and sponsors: AQA and Philip Harris, our partners PSTT, the University of Nottingham, all of our exhibitors, speakers, delegates, volunteers and staff team for making Conference such a great event. Special thanks to Ali Redmore who took over as our new honorary Conference Chair this year.

Annual Teacher Developer Conference

Held in June at the University of Northampton and designed by our Teacher Developer Committee, the programme offered a mixture of keynotes and breakout groups. Sessions included presentations from the Royal Society on the future of Science Education, The Ogden Trust and EEF on evidence informed practice and from Haira Gandolfi on rethinking for curriculum for social justice. 81%

agreed or strongly agreed that attending conference sessions inspired them to explore new ideas and approaches and 72% strongly agreed or agreed that they would apply the knowledge gained in their work and that attending had a positive impact on their professional development. One participant commented; "Quality presenters...provided rich and deep thinking. Fantastic balance between input and discussion. A very high- quality conference that should remain in the ASE calendar". 46 attended including 13 presenters.

Thank you to Ogden Trust for sponsoring and to the University of Northampton for kindly hosting the event and to our Teacher Developer Committee for designing a popular and insightful programme.

Technician's Summer Conference

The Technician's Summer Conference was held in July at Bolton School in Greater Manchester and featured a program of 16 sessions across four time slots, including four supplier workshops. The event attracted 65 delegates, including technicians from both independent and international schools. We were delighted to work in partnership with Philip Harris to offer 15 bursaries that enabled local technicians to attend for free. Bursaries included one year's free membership of the ASE. Sessions included practical workshops on glass working, enzymes, physics, DNA and horticulture. 100% of those completing the feedback agreed or strongly agreed that attendance will have a positive impact on their practice and that their understanding of the subject matter was improved.

Thank you to Philip Harris, for sponsoring the event and to the Glass Sellers Charity for supporting the provision of the hugely popular "Working with glass" practical workshop. Thanks also to Bolton School for hosting and to our Technicians Committee for putting together such a strong programme.

ASE South-East Asia Conference 2025

The third ASE South-East Asia Conference took place on 21st March 2025 and was hosted for the first time by Kings International School, (the two previous SE Asia events were hosted by Bangkok Patana School). The programme comprised eight parallel sessions for teachers and technicians including: innovative practical work such as microscale chemistry, DNA fingerprinting, and A-level physics experiments; teaching approaches like inquiry-based learning, inclusive curricula, and promoting spoken English in science; and emerging themes such as the use of AI in research and teaching, student-led research, and STEAM integration. 82 delegates participated with 100% of respondents agreeing or strongly agreeing that attending the event had a positive impact on their own professional development and would also have a positive impact on their science departments and colleagues. Plans are already in place for 2026 which will be hosted once more by Kings International School.

Many thanks to sponsors Findel (Philip Harris) and also Harper Collins, Hodder, OUP and other regional resource suppliers. Huge thanks also to our partners Kings International School for hosting this remarkable event.

Online Learning

We hosted 118 online professional development sessions in 2024/25 with over 2,800 participants, equating to 3,267 CPD hours. Topics covered included inclusion in science, microscopy, teaching physics, technician leadership, professional registration, primary insights and support for ECTs and international trainees. We aim to monitor the impact of all of our events to ensure we consistently deliver high quality, impactful and relevant CPD. After each event, participants are invited to give feedback and are asked if they 'strongly agree', 'agree', 'neither agree nor disagree', 'disagree' or

'strongly disagree' with the following four statements (the percentage that agreed or strongly agreed across all events is included in brackets):

- Attendance at this event will have a positive impact on my practice (89%)
- Attendance at this event will have a positive impact on my professional development (90%)
- I have improved understanding of the subject matter (87%)
- There are many ideas from the session I attended that I want to incorporate into my personal practice. (89%)

Physics Partners - From Basics to Brilliance

Physics Partners and the ASE partnered to develop and deliver a series designed to support non specialist teachers to teach physics. Ten modules covering forces, energy, electrical circuits, waves, maths, heat, magnets, cosmic physics, radioactivity and practicals were delivered between October 2024 and March 2025 (Series 1), and a shorter series of six modules were delivered between June and July 2025. 53 participants took part, including science teachers, early career teachers and a small number of trainees. Participants with chemistry as a subject specialism made up 58%, 27% biology and 12% physics. 94% of respondents agree or strongly agreed that the event had a positive impact on practice, 93% agreed it would have a positive impact on professional development and 93% agree that it improved their understanding of the subject matter and that they would incorporate ideas into practice. We have agreed to continue to offer the series on a rolling basis in 2025/26 thanks to continued support from Physics Partners.

Microscopy with SAPs

Science and Plants for Schools (SAPS) and the ASE collaborated to deliver a three-part microscopy training series designed to provide high-quality, accessible and affordable professional development in biology. The modules: Building Confidence in Microscopy, Staining and Getting Things Thin, and Taking Things Further: Calibrating and Measuring, were delivered between January and June, attracting 79 participants. The sessions were aimed at non-specialists, ITTs, ECTs, technicians, and specialist teachers, the series was jointly quality assured by ASE and SAPS and made available on demand for a limited time to registered attendees. Accompanying articles also appeared in SSR. 90% agreeing attendance had positive impact on practice and 88% agreeing it improved understanding of subject matter.

Professional Registers

The Association for Science Education, as a licensed body of the Science Council, is empowered under the terms of its Royal Charter to administer Professional Registration awards to individuals who meet the application requirements. Applicants must be active in science teaching and learning in the UK or overseas; this includes teachers and technicians in all state and independent schools, colleges and universities, as well as advisers, inspectors, consultants and researchers.

Our registrant numbers have shown modest growth, with total active registrations increasing to 317 in April 2024 (159 CSciTeach, 32 RSci and 128 RSciTech). An increase of 5% on the prior year. We have worked hard to promote the registers, through social media, inclusion in newsletters and held bespoke sessions outlining the value of the registers and the process for applications.

We would like to thank the Registration Board for their work in reviewing and assessing applications, all of whom offer their time and expertise on a voluntary basis.

Projects that promote excellence and access for all

Keeping Science Practical

The Keeping Science Practical project, funded by the Wolfson Foundation, aims to enhance access to hands-on, purposeful science education in schools, particularly those serving disadvantaged students. The program focuses on improving teachers' and technician confidence and skills in delivering practical science, helping them engage students more effectively in STEM subjects.

In 2024/25, the programme supported a further 50 schools in disadvantaged areas. CPD sessions were highly rated, with 98% of attendees scoring them as "good" or better and 88% reporting a noticeable increase in meaningful practical science activities as a result of engagement in the project. Compared to baseline data, post programme survey responses saw participants reporting increased clarity and alignment in adopted practices for using practical activities, improved inclusive design awareness, growth in supportive structures and professional development, stronger curriculum sequencing, more consistent presentation and management of practical work and enhanced pedagogical clarity.

Looking ahead we are pleased to have secured support from the Spectris Foundation to support a further 30 schools per year again prioritising areas of socio-economic deprivation and high numbers of special educational needs.

We would like to thank the Wolfson Foundation for funding this four-year programme which has supported over 180 schools in disadvantaged areas to improve planning, delivery, and impact of practical science classes in their schools.

Filling the Gap: Understanding the effectiveness of financial incentives on teacher recruitment

Work began on a project funded by the Gatsby Foundation to better understand the landscape in relation to teachers coming to the UK from abroad and whether the financial incentives are impactful and if not, what are the barriers and challenges teachers and students are experiencing. The report was published in December 2025.

Inclusion in Schools

We received confirmation in July 2024 that Department of Education Funding for the Inclusion Science programme would not extend beyond August 2024. Activity was concluded in July and the final report submitted in August 2024. The impact of the programme however was positive. Between September 2021 and August 2023 the, 'Inclusion in Schools' programme worked with nearly 200 state-funded secondary schools across England. The programme was found to have positively contributed to improving senior leadership teams' ability to create a culture of inclusion and increase teachers' confidence in inclusive practice. There was also a measured increase in pupils agreeing with the statement 'Physics will be useful to me in the future' and an increase in the number of year 10 students demonstrating an interest in studying physics post-16. ASE took the key learnings from this consultancy work, and developed a six-module online CPD programme, 'Inclusion in Science', also funded by the DfE and which ran from September 2023 to July 2024. Over 350 teachers engaged with this programme and over 200 completed every module (100 of which held leadership positions in their schools). 95% of participants rated the programme as good or very good and an external evaluation found the programme to be of high quality that improved participants Inclusion knowledge and skills so teachers could build an inclusive culture in their science lesson and make ongoing changes to their practice.

We are saddened that this impactful programme has had to come to an end. We had hoped to secure alternative funding, but this has not been possible. We continue to run inclusion focused sessions as part of our CPD programme. In addition, we are an active stakeholder in the strategic partnership launched in autumn 2024 by Engineering UK in collaboration with the Royal Academy of Engineering, Women's Engineering Society (WES), the British Computer Society (BCS), Women into Science and Engineering (WISE). This project's aim is to increase the number of girls and young women entering engineering and technology pathways by age 18. ASE is a leading member of one of the task and finish groups on whole school inclusion.

Key Moments in History and Science

This 14-month project funded by the Templeton Foundation and started in October 2023 concluded at the end of November 2024. The project aimed to amplify and expand the reach and uptake of the highly successful Mary Anning resources within the UK and through a partnership with the Museo de Ciencias-Universidad de Navarra to provide teachers' professional learning and the project's resources, in Spanish translation, to over 20 schools in Spain. The most noticeable results include children's improved knowledge and understanding, increased confidence in discussing major scientific concepts, and a deeper appreciation for the role of questioning in science. Likewise, teachers have observed greater class participation, more independent research conducted by students at home, and a shift in their approach to teaching across three key areas.

ASE Journals

In 2024/25, we published over 73 articles across *Primary Science*, *School Science Review* (*SSR*) and the *Journal of Emergent Science* (*JES*), produced in partnership with the Primary Science Teaching Trust (PSTT). Additionally, we published eight new pieces of content on our *Science Teacher Education* hub (*STE Hub*), which replaces *Science Teacher Education* (*STE*). Our journals reach 6,000 subscribers, plus 190 universities and institutions subscribing to *SSR* and 96 subscribing to *Primary Science*.

As reported under Future Plans in 2023/24, ASE took steps this year to streamline its family of journals in response to the rising cost of production. We ceased production of *Education in Science*, our membership magazine; news, opinion pieces, prep-room articles and blogs now sit on our website which has improved accessibility and reduced production costs. We reunified *SSR in Practice* and *SSR in Depth* to provide a more integrated and flexible experience for readers. Both *SSR* and *Primary Science* are now published termly with a choice of one or the other included as a member benefit (and members may add a second if they wish). This year also saw the introduction of fresh new templates and branding, giving ASE's journals a more modern and engaging look.

Primary Science explored interdisciplinary links between science and mathematics, highlighting how mathematical knowledge can support the understanding of forces. Issue 184 focused on science in the early years, investigating how young children begin to engage with scientific ideas. Issue 185 examined the use of artificial intelligence and computing in primary science. The article "Using Generative Artificial Intelligence to Plan and Resource Primary Science" was republished in Hello World, an open-access magazine and podcast for educators.

Our two editions of *JES* highlighted creative, research-informed approaches to early science education and the transition through primary learning. Issues 27 and 28 featured articles on storytelling in science, including the Me, You and Science Too (MYST) project engaging families with children aged 3–5 through story-based activities, and research on Botanical Folk Tales, demonstrating how stories can increase awareness of plants. Other contributions explored argumentation and doubt in science learning and building pedagogical bridges between primary

and secondary science through collaborative curriculum design. The editors introduced a new 'collective article' format featuring teachers' reflections on mixed-age primary classrooms and how they adapt science teaching to meet diverse learner needs.

SSR this year centred on the curriculum and assessment review in England, with authors exploring what and why we teach science. Other articles examined topics such as curriculum design, including reorganising GCSE Biology to position ecology at the beginning, and evaluating how space science is represented. Contributors addressed student engagement and equity, with insights from the latest TIMSS findings, research on STEM identity, and strategies for improving climate change communication and understanding the nature of science. Journals also featured practical and innovative classroom ideas, from microscale experiments and oracy in practical science to the use of games like *Unlock CRISPR* to connect students with cutting-edge biology.

This year, the Science Teacher Education Hub shared a range of articles and podcasts supporting science teacher development. Topics included boosting teachers' confidence through zoo and aquarium-based professional development, supporting neurodivergent student teachers, using demonstrations in inquiry-based teaching, and co-planning for departmental improvement. The "Journeys in Professional Learning" podcast series featured global insights into primary teacher preparation, innovative CPD across schools, the impact of the Primary Science Quality Mark, and the Physics Education Research (PER) Club, which promotes collaboration among science educators.

We would like to thank our Editors, Helen Harden, Fiona Williams (*SSR*), Rob Collins (Primary Science until March '25), Leigh Hoath (Primary Science from March '25), Sarah Earle (*JES*) and Natasha Serret (*STE Hub*) as well as our peer reviewers and editorial boards for all their help and support this year.

ASE's publishing – Millgate House Education

In Autumn 2024, we were pleased to publish two new books to support primary science education. *Primary Science in a Nutshell* helps teachers build confidence in teaching science, offering clear explanations of key concepts, common misconceptions, and practical planning tools. The second title, *It's Not Fair!*, focuses on the five types of science enquiry used in primary classrooms, helping teachers and subject leaders develop pupils' understanding of how scientific knowledge is established. Both publications provide practical, accessible guidance to strengthen science teaching and learning in primary schools.

Despite ongoing interest in ASE publications, overall book and publication sales declined again in 2023/24, continuing the downward trend of recent years. With mid-year sales remaining below target, the Millgate House Board of Directors, supported by the ASE Trustees, took the difficult decision to pause new book production and consider winding down the business. Following a full review and due diligence process, the Board of Directors approved a resolution to sell the company and its assets and the sale was completed in December 2024. This decision was made to protect the ASE and ensure limited resources were focused on furthering the Association's charitable objectives, particularly in supporting professional learning, resources and our community of support for science educators. At close of year, including proceeds from the sale, income was £41,786 (£53,231 in 2024)

Partnerships and Third-Party Resources

We work closely with stakeholders across the STEM industry and education sector, offering consultancy on resource development and conducting independent evaluations of third-party materials (under our ASE Evaluated Programme). This activity not only provides a valuable income stream for ASE but also helps ensure that resources published for teachers and technicians are high quality, scientifically accurate, curriculum-aligned and pedagogically appropriate. This year, we were

pleased to collaborate with Amazon Future Engineers, ABPI, LEGO Education, Engineering UK, Collins, The Royal Society of Chemistry and We Are Futures on a range of resources supporting science education.

We would like to thank all our partners, sponsors and advertisers for their ongoing support and commitment to improving the quality of STEM learning materials.

Policy and Advocacy

3. **Influence science education policy at national levels to achieve curriculum reform that meet young people's needs and** drives a policy and practical framework that supports science educators, encourages them to stay in practice and helps to improve outcomes.

In 2024/25, we continued to inform national and regional policy on a range of topics primarily in relation to the government's announcement to carry out a review of curriculum and assessment. We continue to work in partnership with the Institute of Physics (IOP), the Royal Society of Biology (RSB), Royal Society of Chemistry (RSC), and the Royal Society, through the influential Science Education Policy Alliance (SEPA) and as part of the Learned Societies Group in Scotland, and also with a range of partner organisations including British Science Association, Primary Science Quality Mark, Primary Science Teaching Trust (PSTT) and the University of Manchester through the UK Primary Science Education Group (UKPSEG).

ASE is highly regarded as an authority on what constitutes excellence in science education. We draw on our wealth of expertise and our collective knowledge to shape and inform policy at national and regional level. In 2024/25 we have worked both independently and in partnership to inform policy across Westminster and Whitehall as well as the devolved nations. Highlights include:

- ASE worked in partnership with the Institute of Physics, Royal Society of Biology and Royal Society of Chemistry to produce recommendations on the primary science curriculum, stemming from a report from the Primary Curriculum Advisory Group (PCAG), ahead of the curriculum and assessment review. ASE recommended the report's knowledge maps for biology, chemistry and physics with their conceptual boundaries – focusing on what is age and development stage appropriate; and essential experiences – in the classroom, school grounds and/or beyond into their own locality for all children, regardless of their circumstances, by the age of 11 years.
- In November 2024 following consultation with our members and discussions with Committees, we submitted a full response to the Curriculum and Assessment review in which we prioritised a call for curriculum reform that: meets young people's needs and improves their outcomes; drives a policy and practical framework that supports science educators; and encourages science educators to stay in practice.
- In February 2025, ASE in partnership with Etio, submitted a short paper to the Treasury outlining the economic case for investment in teacher retention, recruitment and professional development, highlighting that investing in teacher CPD is likely to be one of the most cost effective strategies for government to improve educational outcomes and drive long term economic growth.
- In February 2025 ASE worked in partnership with the RSC and other partners in SEPA to promote the Science Teaching Survey 2025, the largest science education survey in the UK and Ireland.
- March 2025 saw the publication of the Curriculum and Assessment Review interim report. We welcomed the review's progress and many of the issues raised in our submission received attention, including the need to reduce content overload at Key Stage 4, strengthen sustainability and climate education, address the impact of high-stakes assessment, tackle socio-economic disparities, improve inclusivity in curriculum and assessment, and promote mastery in learning.

- In June, past Chair Helen Harden was invited to speak at the CHEMUK Big Debate – an important opportunity to share the perspectives of teachers and technicians with those working in the chemical industry.
- ASE Scotland worked in partnership with the Learned Societies Group on two major publications: *Moral Support: Using the Curriculum to Foster Ethical Literacy in Scottish Learners* and *Gaps, Overlaps and Challenges: Assessing the Alignment of Scotland's Education Reform Agenda with National Priorities*, both contributing to national discussions on curriculum and reform.
- Working alongside the Institute of Physics, Royal Society of Biology, Royal Society of Chemistry and the Royal Society, ASE engaged in direct consultation with Welsh Government and Qualifications Wales over the development of a revised suite of Made-for-Wales GCSE qualifications. ASE maintains that the most appropriate option for learner access and equity is a simplified pathway delivered by subject specialist teachers for each of biology, chemistry and physics in two GCSEs worth of time, and with performance in each science discipline separately reported alongside the overall grade for completing the qualification.

Organisational Sustainability

4. **Build a strong and sustainable organisation** that meets our members' needs, ensures growth and is fit for the future.

In 2024/25 the ASE continued to implement changes that sought to improve membership numbers; and tackle low reserves.

Membership: In 2023, we reduced our membership fees to reduce barriers to entry and make membership more affordable for all. Member numbers rose significantly in the first year and rose by a further 8% in 2024/2025. The largest increase has been in student membership which has surged by 47%. Individual teacher members and technician numbers has plateaued. We continue to work on our membership offer, with plans to publicise a full annual programme of CPD programme from the summer onwards and also move to include a choice of journal as a member benefit. However, declining membership continues to be a concern.

Financial sustainability: In September, we completed the agreement to relinquish the lease on the headquarters officers at the University of Hertfordshire, resulting in an additional one-off premium of £160,000. After careful due diligence which included an independent opinion on the valuation and legal advice, Millgate House Board of Directors supported by Trustees made the difficult decision to undertake a sale of Millgate House assets and wind down the publishing arm of ASE. The sale was completed in December 2024. This year saw a further reduction in staff team, as we wound down the inclusion programme and reduced activity on book sales resulting in one off restructure costs of £42,774. Whilst we continue to monitor finances very carefully, we are now operating with a leaner team, fully focused on delivering on our core charitable and strategic objectives and look forward to a more stable financial outlook.

Diversity and Inclusion: This year, ASE completed the Science Council and Royal Academy of Engineering Diversity and Inclusion Progression Framework benchmarking exercise for 2025. The review confirmed ASE's strong and progressing performance, across governance, membership, communications, and employment practices, and performing above the sector median in membership and professional registration. Key achievements include reducing membership barriers, improving accessibility and representation in communications, and maintaining flexible, inclusive employment practices that reflect ASE's commitment to equity and belonging across the science education community. Data gathering suggests our membership reflects the wider workforce, but we

aim to do more to measure our progress across other areas such as committee membership and events. EDI is embedded in ASE's strategy, with a trustee diversity champion and inclusive policies across all operations. This year, we advertised widely for new Trustee appointments and were pleased to welcome two new Trustees and one observer from the Young Trustee Movement, who joined the Trustee Body in August 2025. Trustees are also scheduled to undertake further DEI training in 2025/26. All staff have completed online DEI training and we also continue to enhance accessibility and diversity at our conferences and events, ensuring that content, communication, and participation are as inclusive as possible.

Future Plans

ASE remains dedicated to promoting excellence in science education, to improving educational outcomes and supporting the science education workforce through robust professional development, strong advocacy, and an active community network. We are passionate about ensuring accessible, high-quality science education for all, empowering teachers, technicians, and trainers to deliver exceptional science learning experiences.

Our priorities in 2025/26 include enhancing access to practical science for students in disadvantaged areas, ensuring that our member services remain affordable, high quality and accessible to all. We'll continue to work in partnership with stakeholders in the science education community to ensure our members' voices are heard and will continue to pursue greater financial stability. Key initiatives will include:

- Development of a comprehensive annual programme of CPD that provides support and training that meets members' needs, is accessible, affordable and high quality.
- Working with partners in SEPA and the LSG in Scotland to continue to shape policy developments around curriculum reform for England and the devolved nations.
- Championing practical science opportunities through our Keeping Science Practical Programme funded by Spectris, prioritising schools in disadvantaged areas
- Research into the effectiveness of financial incentives on the recruitment of teachers and trainees from abroad funded by the Gatsby Foundation

We continue to actively promote membership to a wide audience, including continued free support for students and trainees and will continue to pursue new funding sources within the STEM sector and from trusts and foundations to support our mission.

From the Honorary Treasurer

The role of Honorary Treasurer, together with the trustee body is to have an oversight of financial matters of the Association together with proposed plans for the future.

FY2425 saw continued reductions in staffing and overheads as we work to reduce our cost base and maintain a balanced budget. This has become more challenging as funding for the Inclusion in Science programme came to an end in August 2024. The strategic plan with its threads of community, professional development, advocacy and organisational sustainability continues to inform and support the financial planning of the Association. This is used in conjunction with regular risk assessments and management accounts that are shared with Trustees by the CEO and Director of Finance at quarterly meetings or as appropriate. Trustees are satisfied that the reports are detailed and transparent and have sufficient information to assess financial risks and make decisions accordingly. To summarise the year ending July 25:

Income: We generated income of £915,286. This includes the lease premium of £160,000 and proceeds from the sale of Millgate House Publishing. We were pleased with the financial performance of the Annual Conference at the University of Nottingham. Thanks are due to the Conference team for all their hard work. All other areas of income, including journal subscriptions, CPD, other conferences and business development were slightly under budget for target income. Whilst we have seen an increase in membership numbers, these are being driven by free student memberships, and we have been disappointed by the low numbers that have converted to paying members. We have been very dependent on project income over the last few years which will be difficult to sustain, particularly following the end of DfE funding for the Inclusion in Science project in August 2024. The team continue to seek alternative funding but the financial outlook is challenging.

Expenditure: We incurred expenditure of £909,688. This includes one off redundancy costs of £42,774 and expenditure on projects which was supported by restricted funding brought forward from FY2324. We surrendered our office lease at the beginning of September 2024 and staff are now working remotely. After permanent staff salaries, our main costs are membership services which includes journals, conferences, CPD and professional registers and support costs which includes IT, HR, finance and insurance. We continue to hold meetings online saving on travel costs. All costs are strictly monitored. ASE ended the year with an unrestricted surplus of £68,160 and carries forward an unrestricted reserve of just over £228,034.

I demitted my post as Honorary Treasurer in August 2025 and have been replaced by Catherine Walker ACMA, CGMA. I am continuing as a trustee. Catherine and I have had a number of meetings to ensure a smooth transition. I would like to thank Laura Rafferty (former Director of Finance and Operations) for her help and support. During her time as DFO Laura has provided excellent support and advice to the trustee body. I would like to thank our funders particularly: The Wolfson Foundation, The Templeton World Charity Foundation, the Gatsby Foundation and the Worshipful Company of Glass Sellers and our business partners, including corporate sponsors AQA, ABPI and Philip Harris. We also extend our thanks to those who made charitable donations to support the Association this year.

The financial outlook for the charity is challenging. We are all working hard to ensure the ASE continues to have a bright future. At all times we need to make sure that we can provide services for members and meet our charitable objectives.

Dr Susan Burr
Honorary Treasurer

Trustees' Report

The Trustees present their annual report and consolidated financial statements for the year ended 31st July 2025.

The financial statements have been prepared in accordance with the accounting policies set out in note 1 to the financial statements and comply with the Charity's constitution, the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005, regulation 8 of the Charities Accounts (Scotland) Regulations 2006 and Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS102) (effective 1st January 2019).

Public benefit

The trustees have complied with the duty in section 17 of the Charities Act 2011 to have due regard to public benefit guidance issued by the Charity Commission.

Objects and activities

Objects

The objects of the Association are to promote education by the following means:

(a) improving the teaching of science; and

(b) providing an authoritative medium through which opinions of teachers of science may be expressed on educational matters; and

(c) affording means of communication among all persons and bodies of persons concerned with the teaching of science in particular and education in general.

Activities

The Rules of the Association provide for the promotion of its objects by:-

(a) holding general and other meetings; and

(b) publishing journals and other literature including literature in electronic formats concerned with the teaching of science and ancillary matters; and

(c) establishing and maintaining of a centre or centres of administration and of information on any aspect of science education; and

(d)-(h) the administration of the Chartered Science Teacher award, CSciTeach including the register thereof and associated standards, admissions, removals disciplinary matters and appeals, and

(i) such other means as the Association may from time to time determine and as may be consistent with the charitable objects of the Association.

Structure, governance and management

The Association is governed by its Royal Charter (dated 13th October 2004) and associated By-laws (updated and approved by the Privy Council October 2012) and Rules of the Association (as adopted at the Annual General Meeting in January 2006 and amended most recently in January 2023).

The Trustee Body of the Association is responsible for all governance issues and the Education Group, comprised of elected members of the Association, is concerned with issues related to ASE's work in science education.

The Trustee Body

Trustees have responsibility for ensuring that ASE complies with relevant charity laws and regulations, that the finances are properly regulated and monitored and that appropriate policies are in place. The Trustees ensure that the activities of the Association fit with the Strategic Plan and take a long-term view of the health of the Association.

The Trustee body consists of:

- three members elected from the Education Group of the Association
- three members elected from the membership by direct vote
- four further members appointed by Trustee body
- the Chair of the Association (may be delegated to the past-Chair of the Association)

One Trustee is nominated to represent Trustees on the Quality and Audit Committee. A Chair of Trustees and a vice Chair is elected from and by the Trustee members. The Chair-Elect and Immediate Past Chair of the Association may attend meetings of the Trustee Body and may participate in Trustee discussions both at and between meetings.

Induction and training of Trustees

New Trustees are provided with a full information pack including Code of Conduct and various policies. They take part in training on functions such as charity finance, EDI and the responsibilities of trustees. On-going training consists of the circulation of Charity Commission updates and training on aspects of the Trustee's role. Trustees are systematically reviewing performance against the Charity Governance code to ensure continuous understanding and improvement in governance. This year particularly focusing on Leadership and Board Effectiveness.

The Trustees are responsible for the direction and management of the Association through its Strategic Plan. Key responsibilities include ensuring a clear vision, the corporate behaviour of the charity, legal and regulatory governance, compliance, guardianship of assets and ensuring high standards of governance. The Trustee body meets on four occasions during the year.

Trustees who served during the year and up to the date of approval of these financial statements are listed below: -

- Manoj Chitnavis – Elected Member (Chair of Trustees)
- David Allen – Education Group Member (Chair of the Association 2025/26)
- Cerian Ayres – Education Group Member (Term ended 31st July 2025)
- Olivia Bussey - Appointed Member (Trustee Rep on Q&A Committee 2024/25)
- Susan Burr – Elected Member, (Association Treasurer until 31st July 2025)
- Sophie Davison (formally known as Will) – Appointed Member (Appointed 1st August 2025)
- Maggie Hannon – Appointed Member (Term ended 31st July 2025)
- Naomi Hiscock – Education Group Member (Appointed 1st August 2025)
- Leigh Hoath – Education Group Member (Past Co-Chair of the Association, Term ended 31st July 2025)
- Dylan Jones – Appointed Member (Appointed 1st August 2025)

- Jane Oldham – Appointed Member (Chair of Association 2024-2025)
- Alex Sinclair – Education Group Member (Past Co-Chair of the Association, Term ended 31st July 2025)
- Corinne Stevenson – Elected Member (Appointed 1st August 2024)
- Catherine Walker - Appointed Member and Treasurer (Appointed 1st August 2025)

Membership

Membership numbers as of July 2025:

- Individual Teachers/Technicians: 5377 (2024: 4,469)
- Schools and Institutions: 318 (2024: 535)
- Total No of Members (including institutions): 5695(2024: 5,004)
- Total individual subscribers: 6601 (2024: 6,183)

Key management personnel

The Trustee Body and the Chief Executive (Lynn Ladbrook) are the key management personnel. The Chair and the Chief Executive are in regular contact to discuss ongoing matters and full reports from the Chief Executive are discussed at meetings of the Trustee Body including all matters relating to activities, finance, budgeting, strategy and future planning. The Chief Executive is subject to an annual development review by the ASE Chair and Treasurer who advise the remuneration committee of proposed awards which are then ratified by the Trustee Body.

Financial review

The financial position of the charity and the group is set out in the financial statements, including principal sources of funding and resources expended. The financial statements have been prepared in accordance with the accounting policies set out in the notes, the requirements of the Trust Deed and the Charities SORP (FRS 102) and comply with current statutory requirements. More detail on the ASE's financial performance for the year and its principal sources of income is given in the Honorary Treasurer's annual report on page 18.

As stated in note 1b the Trustees have considered going concern. As detailed in note 1b, the Trustees have a reasonable expectation that the Charity has adequate resources to continue in operation for the foreseeable future and therefore continue to adopt the going concern basis of accounting.

Risk assessment

The Trustees have assessed the risks to which the Charity may be exposed. A risk register is produced quarterly by the Chief Executive which sets out the main operational, finance and compliance risks facing the Association. Key risks are currently identified as reduced growth in membership which will result in a loss of reach and impact as well as loss of project funds which had contributed to ASE overheads. Mitigating actions have been taken after discussions with the Board of Trustees, and these include measures to reduce costs (including streamlining journals, reduction in staff connected to the publishing business and a transition to Independent Examination) as well as realising maximum potential from key assets such as relinquishing the lease on the HQ offices at the University of Hertfordshire which resulted in a one off cash injection of £160k in September 2024 and the asset sale of stock and contents under Millgate House Publishing Ltd resulting in income of £35k to be paid in instalments over four years.

Reserves policy

Total consolidated reserves as of 31st July 2025 are £264,083 (2024: £258,485). Of these £36,049 are restricted (2024: £98,611). Nearly all amounts in restricted funds will be spent on projects in the year ahead (see note 17a for further details). The ASE undertakes an annual review of reserves policy to ensure finances are sufficient to meet our charitable aims or in extremis to pay our financial obligations in an orderly wind-down. The reserves policy sets a minimum level of reserves at 3 months of running costs and a maximum at 10 months, with the interim target level of reserves set at 4 months. We currently hold reserves equivalent to approximately 3.3 months of running costs and recognise the need to strengthen our financial position. Our goal is to increase reserves to the ideal level of 4 months' running costs within the next two years through careful management of expenditure, initiatives to grow our membership, and increased efforts to diversify our income streams.

At the time of writing our target level of reserves amounts to approximately £286,000. Total consolidated unrestricted reserves at 31st July 2025 were £228,034 (2024: £159,874). We have a budget which puts projected reserves at the end of the next financial year at £245,000 which equates to approximate 3.4 months of reserves, thus meeting our minimum threshold.

Trustees acknowledge the continued pressure on reserves and continue to monitor income and expenditure extremely carefully.

Key investment policy

Monies are currently held in an interest-bearing deposit account.

Statement of Trustee Responsibilities

The Trustees are responsible for preparing the report of the Trustees and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England and Wales and in Scotland requires the Trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charity and the group and of the incoming resources and application of resources of the group for that period.

In preparing these financial statements, the Trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities Statement of Recommended Practice (SORP);
- make judgments and estimates that are reasonable and prudent;
- state whether applicable United Kingdom accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity and group will continue in operation.

The Trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charity and the group and enable them to ensure

that the financial statements comply with the Charities Act 2011, the Charity (Accounts and Reports) Regulations 2008, the Charities and Trustee Investment (Scotland) Act 2005, the Charities Accounts

(Scotland) Regulations 2006 and the provisions of the charity's constitution. They are also responsible for safeguarding the assets of the charity and group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

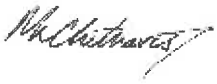
Disclosure of information to Independent Examiner

Each of the Trustees has confirmed that there is no information of which they are aware which is relevant to the Independent Examination, but of which the Independent Examiner is unaware. They have further confirmed that they have taken appropriate steps to identify such relevant information and to establish that the auditor is aware of such information.

Independent Examiner

Goldwins were appointed as Auditors in June 2023 and it was confirmed at the March 2024 AGM that they be re-appointed as Independent Examiners for 2024/2025.

On behalf of the Trustee Body



Manoj Chitnavis
Chair of Trustees

9 March 2026

Independent Examiner's Report

I report to the trustees on the Independent examination of the financial statements of The Association for Science Education (the 'Charity') for the year ended 31 July 2025 which comprise the consolidated Statement of Financial Activities, the group and parent Charity's Balance Sheets, group's statement of cash flows and notes to the financial statements, including a summary of significant accounting policies.

Respective responsibilities of trustees and examiner

The charity's trustees are responsible for the preparation of the accounts in accordance with the terms of the Charities and Trustee Investment (Scotland) Act 2005, the Charities Accounts (Scotland) Regulations 2006 (as amended) and the requirements of the Charities Act 2011 ('the Act').

The charity trustees consider that the audit requirement of Regulation 10(1) (a) to (c) of the 2006 Accounts Regulations does not apply. It is my responsibility to examine the accounts as required under section 44(1) (c) of the Act and to state whether particular matters have come to my attention. I report in respect of my examination of the Trust's accounts carried out under section 145 of the 2011 Act and in carrying out my examination I have followed all the applicable Directions given by the Charity Commission under section 145(5)(b) of the Act.

Basis of independent examiner's statement

The examination process follows the relevant Scottish Accounts Regulations and the Charity Commission's directions. An examination includes a review of the accounting records kept by the charity and a comparison of the accounts presented with those records. It also includes consideration of any unusual items or disclosures in the accounts, and seeks explanations from the trustees concerning any such matters. The procedures undertaken do not provide all the evidence that would be required in an audit, and consequently I do not express an audit opinion on the view given by the accounts.

Independent examiner's statement

In the course of my examination, no matter has come to my attention [other than disclosed below*]

1. which gives me reasonable cause to believe that in any material respect the requirements:

- to keep accounting records in accordance with Section 44(1) (a) of the 2005 Act and Regulation 4 of the 2006 Accounts Regulations
- to prepare accounts which accord with the accounting records and comply with Regulation 8 of the 2006 Accounts Regulations

have not been met, or

2. to which, in my opinion, attention should be drawn in order to enable a proper understanding of the accounts to be reached.

Since the Charity's gross income exceeded £250,000 I confirm that I am qualified to undertake the examination because I am a member of the ICAEW, which is one of the listed bodies.

I have completed my examination. I confirm that no material matters have come to my attention in connection with the examination giving me cause to believe that in any material respect:

1. accounting records were not kept in respect of the Trust as required by section 130 of the Act; or
2. the accounts do not accord with those records; or

3. the accounts do not comply with the applicable requirements concerning the form and content of accounts set out in the Charities (Accounts and Reports) Regulations 2008 other than any requirement that the accounts give a 'true and fair view which is not a matter considered as part of an independent examination.

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.

Anthony Epton

Anthony Epton BA FCA CTA FCIE
Goldwins
Chartered accountants
75 Maygrove Road
West Hampstead
London NW6 2EG

13 March 2026

Financial activities

Consolidated Statement of Financial Activities (incorporating an income and expenditure account)
For the year ended 31 July 2025

	Note	Unrestricted	Restricted	2025 Total	2024 Total
		£	£	£	£
Income from:					
Donations and legacies	3	887	-	**887**	11,589
Charitable activities	4	525,245	138,282	**663,527**	1,399,569
Other trading activities					
Sponsorship and advertising	5	48,975	-	**48,975**	62,430
Investments		4,397	-	**4,397**	4,293
Other income	6	197,500	-	**197,500**	
Total income		**777,004**	**138,282**	**915,286**	1,477,881
Expenditure on:					
Raising funds:					
Sale of educational materials	7a/b	26,149	-	**26,149**	87,737
Charitable activities	7a/b	682,695	200,844	**883,539**	1,471,710
Total expenditure		**708,844**	**200,844**	**909,688**	1,559,447
Net income / (expenditure) for the year and net movement in funds	8	**68,160**	**(62,562)**	**5,598**	(81,566)
Reconciliation of funds:					
Total funds brought forward at 1 August		159,874	98,611	**258,485**	340,051
Total funds carried forward at 31 July		**228,034**	**36,049**	**264,083**	258,485

All of the above results are derived from continuing activities.
There were no other recognised gains or losses other than those stated above.
The attached notes form part of these financial statements.

Charity Statement of Financial Activities (incorporating an income and expenditure account)
For the year ended 31 July 2025

	Note	Unrestricted £	Restricted £	2025 Total £	2024 Total see Note 2b £
Income from:					
Donations and legacies	3	887	-	**887**	11,589
Charitable activities	4	504,504	138,282	**642,786**	1,346,338
				-	
Other trading activities				-	
Sponsorship and advertising	5	48,975	-	**48,975**	62,430
				-	
Investments		4,397	-	**4,397**	4,293
Other income	6	197,500	-	**197,500**	-
Total income		**756,263**	**138,282**	**894,545**	1,424,650
Expenditure on:					
Raising funds:					
Primary purpose trading activities	7	26,149	-	**26,149**	87,737
Charitable activities	7	664,423	200,844	**865,267**	1,413,388
Total expenditure		**690,572**	**200,844**	**891,416**	1,501,125
Net income / (expenditure) for the year and net movement in funds	8	**65,691**	**(62,562)**	**3,129**	(76,475)
Reconciliation of funds:					
Total funds brought forward at 1 August		191,102	98,611	**289,713**	366,188
Total funds carried forward at 31 July		**256,793**	**36,049**	**292,842**	289,713

All of the above results are derived from continuing activities.
There were no other recognised gains or losses other than those stated above.
The attached notes form part of these financial statements.

Consolidated and Charity Balance Sheets

	Note	**Group 2025 £**	Group 2024 £	**Charity 2025 £**	Charity 2024 £
Fixed assets:					
Investment in Subsidiary	**11**	**-**	-	**-**	-
		-	-	**-**	-
Current assets:					
Stock	**12**	-	9,985	**-**	-
Debtors	**13**	**70,875**	107,665	**100,728**	335,396
Cash at bank and in hand		**369,868**	459,729	**368,270**	270,439
		440,743	577,379	**468,998**	605,835
Liabilities:					
Creditors: amounts falling due within one year	**14**	**(176,660)**	(318,894)	**(176,156)**	(316,122)
Net current assets		**264,083**	258,485	**292,842**	289,713
Total net assets		**264,083**	258,485	**292,842**	289,713
Funds	**15,16,17**				
Restricted funds		**36,049**	98,611	**36,049**	98,611
Unrestricted funds:					
General funds		**228,034**	159,874	**256,793**	191,102
Total funds		**264,083**	258,485	**292,842**	289,713

Approved by the trustees on 9th March 2026

Manoj Chitnavis
Trustee

The attached notes form part of the financial statements.

Consolidated statement of cash flows
For the year ended 31 July 2025

	Note	2025 £	2025 £	2024 £	2024 £
Cash flows from operating activities:					
Net cash provided by / (used in) operating activities	**18**		(85,464)		36,790
Cash flows from investing activities:					
Interest receivable		(4,397)		(4,293)	
Cash provided by / (used in) investing activities			(4,397)		(4,293)
Change in cash and cash equivalents in the year			(89,861)		32,497
Cash and cash equivalents at the beginning of the year			459,729		427,232
Cash and cash equivalents at the end of the year	**18**		369,868		459,729

Notes to the Financial Statements for the year ended 31 July 2025

1 Accounting policies

a) Basis of preparation

The financial statements have been prepared in accordance with the charity's Rules of Association, the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005, the Charities Accounts (Scotland) Regulations 2006 (as amended) and "Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2019)".

The charitable company and group meet the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy or note.

b) Going concern

We have set out in the Trustees' Report a review of financial performance and the charity's reserves position. Whilst unrestricted reserves remain low and Trustees recognised that this presents ongoing financial risk, the required reserves have improved compared with the prior year due to receipt of £160,000 lease surrender premium in September 2024, ongoing efforts to make cost savings and generate new income streams. As such the reserves remain above minimum level to support an orderly wind down if that were required. Trustees have reviewed projected income,expenditure, and cash flows, and while acknowledging the uncertainties inherent in these forecasts, they believe the Charity has adequate resources to meet its obligations for at least 12 months from the date of approval of these financial statements. On this basis, the financial statements have been prepared on a going concern basis.

In common with other membership organisations, the Association for Science Education relies upon membership subscriptions, publishing income and events for a substantial part of its annual income. Taking a prudent view of this income, the trustees have prepared cash flow projections for the period to March 2026, which show that the charity would be able to continue in operation for that period. Accordingly, the trustees consider that there are no material uncertainties about the charity's or the group's ability to continue as a going concern for the foreseeable future. Thus the trustees continue to adopt the going concern basis of accounting in preparing the financial statements.

c) Basis of consolidation

These financial statements consolidate the results of the charity and its wholly-owned subsidiary Millgate House Education Limited (now named ASE Publishing and Trading Ltd) on a line by line basis. Transactions and balances between the charity and its subsidiary have been eliminated from the consolidated financial statements. Balances between the companies are disclosed in the note to the charity's balance sheet.

d) Income

Incoming resources are recognised in the period in which the group is entitled to receive them and the amount can be measured with reasonable certainty and it is probable that income will be received. Income is deferred only when the group has to fulfil conditions before becoming entitled to it or where the donor or funder has specified that the income is to be expended in a future accounting period.

Grants from government and Trusts and Foundations have been included as income from activities in furtherance of the group's objectives where these amount to a contract for services, but as donations where the money is given in response to an appeal or with greater freedom of use, for example monies for core funding.

Investment income is accounted for on an accruals basis.

Notes to the Financial Statements for the year ended 31 July 2025 (continued)

1. **Accounting policies (continued)**

e) Expenditure

Expenditure is included in the statement of financial activities when incurred and includes attributable VAT which cannot be recovered.

Expenditure comprises the following:

a. Expenditure on charitable activities comprises monies spent on the charity's primary charitable purposes as described in the Trustees' report. It also includes appropriately apportioned salary costs and support costs (see note 8).

b. The costs of raising funds comprises the expenditure incurred in primary purpose trading activities by the charity and consists of salaries, direct costs and overheads.

c. Support costs represent indirect charitable expenditure. In order to carry out the primary purposes of the group it is necessary to provide support in the form of financial procedures, provision of office services and equipment and a suitable working environment. Salary costs have been allocated based on staff time.

f) Fixed assets

Tangible

Assets costing in excess of £1,000 and with an expected useful life exceeding one year are capitalised.

Depreciation is charged on these assets at the following annual rates in order to write them off over their estimated useful lives:

Computer and other equipment/software	25% straight line

g) Investments

Investment in the subsidiary company is stated in the charity at cost.

h) Stocks

Stocks are valued at lower of cost and net realisable value after making due allowance for obsolete and slow-moving items. Cost includes all expenditure in bringing stock to their present location and condition.

Net realisable value is based on estimated selling price less the anticipated costs to sell.

i) Leased assets

Rentals applicable to operating leases where substantially all of the benefits and risks of ownership remain with the lessor are charged to the statement of financial activities on a straight line basis over the life of the lease.

Assets purchased under hire purchase agreements are capitalised as fixed assets. Obligations under such agreements are included in creditors. Charges are written off to the SOFA over the period of the agreement so as to produce a constant periodic rate of charge.

j) Fund accounting

The unrestricted fund comprises those monies which may be used towards meeting the charitable objectives of the group and which may be applied at the discretion of the Trustees.

The restricted funds are monies granted for, and their use restricted to, a specific purpose, or donations subject to donor-imposed conditions.

Notes to the Financial Statements for the year ended 31 July 2025 (continued)

1. Accounting policies (continued)

k) Pensions

The Association operates a defined contribution group personal pension for employees. The funds are managed by S Widows and contributions are paid monthly by direct debit and charged to the Statement of Financial Activities (SOFA) as incurred.

l) Financial Instruments

The Charity has elected to apply the provisions of Section 11 'Basic Financial Instruments' and Section 12 'Other Financial Instruments Issues' of FRS 102 to all of its financial instruments. The Charity only has financial assets and financial liabilities of a kind that qualify as basic financial instruments. Basic financial instruments are recognised as the amount payable or receivable when the instrument is first recognised together with any subsequent transaction costs but modified in respect of trade debtors for an assessment of potential bad debt.

m) Critical Accounting estimates and judgements

In the application of the Charity's accounting policies, the Trustees are required to make judgements, estimates and assumptions about the carrying amount of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised where the revision affects only that period, or the period of the revision and future periods where the revision affects both current and future periods. The Trustees believe there are no critical estimates or judgements relevant to the financial statements.

2a Detailed comparatives for the consolidated statement of financial activities

	2024 Unrestricted £	2024 Restricted £	2024 Total £
Income from:			
Donations and legacies	11,589	-	**11,589**
Charitable activities	714,236	685,333	**1,399,569**
Other income			
Government Grants	-	-	-
Other trading activities			
Sponsorship and advertising	62,430	-	**62,430**
			-
Investments	4,293	-	**4,293**
Total income	**792,548**	**685,333**	**1,477,881**
Expenditure on:			
Raising funds:			
Sale of educational materials	87,737	-	**87,737**
Charitable activities	735,785	735,925	**1,471,710**
Total expenditure	**823,522**	**735,925**	**1,559,447**
Net income / (expenditure) for the year and net movement in funds	(30,974)	(50,592)	**(81,566)**
Reconciliation of funds:			
Total funds brought forward at 1 August	190,848	149,203	**340,051**
Total funds carried forward at 31 July	**159,874**	**98,611**	**258,485**

Notes to the Financial Statements for the year ended 31 July 2025 (continued)

2b Detailed comparatives for the Charity statement of financial activities

	2024 Unrestricted £	2024 Restricted £	2024 Total £
Income from:			
Donations and legacies	11,589	-	**11,589**
Charitable activities	661,005	685,333	**1,346,338**
Other income			
Government Grants	-	-	-
Other trading activities			
Sponsorship and advertising	62,430	-	**62,430**
Investments	4,293	-	**4,293**
Total income	**739,317**	**685,333**	**1,424,650**
Expenditure on:			
Raising funds:			
Sale of educational materials	87,737	-	**87,737**
Charitable activities	677,463	735,925	**1,413,388**
Total expenditure	765,200	735,925	**1,501,125**
Net income / (expenditure) for the year and net movement in funds	**(25,883)**	**(50,592)**	**(76,475)**
Reconciliation of funds:			
Total funds brought forward at 1 August	216,985	149,203	**366,188**
Total funds carried forward at 31 July	**191,102**	**98,611**	**289,713**

Notes to the Financial Statements for the year ended 31 July 2025 (continued)

3 Income from donations and legacies

	2025 Unrestricted £	2024 Unrestricted £
Individual donations	**887**	11,589
	887	11,589

4 Income from charitable activities

	2025 Total £	2024 Total £
Unrestricted income		
Member subscriptions	**209,679**	282,165
Sales of publications and journals	**75,037**	113,943
Conference and workshop income	**201,703**	225,658
Income from sponsored projects	**38,826**	92,470
	525,245	714,236
Restricted Income		
Income from sponsored projects	**138,282**	685,333
Total income from charitable activities	**663,527**	1,399,569

Included above is £20,741 (2024: £53,231) sales of publications and journals relating to the subsidiary company.

5 Income from other trading activities

	2025 Unrestricted £	2024 Unrestricted £
Advertising and sponsorship	**48,975**	62,430
	48,975	62,430

Income is from journal and conference advertising and sponsorship and is all primary purpose trading.

6 Other income

	2025 Unrestricted £	2024 Unrestricted £
Lease surrender	**160,000**	-
Gain on disposal of investment	**37,500**	
	197,500	-

Notes to the Financial Statements for the year ended 31 July 2025 (continued)

7a Analysis of expenditure year ended 31 July 2025

	Staff costs	Other costs	**2025 Total**
	£	£	**£**
Raising funds			
Sale of educational materials	17,492	8,657	**26,149**
Charitable Activities:			
the promotion and improvement of the teaching of science:			
Members registration and services	57,484	18,118	**75,602**
Book sales	2,590	17,769	**20,359**
Journal expenditure	19,005	53,952	**72,957**
Conferences and other CPD	84,800	93,621	**178,421**
Regional expenses	21,978	2,082	**24,060**
Advocacy & other projects	52,757	-	**52,757**
Support costs	61,769	163,236	**225,005**
Governance costs	27,546	5,988	**33,534**
Restricted project expenditure (see note 19 and 19b)	99,754	101,090	**200,844**
Total expenditure 2025	445,175	464,513	**909,688**
Restricted expenditure	99,754	101,090	**200,844**
Unrestricted expenditure	345,421	363,423	**708,844**
Total expenditure 2025	445,175	464,513	**909,688**

Included above is £17,769 related to the subsidiary company.

7b Analysis of expenditure year ended 31 July 2024

	Staff costs	Other costs	**2024 Total**
	£	£	**£**
Raising funds			
Sale of educational materials	48,866	38,871	**87,737**
Charitable Activities:			
the promotion and improvement of the teaching of science:			
Members registration and services	89,191	27,517	**116,708**
Book sales	27,332	30,988	**58,320**
Journal expenditure	27,060	66,578	**93,638**
Conferences and other CPD	52,810	92,103	**144,913**
Regional expenses	64,506	234	**64,740**
Advocacy & other projects	39,311	1,960	**41,271**
Support costs	91,482	81,808	**173,290**
Governance costs	30,317	12,588	**42,905**
Restricted project expenditure (see note 17a and 17b)	279,946	455,979	**735,925**
Total expenditure 2024	750,820	808,625	**1,559,447**
Restricted expenditure	279,946	455,979	**735,925**
Unrestricted expenditure	470,875	352,647	**823,522**
Total expenditure 2024	**750,821**	**808,626**	**1,559,447**

Notes to the Financial Statements for the year ended 31 July 2025 (continued)

8 Net income / (expenditure) for the year

This is stated after charging / (crediting):	2025	2024
	£	£
Payments under operating leases	-	2,096
Auditor's remuneration:		
Audit fees	-	7,500
Independent Examination fee	5,000	-

9 Analysis of staff costs, trustee remuneration and expenses, and the cost of key management personnel

Staff costs were as follows:	2025	2024
	£	£
Salaries and wages	389,665	668,658
Social security costs	30,519	40,382
Employer's contribution to defined contribution pension schemes	24,992	41,781
	445,175	750,821

The following number of employees received employee benefits (excluding employer pension) during the year between:

	2025	2024
	No.	No.
£60,001 -£70,000	-	1

The total employee benefits including pension contributions of the key management personnel were £56,844 (2024: £75,049). One trustees was reimbursed for travel to the National Science Teacher Association Conference in the USA totalling £980 (2024: £1,863).

No Trustee received remuneration or benefits as a trustee.

Remuneration to trustees for services provided to the charity were paid under the provisions in Section 5 of the Association's Royal Charter.

Staff numbers

The average number of employees (head count based on number of staff employed) during the year was as follows:

	2025	2024
	No.	No.
The Association for Science Education employees	13	23
	13	23

10 Taxation

The charitable company is exempt from corporation tax as its non-primary purpose trading income is below the small trading limit allowable for charities.

Notes to the Financial Statements for the year ended 31 July 2025 (continued)

11 Investments

Millgate House Education Limited (now known as ASE Publishing and Trading Ltd)

On 1 September 2017 the Association for Science Education acquired Millgate House Education Limited, a company incorporated in the United Kingdom and limited by guarantee. Following several years in which the company's activities made a loss, the Directors resolved during the year to sell the related assets. This decision was taken to protect the Charity's financial position and reduce further risk exposure. The sale included tangible assets owned by the subsidiary, together with value attributed to digital downloads and royalties on publications where the Charity retains the intellectual property rights. Amounts relating to these intellectual property rights have been recognised as an intercompany payable within the subsidiary and as income and an intercompany receivable in the Charity's financial statements The sale agreement was as follows:

An initial lump sum of £13,500, plus £2,500 contribution towards costs of sale paid on completion of agreement
· A sum equal to 25% of the value of sales of: existing stock, sales of recently produced books, digital downloads and royalties on texts where the IP belongs to the charity, relating to the Business during the three years following the Completion Date ("Royalties"), payable annually in arrears on the first three anniversaries of the Completion Date.
· Minimum annual payments if Royalties are lower, were agreed as £21,500 to be paid in installmenst over three years.

Contingent consideration may also be payable if the Royalties due exceed the minimum payments. As this amount depends on future sales performance, it cannot be reliably measured at the year end. In line with agreed governance and due process, the remaining company, ASE Trading and Publishing Ltd (renamed April 2025), of 483 Green Lanes, London, N13 4HB, will transfer the asset purchase agreement and related rights to the Charity. Following completion of the transfer, ASE Trading and Publishing Ltd will take the necessary steps to wind down and cease operations. At year end (FY2425), it had a profit for the year of £2,971(2024: deficit of £5,087) and at the end of the year its net liabilities were £28,256 (2024: £31,228).

12 Stock

	Group 2025	Group 2024	**Charity 2025**	Charity 2024
	£	£	**£**	£
Publications for resale	-	9,985	-	-
	-	9,985	-	-

Notes to the Financial Statements for the year ended 31 July 2025 (continued)

13 Debtors	Group 2025	Group 2024	Charity 2025	Charity 2024
Due within one year	**£**	£	**£**	£
Trade debtors	**13,601**	28,911	**13,601**	26,298
Amount due from subsidiary	**-**	-	**29,853**	230,344
Prepayments and accrued income	**35,774**	78,754	**35,774**	78,754
	70,875	107,665	**100,728**	335,396

14 Creditors: amounts falling due within one year	Group 2025	Group 2024	Charity 2025	Charity 2024
	£	£	**£**	£
Trade creditors	**27,762**	57,270	**27,762**	55,002
Taxation and social security	**682**	41,130	**682**	41,130
Accruals	**64,522**	116,215	**64,018**	115,711
Member subscriptions in advance	**66,566**	83,227	**66,566**	83,227
Journal subscriptions in advance	**16,395**	20,702	**16,395**	20,702
Bad debt provision	**733**	350	**733**	350
	176,660	318,894	**176,156**	316,122

Member subscriptions are generally paid in advance for a period of one year or three years and therefore a proportion of this payment is deferred into the following financial year(s). Library subscriptions are paid one year in advance.

15 Analysis of net assets between funds - Group	Group Unrestricted	Group Restricted	Group Total funds
	£	£	**£**
Current assets	404,694	36,049	**440,743**
Creditors due within one year	(176,660)	-	**(176,660)**
Net assets at the end of the year	**228,034**	**36,049**	**264,083**

Analysis of net assets between funds - Charity	Charity Unrestricted	Charity Restricted	Charity Total funds
	£	£	**£**
Current assets	432,949	36,049	**468,998**
Creditors due within one year	(176,156)	-	**(176,156)**
Net assets at the end of the year	**256,793**	**36,049**	**292,842**

Notes to the Financial Statements for the year ended 31 July 2025 (continued)

16 **Analysis of net assets between funds - prior year - Group**	Group Unrestricted £	Group Restricted £	**Group Total funds £**
Current assets	478,768	98,611	**577,379**
Creditors due within one year	(318,894)	-	**(318,894)**
Net assets at the end of the year	**159,874**	**98,611**	**258,485**

Analysis of net assets between funds - prior year - Charity	Charity Unrestricted £	Charity Restricted £	**Charity Total funds £**
Current assets	507,224	98,611	**605,835**
Creditors due within one year	(316,122)	-	**(316,122)**
Net assets at the end of the year	**191,102**	**98,611**	**289,713**

17a Movements in restricted funds - Group and Charity

	At the start of the year £	Incoming resources £	Outgoing resources £	**At the end of the year £**
Restricted funds:				
Alexander Memorial	9,319	-	-	**9,319**
Wolfson Keeping Science Practical	46,557	65,181	(100,405)	**11,333**
Wellcome - Topic Level micro accredited CPD	-	3,393	(3,393)	-
Templeton Amplification	-	14,341	(14,341)	-
Science on stage UK	966	-	(966)	-
IoP Inclusion in Schools	23,019	-	(10,597)	**12,422**
SLI Inclusion in Schools	18,750	43,768	(62,518)	-
Gatsby - International Recruitment Research	-	11,599	(8,624)	**2,975**
Total restricted funds	98,611	138,282	(200,844)	**36,049**

Notes to the Financial Statements for the year ended 31 July 2025 (continued)

17b Movements in restricted funds - prior year - Group and Charity

	At the start of the year	Incoming resources	Outgoing resources	At the end of the year
	£	£	£	£
Restricted funds:				
Alexander Memorial	9,819	-	- 500	**9,319**
Wolfson Keeping Science Practical	65,757	34,499	(53,699)	**46,557**
Wellcome - Topic Level micro accredited CPD	20,934	19,797	(40,731)	-
Key moments in history: a fossil hunter's story	263	-	(263)	-
Science Education for Action and Engagement towards Sustainability (SEAS)	30	-	(30)	-
Science on Stage UK	1,281	-	(315)	**966**
IoP Inclusion in Schools	23,019	-	-	**23,019**
SLI Inclusion in Schools	31,340	529,839	(542,429)	**18,750**
Key moments in history: a fossil hunter's story Amplification	(3,240)	101,198	(97,958)	-
Total restricted funds	149,202	685,333	(735,925)	**98,611**

Purposes of restricted funds

Alexander Memorial
The Alexander Memorial Fund represents a legacy of £10,000 from the late Professor and Mrs Alexander which the ASE has been requested to administer for a memorial award until the funds expire. The award is granted to nominees who meet the criteria of supporting women and girls in science education and in situation of scarce resources. No awards were made in 2022/23 due to the fact that nominations received were not considered by the judging panel to meet the criteria. However, an amount of £500 was awarded in 2024 to the Sreepur Village.

Wolfson Keeping Science Practical
A programme to provide extended support for disadvanted secondary schools across the UK, focused particularly on practical science. Delivered through a targeted and tailored programme of online and face to face CPD for heads of science, early careers teachers and school science technicians.

Wellcome - Topic Level Micro-accredited CPD in Science
A project to test the impact and value of delivering subject-specific CPD in upper primary and lower secondary science through 'bite-sized' online courses linked to micro-accreditation.

Templeton Amplification
This project is producing teaching resources and professional learning strategies for primary teachers of children aged 9-11 years to support their knowledge and understanding of the big ideas of evolution, the nature of scientific enquiry and the strengths and limitations of scientific knowledge. The project was supported by the Templeton World Charity Foundation and more information can be found online.

Science on Stage UK
Funding to pilot an end-use and effectiveness study of the Science Teacher SOS framework.

Notes to the Financial Statements for the year ended 31 July 2025 (continued)

Purposes of restricted funds (continued)

IoP Inclusion in Schools
ASE was subcontracted by the Institute of Physics to deliver the Inclusion in Schools project on behalf of the DfE from 1 August 2021 to March 2022. The primary purpose of this project was to significantly increase the number of students from under-represented groups progressing to physics-based routes (A-level physics, vocational or technical) post the age of 16.

SLI Inclusion in Schools
From April 2022, the ASE was subcontracted by STEM Learning to continue to deliver the Inclusion in Schools project on behalf of the DfE

18 Reconciliation of net income / (expenditure) to net cash flow from operating activities

	2025	2024
	£	£
Net income / (expenditure) for the reporting period (as per the consolidated statement of financial activities)	**5,598**	(81,566)
Interest received	**4,397**	4,293
(Increase) / decrease in stock	**9,985**	7,840
(Increase) / decrease in debtors	**36,790**	43,643
Increase / (decrease) in creditors	**(142,234)**	62,580
Net cash provided by / (used in) operating activities	**(85,464)**	36,790

19 Analysis of changes in net debt

The charity had no debt during the year.

20 Legal status of the charity

The charity is a company established by Royal Charter and has no share capital.
Following the surrender of the lease on our premises at College Lane, Hatfield, the registered address of the charity is now 483 Green Lanes, London, N13 4BS.

21 Related party transactions

There were no related party transactions other than payments to Trustees for services as detailed in note 9.

Legal and Administrative Information

Trustees who served during the year and up to the date of approval of the financial statements:	Manoj Chitnavis – Elected Member (Chair of Trustees) David Allen – Education Group Member (Chair of the Association 2025/26) Cerian Ayres – Education Group Member (Term ended 31st July 2025) Olivia Bussey - Appointed Member (Trustee Rep on Q&A Committee 2024/25) Susan Burr – Elected Member, (Association Treasurer until 31st July 2025) Sophie Davison (formally known as Will) – Appointed Member (Appointed 1st August 2025) Maggie Hannon – Appointed Member (Term ended 31st July 2025) Naomi Hiscock – Education Group Member (Appointed 1st August 2025) Leigh Hoath – Education Group Member (Past Co-Chair of the Association, Term ended 31st July 2025) Dylan Jones – Appointed Member (Appointed 1st August 2025) Jane Oldham – Appointed Member (Chair of Association 2024-2025) Alex Sinclair – Education Group Member (Past Co-Chair of the Association, Term ended 31st July 2025) Corinne Stevenson – Elected Member (Appointed 1st August 2024)
Patron	HRH The Princess Royal
President	Professor Louise Archer - Karl Mannheim Professor of Sociology of Education at University College London
Chair of the Association	Jane Oldham (from 1 August 2024) David Allen (from 1 August 2025)
Chief Executive Officer	Lynn Ladbrook
Charity number:	313123
OSCR number:	SC042473
Royal Charter incorporation number:	RC000805 (England and Wales)
Principal address	483 Green Lanes London N13 4BS
Auditors	Goldwins Limited 75 Maygrove Road West Hampstead London, NW6 2EG
Bankers	NatWest Plc 35, Town centre Hatfield, AL10 0JU

Trustee Annual Report 2425 Final approved

Final Audit Report 2026-03-12

Created:	2026-03-11
By:	Deepa Davies (finance@ase.org.uk)
Status:	Signed
Transaction ID:	CBJCHBCAABAAV6BMrEW982O1-Vci6IS3VjKiZmvY_6wz

"Trustee Annual Report 2425 Final approved" History

Document created by Deepa Davies (finance@ase.org.uk)
2026-03-11 - 11:46:42 AM GMT

Document emailed to manojchitnavis@yahoo.com for signature
2026-03-11 - 11:46:50 AM GMT

Email viewed by manojchitnavis@yahoo.com
2026-03-12 - 1:31:32 PM GMT

Signer manojchitnavis@yahoo.com entered name at signing as M K Chitnavis
2026-03-12 - 1:33:15 PM GMT

Document e-signed by M K Chitnavis (manojchitnavis@yahoo.com)
Signature Date: 2026-03-12 - 1:33:17 PM GMT - Time Source: server

Agreement completed.
2026-03-12 - 1:33:17 PM GMT

Adobe Acrobat Sign

THE ASSOCIATION FOR SCIENCE EDUCATION

England & Wales - Charity number 313123

Accounts

The Association for Science Education

Trustees' Annual Report
and Group Financial Statements
For the Year Ended 31 July 2024

Charity Registration England and Wales No. 313123

OSCR No. SC042473

Company Incorporated by Royal Charter RC000805 (England and Wales)

Contents

Chair's Introduction 3
About the ASE 4
Impact Report 7
- Community 7
- Professional Development 8
- Policy and Advocacy 14
- Organisational Sustainability 15

Future Plans 16
From the Honorary Treasurer 18
Trustees' Report 19
Statement of Trustee Responsibilities 22
Independent Auditor's Report 24
Financial activities 28
- Consolidated Statement of Financial Activities (incorporating an income and expenditure account) 28
- Charity Statement of Financial Activities (incorporating an income and expenditure account) 29
- Consolidated and Charity Balance Sheets 30

Consolidated statement of cash flows 30
- Notes to the Financial Statements for the year ended 31 July 2024 31

Legal and Administrative Information 46

An introduction from our Co-Chairs

This past year has been transformative for ASE, marked by significant change, growth, and a sharper focus on our strategic direction. In a time of considerable flux in the education sector, ASE has demonstrated adaptability and leadership. Changes to membership subscriptions have led to a welcome rise in membership numbers, with notable growth in student memberships. We've supported this community with tailored webinars and signposted useful resources. We are working closely with the current and incoming Chairs to enhance engagement with early career teachers and are optimistic about next year's programme. The rise in technician members also highlights ASE's expanding representation of the science education community—a development we celebrate. We've also taken steps this year to increase the visibility and awareness of membership benefits and to ensure the broader science education community is aware of our valuable services.

As co-chairs, we've had the privilege of representing ASE at international conferences in Thailand and at the NSTA conference in Denver. Engaging with global science education communities has been a reminder of the progress and achievements in this field worldwide. Our gratitude goes to everyone involved in organising these conferences, as well as those in the UK, for their dedication and hard work.

On a personal note, as ASE's first co-chairs, this year has been both challenging and deeply rewarding. We are proud to have established an effective shared leadership model. By "doubling up" on meetings, we've enhanced coverage and flexibility, ensuring continuity during demanding periods. Fortnightly meetings with the CEO and regular Chair Trio discussions have strengthened communication, guided strategic direction, and enriched key agenda-setting.

We are profoundly grateful to everyone who has supported us and ASE this year. A heartfelt thank you to outgoing Chair, Helen Harden, whose solid foundation enabled us to build and grow. Special thanks go to Christine Harrison for her outstanding commitment as Conference Secretary. We warmly welcome incoming Chair Jane Oldham and Chair Elect David Allen, wishing them every success. Together, we look forward to a bright future for ASE and the science education community it serves.

Professor Leigh Hoath and Dr Alex Sinclair
Co-Chairs of the ASE

About the ASE

The Association for Science Education (ASE) is an active membership body that has been supporting all those involved in science education from pre-school to higher education for over 100 years; members include teachers, technicians, teacher educators, researchers and others involved in science education. We play a significant role in promoting excellence in teaching and learning of science in schools and colleges.

Working closely with the science professional bodies, industry and business, we provide a UK-wide network bringing together individuals and organisations to share ideas and tackle challenges in science teaching, develop resources and foster high quality Continuing Professional Development.

We are a Registered Charity with a Royal Charter, owned by our members and independent of government. We seek to create a powerful voice for science education professionals to make a positive and influential difference to the teaching and learning of science throughout the UK and further afield.

Our Mission and Vision

Mission: to promote excellence in science education

Vision: All learners are engaged in appropriate, valuable and interesting science education, supported by a professional science education workforce.

"The objects and purposes for which The Association is hereby constituted are

- the promotion of education by the following means:
- by improving the teaching of science and
- by providing an authoritative medium through which opinions of teachers of science may be expressed on educational matters and
- by affording means of communication among all persons and bodies of persons concerned with the teaching of science in particular and with education in general."

ASE Royal Charter 2004

Our Values

Our values define our culture and reflect our priorities in the way we work. We are:

- **Welcoming:** we celebrate diversity and **foster an inclusive environment** in which everyone in our science education community is respected, valued and heard
- **Evidence informed:** we value **good research,** data analysis, evaluation feedback and expert opinion and use it to shape our activities
- **Passionate about science and teaching:** We inspire educators to continually evolve and grow in their understanding and teaching of science, nurturing a **culture of life-long learning** and innovation
- **Bold:** We aim to push boundaries, **embrace innovation in science education** and set ourselves ambitious objectives in pursuit of our goals
- **Environmentally sustainable:** we are dedicated to **reducing our environmental footprint** by minimising waste, conserving resources, and adopting sustainable practices.

Our Strategy 2023-2024

The ASE plays a positive role in supporting a committed community of science educators to deliver high quality science education to all young people regardless of background. We provide our members and the broader community with lifelong opportunities for professional development, a platform to ensure their views are heard by policymakers, and a community of support.

Science education is facing several key challenges which we try to address through our work. The UK struggles to attract science graduates into teaching and many science teachers plan to leave the profession within three years due to burnout and heavy workloads. Whilst access to professional development and support is known to help teachers in the classroom, it can be hard for teachers and technicians to access to high-quality professional development – not because it is not offered, but because schools and teachers are stretched, both in terms of time and resource.

Over the past year (2023/24) we have continued to build on the strategy developed in 2021 whilst seeking to refine and develop new goals and impact for 2024 and beyond.

Our strategy continues to focus on four key areas:

1. **Offer a welcoming, diverse and inclusive range of professional activities, networks and opportunities** that help our members to enjoy their professional career and encourages them to stay in education.
2. **Create a comprehensive programme of professional learning for science educators** that promotes subject knowledge, improves confidence, leads to changes in classroom practices and pedagogy, improvement in outcomes and encourages educators to remain in education.
3. **Influence science education policy at national levels to achieve curriculum reform** that meet young people's needs and drives a policy and practical framework that supports science educators, encourages them to stay in practice and helps to improve outcomes.
4. **Build a strong and sustainable organisation** that meets our members' needs, ensures growth and is fit for the future.

ASE: A professional body - working with members for members

ASE thrives thanks to the dedication and support of our members and volunteers. We are proud to have over 120 members actively engaged in our National Committees and Groups, representing voices from across the education sector. Our committees and special interest groups—including Primary, 11-19, Teacher Developers (formerly known as Futures), Publications, Technicians, Health and Safety, Research, as well as our Editorial Boards, Registration Board, and Regional Committees—play an essential role in ensuring ASE's success and responsiveness to member needs. This year we established two new special interest groups: the Policy Group, which guides ASE policy development and ensures our position statements reflect the voice of members and practising educators, and the Conference Working Group to assist the conference secretary and staff team with the organisation of our flagship event.

These groups inform our priority areas and activities and directly help to deliver initiatives. Members contribute to policy discussions at national and regional levels, write for our publications, curate content and deliver sessions at conferences, peer review resources, and provide a vital connection to the daily realities of science educators in classrooms, labs, lecture halls, and academic institutions nationwide. We extend our heartfelt thanks to all our national and regional committee members for their hard work, commitment, and invaluable contributions to the Association's mission and growth.

Our Year in Numbers

1. **6,183 members**

We saw membership grow by 20%. Teachers, technicians, lecturers, academics, researchers, school leaders, teacher developers, consultants, student teachers and early career teachers in membership

2. **605,500 page views**

Our website was visited by over 149,000 unique users, who visited multiple pages and downloaded key resources, journals, guidance, news and events. Our membership page saw an increase of 139% in page views!

3. **18,170 CPD Hours.**

Nearly 5000 teachers, technicians and students attended over **82 CPD** events on topics such as AI, SEND, inclusion and practical science.

4. **33,000 social media followers**

We saw increased activity particularly on LinkedIn where followers increased by 15.8% over the year, and we launched a new channel on Instagram.

5. **64 newsletter updates**

We sent out 64 newsletters customized and segmented based on teaching background (e.g. primary, secondary, technician) with information on relevant events, CPD, and news.

6. **27 news stories**

Including coverage of topics such as ASE responses to the EEF guidance, Teacher Tapp State of CPD report, Royal Society's Science Education Tracker, and our response to the Advanced British Standard.

7. **1 new brand launch**

Unchanged since 1973, the ASE launched a new logo, colour pallet and livery to bring the Association well into the 21st century

Impact Report

Community

1. The ASE: a welcoming community that seeks to support educators so that they enjoy their profession and stay in education

From local level teach meets and tech meets to international conferences; from in depth discussions on Zoom and Teams, to debates and chat on our social media channels, our community of support has continued to help providers of science education from all over the world feel less isolated, able to reach out, seek guidance, find encouragement, and access more professional opportunities. This year saw the launch of new networks bringing together different sections of our community in initiatives that have proved valuable to our growing membership.

A growing community: In September 2023 we overhauled our membership subscriptions, bringing down the cost of membership to £45 for all teachers and consultants (previously between £95 and £140), £25 for technicians (previously £50) and free for student members and early career teachers (previously between £24 and £70). Making the membership structure simpler, more affordable and reducing financial barriers to our services. This change has seen our individual membership numbers rise for the first time in many years. **The total number of members in 2023/24 was 6183** (2022: 5115) representing a 21% increase. This increase was largely driven by free membership for students and early career teachers, but we also saw increases in our technician community and increased numbers of teacher members. Our school membership numbers have declined since a peak during the pandemic, influenced by tighter school budgets and the enhanced value of individual memberships. Looking ahead, we will develop a new membership offer for schools, providing maximum value for money and tailored services that address their unique needs.

Local and community networks: Our committed network of local groups across the English regions, Wales, Scotland and Northern Ireland, continue to host TeachMeets and TechMeets, and bring together science educators in their own local areas. Local groups ran 28 events attended by over 780 members. Falling numbers at some local face to face events highlights the increasing pressure on teachers' time and the ongoing convenience of online events, which, while accessible, may not always deliver the same level of engagement or networking opportunities that in-person meetings can offer. We have held networking events in London, East Anglia and Southeast Region and have also launched community networks for our Teacher Developer Community and an International Teachers Discussion Forum and Network**.**

Community in the devolved nations: Members in Northern Ireland were able to gather at their Biennial Conference (see box below) as well as a regional Primary Teachmeet at W5 Life in Belfast and a Technician get together in Coleraine. ASE Wales held online Teach Meets and Tech Meets and our ASE Scotland Committee ran seven online Teach Meets, as well as face to face events for secondary teachers at the Royal Botanic Garden in Edinburgh and the Mearns Primary School for Primary Teachers. We are extremely grateful to our local members who work so hard to initiate local events for our members.

ASENI – Biennial Conference 2024: Held on June 7th at W5 and supported by sponsorship from Almac, the conference attracted over 200 attendees, including primary and post-primary teachers, science technicians, and exhibitors. The event facilitated 22 exhibitor tables, providing valuable networking and resource-sharing opportunities. A record number of technician delegates attended, underscoring the strong demand for targeted, practical training and peer interaction. Technician workshops on troubleshooting practical issues and lab safety were particularly valued. This

conference reaffirmed the essential role of in-person professional gatherings in advancing science education, enabling educators to learn from each other, renew their motivation, and bring fresh ideas back to their classrooms.

We're extremely grateful to ASE Northern Ireland Committee and Michelle Ryan, local Field Officer for all their hard work in helping to stage and deliver this event which fosters collaboration, community, professional development, and practical skill-sharing among science educators from across Northern Ireland.

The ASE in Asia: The ASE Southeast Asia Conference, held on March 15–16, 2024, brought together science educators and technicians from across the region. Hosted by Bangkok Patana School in partnership with The Association for Science Education and Philip Harris / Findel International, and sponsored by Philip Harris, Charleston Scientific, and Vernier, the conference offered a rich professional learning experience. A total of 125 delegates from 37 international schools in seven countries attended the two-day event, which was highly praised by participants for its subject-specific focus and impact on science education in Southeast Asia.

We are enormously grateful to all our members who sit on our regional committees and devolved nation committees and who commit a significant amount of time to our activities in local communities.

Professional Development

2. **The ASE: Creating a comprehensive programme of professional learning for science educators that promotes subject knowledge, improves confidence, improves outcomes and encourages educators to remain in education.**

In 2023/24, we continued to advance the professional development of our members and the broader science education community through a wide range of events and publications. Guided by our values, ASE offers high-quality CPD designed to support members in promoting excellence in science education. Many of our expert speakers are drawn from within our own skilled membership, contributing their insights to a CPD program tailored to address key topics in science education—from AI to Alpacas, and from professional recognition to hands-on practical work.

Annual Conference 2024: The ASE Annual Conference is a flagship event, held in high regard amongst the science education community. This event brings together teachers, technicians, research, academics, consultants, trainers, school suppliers, exam boards, charitable organisations and policy makers from across the science education sector. It offers a unique space for professional growth, networking, and access to inspiration speakers and influencers. By gathering experts and practitioners, the conference fosters the exchange of ideas and insights on teaching pedagogy, practical classroom strategies, the latest research and curriculum linked resources.

The 2024 ASE Annual Conference took place at the University of Northampton's Waterside Campus. The conference, curated by ASE committees, spanned three days and offered 250 sessions including tailored programmes for post-16 educators, technicians, Early Career Teachers (ECTs), and teacher trainers, primary and secondary teachers, as well as session on research and international science education. Key themes addressed were Climate Change, Inclusion and Diversity, Research, Sustainability, Professional Journeys, Practical Science, and Post-Covid Learning, with sessions curated by ASE Committees.

- 1,419 registered participants
- 250+ sessions
- 45 exhibitor stands

Feedback was overwhelming positive, with 89% agreeing or strongly agreeing that the event had a positive impact on their professional development. 80% agreeing or strongly agreeing it has a positive impact on subject knowledge. 80% agreeing or strongly agreeing is had a positive impact on science department and colleagues and 92% agreeing that they had picked up many ideas that would be incorporated in their personal practice.

Thank you to our conference partners and sponsors: AQA, Philip Harris, Gatsby, RSC, Vitta, OUP, the University of Northampton, and partners PSTT.

Annual Teacher Developer Conference: Held in June at the Institute of Physics, and designed by our Teacher Developer Committee, sessions explored the journey from teacher to teacher developer and examined the critical roles and research underpinning the development of teachers' knowledge bases. The event was well received, and feedback was overwhelmingly positive.

Thank you to AQA and Ogden Trust for sponsoring and to the Institute of Physics for kindly hosting the event.

Technician Conference: The Summer Conference on July 24 at Cambridge Regional College featured a program of 16 sessions across four time slots, including four supplier workshops. The event attracted 66 delegates, including technicians from both independent and international schools. Exhibitors were pleased with delegate engagement, and attendees completed a total of 396 CPD hours.

Thank you to Philip Harris for sponsoring this event and to Cambridge Regional College for hosting.

Online Learning

AI Series: AI is transforming education by enhancing personalized learning, automating routine tasks and providing data-driven insights into student progress. In science education, AI's capabilities to analyse large datasets and simulate complex processes make it especially valuable. As schools prepare students for a tech-driven future, understanding AI's potential has become essential for science educators.

ASE ran a series of AI seminars, kindly sponsored by CENTURY Tech, focusing on the integration of AI in science education. Attended by 230 participants, and featuring expert speakers and practical insights, the series consisted of three webinars, each targeting different aspects of AI applications for science educators. The series provided an overview of the fundamentals of AI, its different applications and how it could be used to benefits science educators and students. There was ample chance for discussion and for participants to raise questions around their own usage and experience of AI in classroom. Participants left with a deeper understanding of AI, and more knowledge and tools to integrate AI into their teaching practices. The positive reception and high levels of engagement underscore the series' impact.

Attendees rated the webinars highly, with average scores of 4.3/5 for positive impact on practice, 4.5/5 for professional development, and 4.5/5 for improved understanding of the subject matter.

Maths for Teachers of A-level Biology: Now in its fourth phase of funding, this initiative aims to develop the capacities and confidence of biology teachers in their use of mathematics within the post 16 context, and to encourage more students to study Level 3 mathematics during the post-16 phase. A CPD course, followed by 47 participants, consisted of eight 90-minute online sessions from November '23 to March '24. The project is funded by the Department of Education in partnership with ASE and Mathematics in Education and Industry (MEI) as part of the Advanced Mathematics Support Programme (AMSP).

ASE BEST Bites: This project developed three pilot units of research-informed, topic-level, bite-sized online CPD and accompanying resources for teachers of science in upper primary and lower secondary schools,

drawing on the approaches of the Best Evidence Science Teaching (BEST) project, and evaluated the impact of the pilot units on a sample of teachers. It was clear from the teacher interviews and other evaluation aspects that the pilot CPD units had been well received and were appreciated, and that there is an appetite for more CPD like that developed for this proof-of-principle project. The unique combination of features of CPD that is topic-level, research-informed, bite-sized, completed online and self-directed made it very appealing to the primary and secondary science teachers in the study. Some of the teachers were from schools deemed by Ofsted to require improvement, and/or with a high percentage of pupils eligible for free school meals. Some were from schools that have little history of engagement with the ASE or the work of UYSEG and CIEC. The project, completed in December 2023, was funded by Wellcome Foundation legacy funding, and developed and delivered in partnership with the University of York Science Education Group and Centre for Industry Education Collaboration.

Science on Stage UK National Steering Group: ASE is proud to be the UK member of Science on Stage: an initiative that fosters international collaboration among teachers, promoting the exchange of ideas, resources, and teaching practices that enhance science education. This year, we finalized the selection of the UK delegation to represent us at the Science on Stage 2024 Festival in Turku, Finland, scheduled for August 2024. In addition to the eleven delegates chosen through our national selection process, three UK teachers were selected in the 'Joint Projects' category, collaborating with partners from Sweden, Portugal, and Bulgaria. Approximately half of the UK delegation had the opportunity to showcase their projects during a 'practice run' at the Schools Exhibition at the ASE Annual Conference in Northampton in January 2024.

Professional Registers

The Association for Science Education, as a licensed body of the Science Council, is empowered under the terms of its Royal Charter to administer Professional Registration awards to individuals who meet the application requirements. Applicants must be active in science teaching and learning in the UK or overseas; this includes teachers and technicians in all state and independent schools, colleges and universities, as well as advisers, inspectors, consultants and researchers.

This year, our Registration Board, supported by our Registrar, focused on maintaining compliance with Science Council standards, adapting procedures for remote and paperless workflows, and increasing registrant numbers by promoting registration linked to professional development. Systems improvements, including data cleansing and accurate record-keeping in CiviCRM, have strengthened our monitoring and communication with registrants. We were pleased that the Science Council license review confirmed full compliance with no actions required, validating our commitment to best practices.

Our registrant numbers have shown modest growth, with total registrations increasing from 302 in April 2023 to 307 by October 2024, despite a brief decline due to data cleansing adjustments. The ASE remains committed to recognising excellence in science education through professional registration, and we are proud to report that one of our Chartered Science Teachers received a CPD award for excellence in professional development this year, underscoring our impact on high-quality science teaching in line with our charitable goals.

Projects that promote excellence and innovation in Science Education

Keeping Science Practical: The Keeping Science Practical project, funded by the Wolfson Foundation, aims to enhance access to hands-on, purposeful science education in schools, particularly those serving disadvantaged students. The program focuses on improving teachers' confidence and skills in delivering practical science, helping them engage students more effectively in STEM subjects.

In the past year, the project successfully met the objectives to provide practical science support to schools serving disadvantaged learners. We exceeded our recruitment goal by enrolling 55 schools, with 52 completing the baseline questionnaire. A total of 30 schools completed the final evaluation, contributing 374 entries to the online register, indicating a broader reach.

The CPD sessions were highly rated, with 98% of attendees scoring them as "good" or better. Although conference attendance was lower than expected, 15 educators participated, and schools expressed satisfaction with the support provided.

The Wolfson Foundation was pleased with the project's outcomes and, as a result, allowed the ASE to carry over unused funds to extend the initiative for another year, with a target of recruiting an additional 50 schools. This project has not only furthered the ASE's mission to enhance science education but has also provided financial benefits through memberships, conference participation, and book sales.

Inclusion in Schools: The Inclusion in Science programme, is an online CPD initiative aimed at science teachers and leaders. Funded by the Department for Education, the programme targets teachers in state-funded schools in England, specifically for Key Stages 3, 4, and 5. It focuses on promoting inclusion in science education, especially for groups of students who may face engagement and attainment challenges. Our Inclusion in Science team developed and delivered an online CPD programme consisting of 6 modules: sessions focused on building an inclusive culture in science classrooms; career-related materials; seminar discussions encouraged idea-sharing and peer interaction; helping teachers to reflect on their practices and implement inclusive changes in their teaching.

In the 2023-24 academic year, two cohorts participated, totalling 235 teachers.

The programme seeks to effectively equip teachers with knowledge and skills to build an inclusive culture in their classrooms, with a notable improvement in their use of inclusive language and their confidence in engaging students.

An independent evaluation conducted in early 2024 by Impact Ed, based on both quantitative and qualitative data, found that the programme had a positive impact. Key findings include:

- 96.9% of participants felt confident about making students feel welcome.
- 95.7% rated the sessions as of good or very good quality.
- 60.2% reported reflecting on and changing their department practices for greater inclusivity.
- Participants saw a 48% increase in knowledge of inclusive practices and a 29.1% increase in awareness of their own biases.

The evaluation recommends continuing the interactive elements of the programme, such as breakout groups and discussions, and providing more resources on inclusive careers. It also suggests adding more flexibility regarding time and further enhancing the evaluation process, including qualitative research and matching pre- and post-programme survey data.

Sadly, DfE fundings for the programme ended in August 2024. We will be offering a version of this programme for secondary and Primary schools. We continue to seek alternative funding to reduce costs to participating schools and improve accessibility.

Key Moments in History and Science: Building on the success of the Mary Anning pilot project, which showed positive effects on children's learning progress and challenged teachers to improve their science teaching methods, the Museo de Ciencias-Universidad de Navarra has partnered with the Mary Anning project to expand its impact on primary science education in Spain. Previous research has shown that science education in the Spanish curriculum is largely focused on theoretical learning, with minimal emphasis on practical inquiry or dialogue. The Mary Anning project provides valuable training that enhances teachers' professional pedagogical development and offers innovative resources for fostering classroom inquiry.

The 14-month project, (starting in October 2023), has already shown significant outcomes, working with 20 primary schools, 40 teachers and their pupils across Spain. The most noticeable results include children's improved knowledge and understanding, increased confidence in discussing major scientific concepts, and a deeper appreciation for the role of questioning in science. Likewise, teachers have observed greater class participation, more independent research conducted by students at home, and a shift in their approach to teaching across three key areas:

- The fundamental concepts of fossils and evolution (content knowledge).
- The principles and processes of scientific inquiry (procedural knowledge).
- The nature of scientific, historical, and religious knowledge (epistemic knowledge).

This project also increased its reach in the UK through articles focused on dialogic teaching approaches in Education Today, Headteacher Update, Schools Week and Teach Primary. These, together with email and social media campaigns, significantly increased engagement with the project's webpage and resources. As a result of this amplification work, our Mary Anning landing page saw a 3,016% increase in views compared to the previous period.

Award Winner

The film depicting Mary Anning's early life, produced as part of ASE's Mary Anning: a fossil hunter's story primary resource, by film director James Morgan, won two further accolades this year! It was announced this week that 'Sea Dragon', a 15-minute narrative film about the young Mary Anning and her discoveries, has won Best Short Film and Best Fiction Short Film at the International Braga Science Film Fest 2023 in Portugal. [include images]

ASE Journals and Publications

Our family of journals, along with our events, webinars, and online learning, offers members a diverse range of content that deepens subject and disciplinary knowledge, supports effective teaching strategies, explores new research and real-world science, provides practical ideas, and

addresses key topics this year, including climate change, curriculum connections, a closer look at our living world, arts-based learning, inclusive teaching and learning, and artificial intelligence.

In 2023/24, we published over 153 articles across our journals, including three issues of *Education in Science* (EIS), four issues of *Primary Science*, six editions of *School Science Review* (SSR) in both *In Depth* and *In Practice* formats, and one issue of the *Journal of Emergent Science* (JES), sponsored by the Primary Science Teaching Trust. Additionally, we launched the new Science Teacher Education hub, which replaces the Journal of Science Teacher Education (STE). This dedicated online space captures the perspectives of science teacher educators, experienced teachers, trainee teachers, and the international community, welcoming contributions from all voices on current issues in science teacher education. The hub features podcasts, articles, and the latest news and events in the field. Our journals now reach over 12,500 subscribers, with more than 100 universities and institutions subscribing to library editions, helping to expand access to professional development resources for science educators and teacher trainees.

This year, our journals have placed a strong emphasis on exploring and understanding our living world. Both Primary Science and SSR have featured articles focused on sustainability and the importance of deepening our knowledge of the environment. Primary Science highlighted key topics such as farming, animal ethics, sustainability, and recycling, while also showcasing Sindhu Jacob's innovative approach to investigating the relative rates of photosynthesis and respiration in a water plant using hydrogen carbonate indicator. Professor Micheal Reiss, our President wrote an article on the theme he explored at our annual conference on the critical question: what specific contribution can school science make in addressing the climate crisis and the escalating loss of biodiversity? These articles not only foster a greater understanding of environmental issues but also encourage educators and students to think critically about their role in shaping a sustainable future.

Although we no longer produce our International Journal, we have remained committed to incorporating global perspectives on science across our publications. In *SSR*, for example: Romaiza Naseem and Nasima Hassan explored decolonisation as a vital approach to creating a more inclusive and dynamic curriculum; Sheila Hopkins offered valuable insights on integrating content and language development to better support EAL (English as an additional language) students in science education. Additionally, Simon Taylor discusses a research project in New Zealand, where 13-to 14-year-olds used diorama construction to engage with climate science. In *EIS*, we featured articles on promoting substantive knowledge progression within the Australian science curriculum and as well as a unique African perspective on practical work in the science curriculum. Through these contributions, we continue to ensure that diverse global viewpoints enrich the science education discourse, empowering educators worldwide to think critically and inclusively.

ASE's publishing arm – Millgate House Education

In 2023/24, ASE's publishing arm, Millgate, continued to make impact with its award-winning books. Notably, Kathryn Horan's *Wow! But Why?* won the Teach Awards 2023 in the Primary STEM category. The book has been praised for its ability to balance engaging activities with deepening both teacher and pupil knowledge, linking each "wow" moment to real-world applications. It includes activities tailored for primary classrooms, connecting science concepts to students' everyday lives and global issues, as well as providing links to national curricula and STEM careers. *Grappling with Graphs* was also shortlisted for the Teach Secondary Awards 2024 in the CPD category with judges acknowledging its valuable contribution to teacher development, particularly in enhancing the teaching of graphs in science education. Through these efforts, Millgate continues to support high-quality educational resources, fostering both teacher and student development in science education.

Unfortunately, overall sales of books and publications has declined again this financial year. (£53,231 this financial year verses £68,184 in 2023). We believe this is partly due to challenges in establishing a platform on Amazon, but also reflects that many resources are now freely available online and are more cost effective.

Policy and Advocacy

3. **Influence science education policy at national levels to achieve curriculum reform that meet young people's needs and** drives a policy and practical framework that supports science educators, encourages them to stay in practice and helps to improve outcomes.

In 2023/24, we continued to inform national and regional policy on a range of topics including guidance on primary science education, 11-16 education, post-16 education, teacher professional development and new science GCSE qualifications in Wales. We continue to work in partnership with the Institute of Physics (IOP), the Royal Society of Biology (RSB), Royal Society of Chemistry (RSC), and the Royal Society, through the influential Science Education Policy Alliance (SEPA), as part of the Learned Societies Group in Scotland, and with a range of partner organisations including Primary Science Quality Mark, Primary Science Teaching Trust (PSTT) and the University of Manchester.

ASE is highly regarded as an authority on what constitutes excellence in science education. We draw on our wealth of expertise and our collective knowledge to shape and inform policy at national and regional level. In 2023/24 we have worked both independently and in partnership to inform policy across Westminster and Whitehall as well as the devolved nations.

Highlights include:

- In October 2023, the Primary Curriculum Advisory Group, convened by IOP, RSB, and RSC, with ASE, produced a report with recommendations for the future of the primary science curriculum. The proposed framework aims to inspire educators with a clear vision for primary science, ensuring all children gain meaningful scientific understanding and fostering essential skills to prepare them as informed, responsible citizens.
- The ASE was represented on the advisory group of the EEF guidance on improving primary science, which came out in November 2023. The report provides six practical recommendations to help teachers and school leaders enhance their science teaching, focusing on building students' scientific vocabulary and connecting new concepts to real-world contexts. Each recommendation includes models, examples, and strategies to demonstrate how these improvements can be effectively implemented in primary school classrooms.
- In December 2023 we welcomed the findings and recommendations of the House of Lords consultation on 11-16 education which called for urgent change to the 11-16 education system. Our own response to this inquiry included calls to ensure the school science curricula effectively engaged and prepared all students to tackle challenges such as climate change and sustainability and equips young people with the necessary knowledge, skills, attitudes, and values to live their lives well.
- In March we responded to the DfE consultation on the proposed Advanced British Standard advocating a curriculum overhaul that fostered critical thinking, practical skills, and interdisciplinary learning, with greater emphasis on fields like engineering, climate education, and sustainability. Key concerns on the proposals included teacher workload, resources, and equitable access for diverse student populations, as well as the need for substantial investment in professional development, laboratory resources, and inclusion

strategies for learners with additional needs, aiming for a holistic, inclusive, and forward-looking educational system.

- In April, we launched our four election pledges for a future government (see box below) and met with several MPs and peers to discuss how these might help to shape science education policy in the future.
- In June we welcomed Qualifications Wales' decision to introduce a new GCSE, The Sciences (double award), starting in September 2026, with the expectation that most learners will study it. This aligns with our long-standing view that a combined science route, blending the best aspects of both combined and separate science study, ensures equity and better use of specialist teachers. We, however, continue to express concerns that the introduction a new single award science GCSE will limit post-16 progression opportunities.

ASE's Manifesto to help transform science education for a brighter future: In April, in anticipation of a forthcoming General Election, we launched our Election Pledges. These pledges were informed by detailed discussions including with members and stakeholders at the Talking Science Debate held at the ASE's Annual Conference in January 2024.

1. **National review of the vision for science education**

We call on the next government to undertake a comprehensive national review of science education led by an independent body, inclusive of diverse perspectives from across the education sector.

2. **Reform of the science education curriculum and assessment**

Utilising the insights from the national review, we urge the next government to seek substantial reforms to the science education curriculum and assessment.

3. **Increased funding to support training and ongoing professional development**

The next government must take urgent steps to elevate the status of science education professionals, placing their well-being and ongoing development at the forefront of the education agenda.

4. **Support for equity and inclusion initiatives that help to ensure all young people have equal access to excellent science education**

Addressing inequity and inclusion in schools is a critical aspect of ensuring a fair and just education system. All students should have equal access to quality education regardless of their background or circumstances.

Organisational Sustainability

4. **Build a strong and sustainable organisation** that meets our members' needs, ensures growth and is fit for the future.

In 2023/24 the ASE continued to implement changes that sought to improve membership numbers; and tackle low reserves.

Tackling falling membership: In 2023, we conducted a thorough review of our membership structure, aiming to make membership more affordable, flexible, and inclusive. Our new rates include an annual fee of £45 for standard members, £25 for Technicians and retired educators, and free membership for student teachers, with discounts in their third year. The member offer was clarified with members all receiving the same extensive benefits including regular science education updates, substantial discounts on resources, a copy of Education in Science and new features like quarterly CPD updates and additional online resources. Members were given the option to add a journal of their choice (SSR, PS or STE) for a small fee. The changes were designed to foster a more supportive and diverse ASE community, helping educators at all career stages thrive. The result has been a

growth in membership of around 21% and good feedback from members who have welcomed these changes.

Financial sustainability: We continue to monitor income and expenditure carefully and have identified some further cost-saving opportunities across several areas, including conferences, journals, and publications. Following a strategic staff restructure in 2022/23, we now operate with a leaner team, and, as part of our commitment to financial sustainability, trustees decided in May 2023 to relinquish our office lease. This decision provided a valuable cash injection, bolstering our reserves and strengthening our financial position for the future. We expect to move out of the building by 1st September 2024.

Strategic Plan: Work was undertaken during the year to develop a new strategic plan (2024-2027). The plan was developed in discussion the staff team, committees and trustees. It continues to build on the four overarching themes of advocacy, CPD, community and organisational stability and includes key values upon which our activities and approach are built.

ASE Archive: We are deeply grateful to our volunteers, John Lawrence, Peter Borrows, and Alan Rhodes, who dedicated significant time to cataloguing our extensive archive ahead of the office relocation. This remarkable collection, spanning over 100 years, includes journals, booklets, pamphlets, event programs, reports, educational resources, photographs, and minutes, all documenting the rich history of ASE. Recognising the archive's historical and educational value, we are actively exploring partnerships with libraries interested in preserving and managing this unique resource for future generations.

Branding: As part of our ongoing transformation, we were pleased to unveil a refreshed visual identity for the Association for Science Education. The new logo—a modern interpretation of the iconic ASE ambigram—honours the history of ASE, while signalling a forward-looking and modern organisation. The redesigned look is being rolled out in phases, with updates made as needed to avoid unnecessary costs. While some materials still feature the previous design, they will be gradually updated over time to reflect the fresh look without incurring waste.

Future Plans

ASE remains dedicated to supporting the science education workforce through robust professional development, strong advocacy, and an active community network. We are passionate about ensuring accessible, high-quality science education for all, empowering teachers, technicians, and trainers to deliver exceptional science learning experiences.

Our priorities in 2024/25 include enhancing our professional support community, expanding our advocacy and curriculum development efforts, and pursuing greater financial stability. Key initiatives will include:

- Delivery of a range of CPD opportunities, including a partnership with Physics Partners to support non subject specialists and a series of webinars to support our primary community.
- We'll continue to develop our international, teacher developer, technician and local networks.
- We aim to strengthen our advocacy, feeding into key government consultations on the curriculum in England and on qualifications in Scotland and Wales.
- We will streamline our Journals and launch a new look which aligns with our new branding.
- We'll continue to champion practical science and will relaunch the School Inclusion Program under a new funding model.
- The staff team will transition to a fully remote model of work from September 2024.

We continue to actively pursue new funding sources within the STEM sector and from trusts and foundations to support our mission.

From the Honorary Treasurer

This has been a year of continuing change for the Association. There has been a reduction in staffing and additional cost savings made in book and journal production and regional support. These changes have been essential and are part of a bigger plan of change to ensure the ongoing financial sustainability of the Association. The impact of these changes is now being felt and will be more apparent in the year 2024/25 and beyond.

The strategic plan with its threads of Community, Professional development and Advocacy continues to provide a major tool in informing and supporting the financial planning of the Association. This is used in conjunction with regular risk assessments.

Throughout the year Laura Rafferty (Director of Finance and Operations) has continued to provide excellent support for myself and the trustee body. My role as Honorary treasurer, together with the trustee body is to have an oversight of financial matters including proposed plans for the future. Reporting is timely and transparent, and Trustees have sufficient information to assess financial risks and make decisions accordingly.

To summarise the year:

Income:

We were pleased with the financial performance of the annual conference in Northampton. Increased membership numbers have allowed us to meet our budget for membership income but other areas, in particular book-sales and fundraising were weaker than expected. We have been very dependent on project income over the last few years which will be difficult to sustain, particularly following the end of DfE funding for the Inclusion in Schools project in August 2024. We are seeking alternative funding, but this will impact on our income. We extend our thanks to those who made charitable donations to support the Association this year.

Expenditure:

There have been savings in a number of areas including staffing and book and journal production. We surrendered our office lease at the beginning of September 2024 and staff will be working remotely from now on. Committee meetings will continue to be held remotely, saving on travel costs. The lease surrender will provide a significant cash injection in the 2024/25 accounts, bolstering our reserves.

We have an unrestricted deficit for the year of £30,974, with £159,874 in unrestricted reserves at the end of the financial year. Our aim is to build our reserves level over the next few years. For further details on our reserves policy and our reserves level at the time of writing please see page 20.

The next few years are going to be challenging for all of us, trustees, members and staff. I have great faith in the future of the Association, and I know that everyone will be working incredibly hard to ensure it continues to have a bright future. At all times we need to make sure that we can provide services for members and meet our charitable objectives.

Dr Susan Burr

Honorary Treasurer

Trustees' Report

The Trustees present their annual report and consolidated financial statements for the year ended 31st July 2024.

The financial statements have been prepared in accordance with the accounting policies set out in note 1 to the financial statements and comply with the Charity's constitution, the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005, regulation 8 of the Charities Accounts (Scotland) Regulations 2006 and Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS102) (effective 1st January 2019).

Public benefit

The trustees have complied with the duty in section 17 of the Charities Act 2011 to have due regard to public benefit guidance issued by the Charity Commission.

Objects and activities

Objects

The objects of the Association are to promote education by the following means:

(a) improving the teaching of science; and

(b) providing an authoritative medium through which opinions of teachers of science may be expressed on educational matters; and

(c) affording means of communication among all persons and bodies of persons concerned with the teaching of science in particular and education in general.

Activities

The Rules of the Association provide for the promotion of its objects by:-

(a) holding general and other meetings; and

(b) publishing journals and other literature including literature in electronic formats concerned with the teaching of science and ancillary matters; and

(c) establishing and maintaining of a centre or centres of administration and of information on any aspect of science education; and

(d)-(h) the administration of the Chartered Science Teacher award, CSciTeach including the register thereof and associated standards, admissions, removals disciplinary matters and appeals, and

(i) such other means as the Association may from time to time determine and as may be consistent with the charitable objects of the Association.

Structure, governance and management

The Association is governed by its Royal Charter (dated 13th October 2004) and associated By-laws (updated and approved by the Privy Council October 2012) and Rules of the Association (as adopted at the Annual General Meeting in January 2006 and amended most recently in January 2021).

The Trustee Body of the Association is responsible for all governance issues and the Education Group, comprised of elected members of the Association, is concerned with issues related to ASE's work in science education.

The Trustee Body

Trustees have responsibility for ensuring that ASE complies with relevant charity laws and regulations, that the finances are properly regulated and monitored and that appropriate policies are in place. The Trustees ensure that the activities of the Association fit with the Strategic Plan and take a long-term view of the health of the Association.

The Trustee body consists of:

- three members elected from the Education Group of the Association
- three members elected from the membership by direct vote
- four further members appointed by Trustee body
- the Chair of the Association (may be delegated to the past-Chair of the Association)

One Trustee is nominated to represent Trustees on the Quality and Audit Committee. A Chair of Trustees and a vice Chair is elected from and by the Trustee members. The Chair-Elect and Immediate Past Chair of the Association may attend meetings of the Trustee Body and may participate in Trustee discussions both at and between meetings.

Induction and training of Trustees

New Trustees are provided with a full information pack including Code of Conduct and various policies. They take part in training on functions such as charity finance, EDI and the responsibilities of trustees. On-going training consists of the circulation of Charity Commission updates and training on aspects of the Trustee's role. Trustees are systematically reviewing performance against the Charity Governance code to ensure continuous understanding and improvement in governance.

The Trustees are responsible for the direction and management of the Association through its Strategic Plan. Key responsibilities include ensuring a clear vision, the corporate behaviour of the charity, legal and regulatory governance, compliance, guardianship of assets and ensuring high standards of governance. The Trustee body meets on four occasions during the year.

Trustees who served during the year and up to the date of approval of these financial statements are listed below: -

- Manoj Chitnavis – Appointed Member (Chair of Trustees from 1st August 2023)
- David Allen – Representing Education Group (Appointed 1st August 2024)
- Cerian Ayres – Representing Education Group
- Olivia Bussey - Appointed Member (Appointed 1st August 2023) (Trustee Rep on Q&A Committee '24/25)
- Bryan Berry - Appointed Member (Resigned July 2024)
- Susan Burr – Elected by Membership, (Association Treasurer)
- Helen Harden, Immediate Past Chair of the Association (Resigned 31st July 2024)
- Maggie Hannon – Appointed Member (Trustee rep on Q&A Committee '23/24)
- Leigh Hoath – Representing Education Group (Co-Chair of the Association 2023-2024)
- Jane Oldham – Appointed Member (Chair of Association 2024-2025)
- Geoff Mackey – Elected by Membership (Resigned 31st July 2024)

- Alex Sinclair – Representing Education Group (Co-Chair of the Association 2023-2024)
- Corinne Stevenson – Elected by Membership (Appointed 1st August 2024)

Membership

Membership numbers as of July 2024:

- Individual Teachers/Technicians: 4,469 (2023: 2,935)
- Schools and Institutions: 535 (2023: 780)
- Total No of Members (including institutions): 5,004 (2023: 3,715)
- Total individual subscribers: 6,183 (2023: 5,115)

Key management personnel

The Trustee Body and the Chief Executive (Lynn Ladbrook) are the key management personnel. The Chair and the Chief Executive are in regular contact to discuss ongoing matters and full reports from the Chief Executive are discussed at meetings of the Trustee Body including all matters relating to activities, finance, budgeting, strategy and future planning. The Chief Executive is subject to an annual development review by the ASE Chair and Treasurer who advise the remuneration committee of proposed awards which are then ratified by the Trustee Body.

Financial review

The financial position of the charity and the group is set out in the financial statements, including principal sources of funding and resources expended. The financial statements have been prepared in accordance with the accounting policies set out in the notes, the requirements of the Trust Deed and the Charities SORP (FRS 102) and comply with current statutory requirements. More detail on the ASE's financial performance for the year and its principal sources of income is given in the Honorary Treasurer's annual report on page 21.

As stated in note 1b the Trustees have considered going concern. As detailed in note 1b, the Trustees have a reasonable expectation that the Charity has adequate resources to continue in operation for the foreseeable future and therefore continue to adopt the going concern basis of accounting.

Risk assessment

The Trustees have assessed the risks to which the Charity may be exposed. A risk register is produced quarterly by the Chief Executive and Director of Finance and Operations which sets out the main operational, finance and compliance risks facing the Association. Key risks are currently identified as declining membership which will result in a loss of reach and impact as well as loss of income. Mitigating actions have been taken after discussions with the Board of Trustees, and these include measures to reduce costs with savings made on print, publications, IT, staff and audit fees. To ensure membership is more affordable for all we have also taken the decision to reduce membership subscriptions from September 23 as explained elsewhere in this report.

Reserves policy

Total consolidated reserves as of 31st July 2024 are £258,485 (2023: £340,051). Of these £98,611 are restricted (2023: £149,203). Nearly all amounts in restricted funds will be spent on projects in the year ahead (see note 17a for further details). The ASE undertakes an annual review of reserves policy to ensure finances are sufficient to meet our charitable aims or in extremis to pay our financial obligations in an orderly wind-down. The reserves policy sets a minimum level of reserves at 4 months of running costs and a maximum at 10 months, with the target level of reserves set at 6 months. We currently hold reserves equivalent to approximately 2.5 months of running costs and

recognise the need to strengthen our financial position. Our goal is to increase reserves to the ideal level of 6 months' running costs within the next two years through careful management of expenditure, initiatives to grow our membership, and increased efforts to diversify our income streams.

At the time of writing our target level of reserves amounts to approximately £385,000. Total consolidated unrestricted reserves at 31st July 2024 were £159,874 (2023: £190,848). However, we have secured a cash injection from the surrender of our office lease which eases cash flow and puts projected reserves at the end of the next financial year at £279,000 which equates to approximate 4.4 months of reserves, thus meeting our minimum threshold.

Trustees acknowledge the continued pressure on reserves and continue to monitor income and expenditure extremely carefully.

Key investment policy

Monies are currently held in an interest-bearing deposit account.

Statement of Trustee Responsibilities

The Trustees are responsible for preparing the report of the Trustees and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England and Wales and in Scotland requires the Trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charity and the group and of the incoming resources and application of resources of the group for that period.

In preparing these financial statements, the Trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities Statement of Recommended Practice (SORP);
- make judgments and estimates that are reasonable and prudent;
- state whether applicable United Kingdom accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity and group will continue in operation.

The Trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charity and the group and enable them to ensure that the financial statements comply with the Charities Act 2011, the Charity (Accounts and Reports) Regulations 2008, the Charities and Trustee Investment (Scotland) Act 2005, the Charities Accounts

(Scotland) Regulations 2006 and the provisions of the charity's constitution. They are also responsible for safeguarding the assets of the charity and group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Disclosure of information to auditor

Each of the Trustees has confirmed that there is no information of which they are aware which is relevant to the audit, but of which the auditor is unaware. They have further confirmed that they have taken appropriate steps to identify such relevant information and to establish that the auditor is aware of such information.

Auditor

Goldwins were appointed as new auditors to the charity in June 2023 and it was confirmed by at the March AGM that they be re-appointed for the next financial year.

On behalf of the Trustee Body



Manoj Chitnavis
Chair of Trustees

8th March 2025

Independent Auditor's Report

Opinion

We have audited the financial statements of The Association for Science Education (the 'Charity') for the year ended 31 July 2024 which comprise the consolidated Statement of Financial Activities, the group and parent Charity's Balance Sheets, group's statement of cash flows and notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 102: The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

In our opinion, the financial statements:

- give a true and fair view of the state of the group's and charity's affairs as at 31 July 2024 and of its income and expenditure for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice;
- have been prepared in accordance with the requirements of the charity's Royal Charter, the Charities and Trustee Investment (Scotland) Act 2005 and regulation 8 of the Charities Accounts (Scotland) Regulations 2006 (as amended) and Charities Act 2011.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Charity in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the trustees' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the charitable company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the trustees with respect to going concern are described in the relevant sections of this report.

Other information

The trustees are responsible for the other information. The other information comprises the information included in the annual report other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the Charity and environment obtained in the course of the audit, we have not identified material misstatements in the Trustees' Annual Report.

We have nothing to report in respect of the following matters in relation to which the Charities Act 2011 or the Charity Accounts (Scotland) Regulations 2006 (as amended) requires us to report to you if, in our opinion:

- sufficient accounting records have not been kept;
- the financial statements are not in agreement with the accounting records and returns; or
- we have not obtained all the information and explanations necessary for the purposes of our audit.

Responsibilities of the trustees

As explained more fully in the trustees' responsibilities statement, the trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the trustees are responsible for assessing the Charity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to liquidate the Charity or to cease operations, or have no realistic alternative but to do so.

Our responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud are set out below.

Capability of the audit in detecting irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, our procedures included the following:

- We enquired of management, which included obtaining and reviewing supporting documentation, concerning the charity's policies and procedures relating to:
    - Identifying, evaluating, and complying with laws and regulations and whether they were aware of any instances of non-compliance;
    - Detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected, or alleged fraud;
    - The internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations;
- We inspected the minutes of meetings of those charged with governance.
- We obtained an understanding of the legal and regulatory framework that the charity operates in, focusing on those laws and regulations that had a material effect on the financial statements or that had a fundamental effect on the operations of the charity from our professional and sector experience.
- We reviewed the financial statement disclosures and tested these to supporting documentation to assess compliance with applicable laws and regulations.
- We performed analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud.
- In addressing the risk of fraud through management override of controls, we tested the appropriateness of journal entries and other adjustments, assessed whether the judgements made in making accounting estimates are indicative of a potential bias and tested significant transactions that are unusual or those outside the normal course of business.

Because of the inherent limitations of an audit, there is a risk that we will not detect all irregularities, including those leading to a material misstatement in the financial statements or non-compliance with regulation. This risk increases the more that compliance with a law or regulation is removed from the events and transactions reflected in the financial statements, as we will be less likely to become aware of instances of non-compliance. The risk is also greater regarding irregularities occurring due to fraud rather than error, as fraud involves intentional concealment, forgery, collusion, omission or misrepresentation.

A further description of our responsibilities is available on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of our report

This report is made solely to the Charity's trustees, as a body, in accordance with the charity's Royal Charter, section 144 of the Charities Act 2011 and the regulations made under section 154 of that Act, regulation 10 of the Charities Accounts (Scotland) Regulations 2006 (as amended) and under Section 44(1) (c) of the Charities and Trustee Investment (Scotland) Act 2005. Our audit work has been undertaken so that we might state to the Charity's trustees those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Charity's trustees as a body, for our audit work, for this report, or for the opinions we have formed.

Goldwins

Goldwins Limited
Chartered Accountants
Statutory Auditor
75 Maygrove Road
London
NW6 2EG

18th March 2025

Goldwins Limited is eligible for appointment as auditors of the charity by virtue of its eligibility for appointment as auditors of a company under section 1212 of the Companies Act 2006.

Financial activities

Consolidated Statement of Financial Activities (incorporating an income and expenditure account)
For the year ended 31 July 2024

	Note	Unrestricted	Restricted	2024 Total	2023 Total
		£	£	£	£
Income from:					
Donations and legacies	**3**	11,589	-	**11,589**	3,013
Charitable activities	**4**	714,236	685,333	**1,399,569**	1,493,600
Other trading activities					
Sponsorship and advertising	**5**	62,430	-	**62,430**	66,334
Investments	**6**	4,293	-	**4,293**	3,328
Total income		**792,548**	**685,333**	**1,477,881**	1,566,275
Expenditure on:					
Raising funds:					
Sale of educational materials	**7a/b**	87,737	-	**87,737**	95,278
Charitable activities	**7a/b**	735,785	735,925	**1,471,710**	1,479,220
Total expenditure		**823,522**	**735,925**	**1,559,447**	1,574,498
Net income / (expenditure) for the year and net movement in funds	**8**	**(30,974)**	**(50,592)**	**(81,566)**	(8,223)
Reconciliation of funds:					
Total funds brought forward at 1 August		190,848	149,203	**340,051**	348,274
Total funds carried forward at 31 July		**159,874**	**98,611**	**258,485**	**340,051**

All of the above results are derived from continuing activities.
There were no other recognised gains or losses other than those stated above.
The attached notes form part of these financial statements.

Charity Statement of Financial Activities (incorporating an income and expenditure account)
For the year ended 31 July 2024

	Note	Unrestricted £	Restricted £	2024 Total £	2023 Total see Note 2b £
Income from:					
Donations and legacies	**3**	11,589	-	**11,589**	3,013
Charitable activities	**4**	661,005	685,333	**1,346,338**	1,425,417
Other trading activities					
Sponsorship and advertising	**5**	62,430	-	**62,430**	66,334
Investments	**6**	4,293	-	**4,293**	3,328
Total income		**739,317**	**685,333**	**1,424,650**	1,498,092
Expenditure on:					
Raising funds:					
Primary purpose trading activities	**7**	87,737	-	**87,737**	95,278
Charitable activities	**7**	677,463	735,925	**1,413,388**	1,402,284
Total expenditure		**765,200**	**735,925**	**1,501,125**	1,497,562
Net income / (expenditure) for the year and net movement in funds	**8**	**(25,883)**	**(50,592)**	**(76,475)**	530
Reconciliation of funds:					
Total funds brought forward at 1 August		216,985	149,203	**366,188**	365,658
Total funds carried forward at 31 July		**191,102**	**98,611**	**289,713**	**366,188**

All of the above results are derived from continuing activities.
There were no other recognised gains or losses other than those stated above.
The attached notes form part of these financial statements.

Consolidated and Charity Balance Sheets

	Note	**Group 2024 £**	Group 2023 £	**Charity 2024 £**	Charity 2023 £
Fixed assets:					
Investment in Subsidiary	**11**	**-**	-	**-**	-
		-	-	**-**	-
Current assets:					
Stock	**12**	**9,985**	17,825	**-**	-
Debtors	**13**	**107,665**	151,308	**335,396**	337,809
Cash at bank and in hand		**459,729**	427,232	**270,439**	282,602
		577,379	596,365	**605,835**	620,411
Liabilities:					
Creditors: amounts falling due within one year	**14**	**(318,894)**	(256,314)	**(316,122)**	(254,223)
Net current assets		**258,485**	340,051	**289,713**	366,188
Total net assets		**258,485**	340,051	**289,713**	366,188
Funds	**15,16,17**				
Restricted funds		**98,611**	149,203	**98,611**	149,203
Unrestricted funds:					
General funds		**159,874**	190,848	**191,102**	216,985
Total funds		**258,485**	340,051	**289,713**	366,188

Approved by the trustees on 8th March 2025



Manoj Chitnavis
Trustee

The attached notes form part of the financial statements.

Consolidated statement of cash flows
For the year ended 31 July 2024

	Note	2024 £	2024 £	2023 £	2023 £
Cash flows from operating activities:					
Net cash provided by / (used in) operating activities	**18**		36,790		42,866
Cash flows from investing activities:					
Interest receivable		(4,293)		(3,328)	
Cash provided by / (used in) investing activities			(4,293)		(3,328)
Change in cash and cash equivalents in the year			32,497		39,538
Cash and cash equivalents at the beginning of the year			427,232		387,694
Cash and cash equivalents at the end of the year	**18**		459,729		427,232

Notes to the Financial Statements for the year ended 31 July 2024

1 Accounting policies

a) Basis of preparation

The financial statements have been prepared in accordance with the charity's Rules of Association, the Charities Act 2011, the Charities and Trustee lnvestment (Scotland) Act 2005, the Charities Accounts (Scotland) Regulations 2006 (as amended) and "Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of lreland (FRS 102) (effective 1 January 2019)".

The charitable company and group meet the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy or note.

b) Going concern

We have set out in the Trustees' Report a review of financial performance and the charity's reserves position. Whilst unrestricted reserves are lower at the end of July 2024 than the prior year, this is a result of changes made to reduce costs going forward. In addition the charity received a £160,000 lease surrender premium in September 2024. We therefore expect that our unrestricted reserves will be closer to our target reserves position at the end of the next financial year.

In common with other membership organisations, the Association for Science Education relies upon membership subscriptions, publishing income and events for a substantial part of its annual income. Taking a prudent view of this income, the trustees have prepared cash flow projections for the period to March 2026, which show that the charity would be able to continue in operation for that period. Accordingly, the trustees consider that there are no material uncertainties about the charity's or the group's ability to continue as a going concern for the foreseeable future. Thus the trustees continue to adopt the going concern basis of accounting in preparing the financial statements.

c) Basis of consolidation

These financial statements consolidate the results of the charity and its wholly-owned subsidiary Millgate House Education Limited on a line by line basis. Transactions and balances between the charity and its subsidiary have been eliminated from the consolidated financial statements. Balances between the companies are disclosed in the note to the charity's balance sheet.

d) Income

Incoming resources are recognised in the period in which the group is entitled to receive them and the amount can be measured with reasonable certainty and it is probable that income will be received. Income is deferred only when the group has to fulfil conditions before becoming entitled to it or where the donor or funder has specified that the income is to be expended in a future accounting period.

Grants from government and Trusts and Foundations have been included as income from activities in furtherance of the group's objectives where these amount to a contract for services, but as donations where the money is given in response to an appeal or with greater freedom of use, for example monies for core funding.

Investment income is accounted for on an accruals basis.

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

1. Accounting policies (continued)

e) Expenditure

Expenditure is included in the statement of financial activities when incurred and includes attributable VAT which cannot be recovered.

Expenditure comprises the following:

a. Expenditure on charitable activities comprises monies spent on the charity's primary charitable purposes as described in the Trustees' report. It also includes appropriately apportioned salary costs and support costs (see note 8).

b. The costs of raising funds comprises the expenditure incurred in primary purpose trading activities by the charity and consists of salaries, direct costs and overheads.

c. Support costs represent indirect charitable expenditure. In order to carry out the primary purposes of the group it is necessary to provide support in the form of financial procedures, provision of office services and equipment and a suitable working environment. Salary costs have been allocated based on staff time.

f) Fixed assets

Tangible

Assets costing in excess of £1,000 and with an expected useful life exceeding one year are capitalised.
Depreciation is charged on these assets at the following annual rates in order to write them off over their estimated useful lives:

Computer and other equipment/software
25% straight line

g) Investments

Investment in the subsidiary company is stated in the charity at cost.

h) Stocks

Stocks are valued at lower of cost and net realisable value after making due allowance for obsolete and slow-moving items. Cost includes all expenditure in bringing stock to their present location and condition.
Net realisable value is based on estimated selling price less the anticipated costs to sell.

i) Leased assets

Rentals applicable to operating leases where substantially all of the benefits and risks of ownership remain with the lessor are charged to the statement of financial activities on a straight line basis over the life of the lease.

Assets purchased under hire purchase agreements are capitalised as fixed assets. Obligations under such agreements are included in creditors. Charges are written off to the SOFA over the period of the agreement so as to produce a constant periodic rate of charge.

j) Fund accounting

The unrestricted fund comprises those monies which may be used towards meeting the charitable objectives of the group and which may be applied at the discretion of the Trustees. The restricted funds are monies granted for, and their use restricted to, a specific purpose, or donations subject to donor-imposed conditions.

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

k) Pensions

The Association operates a defined contribution group personal pension for employees. The funds are managed by Scottish
Widows and contributions are paid monthly by direct debit and charged to the Statement of Financial Activities (SOFA) as incurred.

l) Financial Instruments

The Charity has elected to apply the provisions of Section 11 'Basic Financial Instruments' and Section 12 'Other Financial Instruments Issues' of FRS 102 to all of its financial instruments. The Charity only has financial assets and financial liabilities of a kind that qualify as basic financial instruments. Basic financial instruments are recognised as the amount payable or receivable when the instrument is first recognised together with any subsequent transaction costs but modified in respect of trade debtors for an assessment of potential bad debt.

m) Critical Accounting estimates and judgements

In the application of the Charity's accounting policies, the Trustees are required to make judgements, estimates and assumptions about the carrying amount of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised where the revision affects only that period, or the period of the revision and future periods where the revision affects both current and future periods. The Trustees believe there are no critical estimates or judgements relevant to the financial statements.

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

2a Detailed comparatives for the consolidated statement of financial activities

	2023 Unrestricted £	2023 Restricted £	2023 Total £
Income from:			
Donations and legacies	3,013	-	**3,013**
Charitable activities	780,775	712,825	**1,493,600**
Other income			
Government Grants	-	-	**-**
Other trading activities			
Sponsorship and advertising	66,334	-	**66,334**
Investments	3,328	-	**3,328**
Total income	**853,450**	**712,825**	**1,566,275**
Expenditure on:			
Raising funds:			
Sale of educational materials	95,278	-	**95,278**
Charitable activities	783,201	696,019	**1,479,220**
Total expenditure	**878,479**	**696,019**	**1,574,498**
Net income / (expenditure) for the year and net movement in funds	(25,029)	16,806	**(8,223)**
Reconciliation of funds:			
Total funds brought forward at 1 August	215,877	132,397	**348,274**
Total funds carried forward at 31 July	**190,848**	**149,203**	**340,051**

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

2b Detailed comparatives for the Charity statement of financial activities

	2023 **Unrestricted** **£**	2023 **Restricted** **£**	2023 **Total** **£**
Income from:			
Donations and legacies	3,013	-	**3,013**
Charitable activities	712,592	712,825	**1,425,417**
Other income			
Government Grants	-	-	**-**
Other trading activities			
Sponsorship and advertising	66,334	-	**66,334**
Investments	3,328	-	**3,328**
Total income	**785,267**	**712,825**	**1,498,092**
Expenditure on:			
Raising funds:			
Sale of educational materials	95,278	-	**95,278**
Charitable activities	706,265	696,019	**1,402,284**
Total expenditure	801,543	696,019	**1,497,562**
Net income / (expenditure) for the year and net movement in funds	**(16,276)**	**16,806**	**530**
Reconciliation of funds:			
Total funds brought forward at 1 August	233,261	132,397	**365,658**
Total funds carried forward at 31 July	**216,985**	**149,203**	**366,188**

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

3 Income from donations and legacies

	2024 Unrestricted £	2023 Unrestricted £
Individual donations	**11,589**	3,013
Legacies	**-**	-
	11,589	3,013

4 Income from charitable activities

	2024 Total £	2023 Total £
Unrestricted income		
Member subscriptions	**282,165**	404,096
Sales of publications and journals	**113,943**	132,408
Conference and workshop income	**225,658**	184,048
Income from sponsored projects	**92,470**	60,223
	714,236	780,775
Restricted Income		
Income from sponsored projects	**685,333**	712,825
Total income from charitable activities	**1,399,569**	1,493,600

Included above is £53,231 (2023: £68,184) sales of publications and journals relating to the subsidiary company. The charity only total is £1,346,338 (2023: £1,425,417).

5 Income from other trading activities

	2024 Unrestricted £	2023 Unrestricted £
Advertising and sponsorship	**62,430**	66,334
	62,430	66,334

Income is from journal and conference advertising and sponsorship and is all primary purpose trading.

6 Investments

	2024 Unrestricted £	2023 Unrestricted £
Bank Interest	**4,293**	3,328
	4,293	3,328

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

7a Analysis of expenditure year ended 31 July 2024

	Staff costs	Other costs	**2024 Total**
	£	£	**£**
Raising funds			
Sale of educational materials	48,866	38,871	**87,737**
Charitable Activities:			
the promotion and improvement of the teaching of science:			
Members registration and services	89,191	27,517	**116,708**
Book sales	27,332	30,988	**58,320**
Journal expenditure	27,060	66,578	**93,638**
Conferences and other CPD	52,810	92,103	**144,913**
Regional expenses	64,506	234	**64,740**
Advocacy & other projects	39,311	1,960	**41,271**
Support costs	91,482	81,808	**173,290**
Governance costs	30,317	12,588	**42,905**
Restricted project expenditure (see note 19 and 19b)	279,946	455,979	**735,925**
Total expenditure 2024	750,821	808,626	**1,559,447**
Restricted expenditure	279,946	455,979	**735,925**
Unrestricted expenditure	470,875	352,647	**823,522**
Total expenditure 2024	750,821	808,626	**1,559,447**

Included above is £58,322 related to the subsidiary company. The charity only expenditure on raising funds and charitable activities is £1,501,125.

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

7b Analysis of expenditure year ended 31 July 2023

	Staff costs	Other costs	**2023 Total**
	£	£	**£**
Raising funds			
Sale of educational materials	74,873	20,405	**95,278**
Charitable Activities:			
the promotion and improvement of the teaching of science:			
Members registration and services	67,611	17,966	**85,577**
Book sales	37,915	39,019	**76,934**
Journal expenditure	25,534	72,394	**97,928**
Conferences and other CPD	56,278	122,283	**178,561**
Regional expenses	74,426	7,630	**82,056**
Advocacy & other projects	42,333	9,504	**51,837**
Support costs	84,998	83,633	**168,631**
Governance costs	28,876	12,801	**41,677**
Restricted project expenditure (see note 17a and 17b)	302,254	393,765	**696,019**
Total expenditure 2023	795,098	779,400	**1,574,498**
Restricted expenditure	302,254	393,765	**696,019**
Unrestricted expenditure	492,844	385,635	**878,479**
Total expenditure 2023	**795,098**	**779,400**	**1,574,498**

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

8 Net income / (expenditure) for the year

This is stated after charging / (crediting):	**2024**	2023
	£	£
Amortisation	**-**	-
Payments under operating leases	**2,096**	2,096
Auditor's remuneration:		
Audit fees	**7,500**	7,500
Non audit fees	**-**	-

9 Analysis of staff costs, trustee remuneration and expenses, and the cost of key management personnel

Staff costs were as follows:	**2024**	2023
	£	£
Salaries and wages	**668,658**	693,519
Social security costs	**40,382**	50,492
Employer's contribution to defined contribution pension schemes	**41,781**	51,087
	750,821	795,098

The following number of employees received employee benefits (excluding employer pension) during the year between:

	2024	2023
	No.	No.
£60,001 -£70,000	**1**	0

The total employee benefits including pension contributions of the key management personnel were £75,049 (2023: below £60,00

Five trustees were reimbursed expenses during the year for travel, accommodation and subsistence costs totalling £1,863 (2023: £2,730).

No Trustee received remuneration or benefits as a trustee however the following trustees received remuneration for the following services provided to the charity: Helen Harden £3,000 (2023: £3,625) for journal editing and commissioning and resource evaluation.

Remuneration to trustees for services provided to the charity were paid under the provisions in Section 5 of the Association's Royal Charter.

Staff numbers

The average number of employees (head count based on number of staff employed) during the year was as follows:

	2024	2023
	No.	No.
Millgate House Education employees	**-**	2
The Association for Science Education employees	**23**	32
	23	34

10 Taxation

The charitable company is exempt from corporation tax as its non-primary purpose trading income is below the small trading limit allowable for charities.

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

11 Investments

Millgate House Education Limited

On 1 September 2017 the Association for Science Education acquired Millgate House Education Limited, a company incorporated in the United Kingdom and limited by guarantee. Its results have been consolidated in these financial statements. Millgate House Education is considered by the Trustees of the charity to be undertaking primary purpose trading, namely selling science publications.

The registered office of Millgate House Education Limited is College Lane, Hatfield, Hertfordshire, AL10 9AA. Its company registration number is 10875129. It had a deficit for the year of £5,089 (2023:deficit of £8,750) and at the end of the year its net liabilities were £31,228 (2023: £26,139).

12 Stock

	Group 2024 £	Group 2023 £	**Charity 2024 £**	Charity 2023 £
Publications for resale	**9,985**	17,825	**-**	-
	9,985	17,825	**-**	-

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

13	**Debtors**	**Group 2024**	Group 2023	**Charity 2024**	Charity 2023
	Due within one year	**£**	£	**£**	£
	Trade debtors	**28,911**	105,615	**26,298**	101,993
	Amount due from subsidiary	**-**	**-**	**230,344**	190,123
	Other debtors	**-**	149	**-**	149
	Prepayments and accrued income	**78,754**	45,544	**78,754**	45,544
		107,665	151,308	**335,396**	337,809

14	**Creditors: amounts falling due within one year**	**Group 2024**	Group 2023	**Charity 2024**	Charity 2023
		£	£	**£**	£
	Trade creditors	**57,270**	16,869	**55,002**	17,101
	Taxation and social security	**41,130**	34,128	**41,130**	34,128
	Accruals	**116,215**	59,559	**115,711**	57,236
	Member subscriptions in advance	**83,227**	119,906	**83,227**	119,906
	Journal subscriptions in advance	**20,702**	20,852	**20,702**	20,852
	Bad debt provision	**350**	5,000	**350**	5,000
		318,894	256,314	**316,122**	254,223

Member subscriptions are generally paid in advance for a period of one year or three years and therefore a proportion of this payment is deferred into the following financial year(s). Library subscriptions are paid one year in advance.

15	**Analysis of net assets between funds - Group**	Group Unrestricted	Group Restricted	**Group Total funds**
		£	£	**£**
	Current assets	478,768	98,611	**577,379**
	Creditors due within one year	(318,894)	-	**(318,894)**
	Net assets at the end of the year	**159,874**	**98,611**	**258,485**

	Analysis of net assets between funds - Charity	Charity Unrestricted	Charity Restricted	**Charity Total funds**
		£	£	**£**
	Current assets	507,224	98,611	**605,835**
	Creditors due within one year	(316,122)	-	**(316,122)**
	Net assets at the end of the year	**191,102**	**98,611**	**289,713**

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

16	**Analysis of net assets between funds - prior year - Group**	Group Unrestricted £	Group Restricted £	**Group Total funds £**
	Current assets	447,162	149,203	**596,365**
	Creditors due within one year	(256,314)	-	**(256,314)**
	Net assets at the end of the year	**190,848**	**149,203**	**340,051**

	Analysis of net assets between funds - prior year - Charity	Charity Unrestricted £	Charity Restricted £	**Charity Total funds £**
	Current assets	471,208	149,203	**620,411**
	Creditors due within one year	(254,223)	-	**(254,223)**
	Net assets at the end of the year	**216,985**	**149,203**	**366,188**

17a Movements in restricted funds - Group and Charity

	At the start of the year £	Incoming resources £	Outgoing resources £	**At the end of the year £**
Restricted funds:				
Alexander Memorial	9,819	-	(500)	**9,319**
Wolfson Keeping Science Practical	65,757	34,499	(53,699)	**46,557**
Wellcome - Topic Level micro accredited CPD	20,934	19,797	(40,731)	**-**
Key Moments in history: a fossil hunter's story	263	-	(263)	**-**
Science Education for Action and Engagement towards Sustainability (SEAS)	30	-	(30)	**(0)**
Science on stage UK	1,281	-	(315)	**966**
IoP Inclusion in Schools	23,019	-	-	**23,019**
SLI Inclusion in Schools	31,340	529,839	(542,429)	**18,750**
Amplification	(3,240)	101,198	(97,958)	**-**
Total restricted funds	149,203	685,333	(735,925)	**98,611**

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

17b Movements in restricted funds - prior year - Group and Charity

	At the start of the year	Incoming resources	Outgoing resources	**At the end of the year**
	£	£	£	**£**
Restricted funds:				
Alexander Memorial	9,819	-	-	**9,819**
Gatsby Rise (Retention Initiative for Science Education)	-	9,100	(9,100)	**-**
Gatsby post 16 resources	1,900	-	(1,900)	**-**
Wolfson Keeping Science Practical	30,192	83,296	(47,731)	**65,757**
Wellcome - Topic Level micro accredited CPD	-	38,830	(17,896)	**20,934**
Key Moments in history: a fossil hunter's story	8,600	-	(8,337)	**263**
Science Education for Action and Engagement towards Sustainability (SEAS)	2,441	-	(2,411)	**30**
Science on stage UK	1,281	-	-	**1,281**
IoP Inclusion in Schools	39,978	-	(16,959)	**23,019**
SLI Inclusion in Schools	38,186	581,599	(588,445)	**31,340**
Key Moments in history: a fossil hunter's story Amplification	-	-	(3,240)	**(3,240)**
Total restricted funds	132,397	712,825	(696,019)	**149,203**

Purposes of restricted funds

The Alexander Memorial Fund represents a legacy of £10,000 from the late Professor and Mrs Alexander which the ASE has been requested to administer for a memorial award until the funds expire. The award is granted to nominees who meet the criteria of supporting women and girls in science education and in situation of scarce resources. No awards were made in 2022/23 due to the fact nominations received were not considered by the judging panel to meet the criteria. However, an among of £500 was awarded in 2024 to the Sreepur Village.

Gatsby Rise (Retention Initiative for Science Education)

A programme to expand the reach and impact of the Science Teacher SOS Framework and survey by developing an accompanying package of support that can be used proactively by science leaders to support the wellbeing, career development and ultimately retention of their team throughout the year. Project ended 22/23.

Gatsby post 16 resources

Funding to enable the ASE to support implementation of Benchmarks 1 and 2 of the Gatsby Charitable Foundation's Good Practical Science Report, which provides a framework for good practical science in schools and colleges. Further information is available on both the ASE and the Gatsby Charitable Foundation's websites. Project ended in 22/23.

Wolfson Keeping Science Practical

A programme to provide extended support for disadvanted secondary schools across the UK, focused particularly on practical science. Delivered through a targeted and tailored programme of online and face to face CPD for heads of science, early careers teachers and school science technicians.

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

Wellcome - Topic Level Micro-accredited CPD in Science

A project to test the impact and value of delivering subject-specific CPD in upper primary and lower secondary science through 'bite-sized' online courses linked to micro-accreditation.

Key Moments in history: a fossil hunter's story

This project is producing teaching resources and professional learning strategies for primary teachers of children aged 9-11 years to support their knowledge and understanding of the big ideas of evolution, the nature of scientific enquiry and the strengths and limitations of scientific knowledge. The project was supported by the Templeton World Charity Foundation and more information can be found online.

Science Education for Action and Engagement towards Sustainability (SEAS)

ASE was a partner organisation for this EU Horizon 2020 funded project which was led by the University of Oslo.

Science on stage UK

Funding to pilot an end-use and effectiveness study of the Science Teacher SOS framework.

IoP Inclusion in Schools

ASE was subcontracted by the Institute of Physics to deliver the Inclusion in Schools project on behalf of the DfE from 1 August 2021 to March 2022. The primary purpose of this project was to significantly increase the number of students from under-represented groups progressing to physics-based routes (A-level physics, vocational or technical) post the age of 16.

SLI Inclusion in Schools

From April 2022, the ASE was subcontracted by STEM Learning to continue to deliver the Inclusion in Schools project on behalf of the DfE.

Key Moments in history: a fossil hunter's story – Amplification

ASE was awarded a new grant from the Templeton World Charity Foundation in 2023-24 to amplify the impact of the Key Moments in history project detailed above. More information can be found in the Trustees Report.

Notes to the Financial Statements for the year ended 31 July 2024 (continued)

18 Reconciliation of net income / (expenditure) to net cash flow from operating activities

	2024	2023
	£	£
Net income / (expenditure) for the reporting period (as per the consolidated statement of financial activities)	**(81,566)**	(8,223)
Interest received	**4,293**	3,328
Depreciation and amortisation	**-**	-
(Increase) / decrease in stock	**7,840**	8,320
(Increase) / decrease in debtors	**43,643**	156,358
Increase / (decrease) in creditors	**62,580**	(116,917)
Net cash provided by / (used in) operating activities	**36,790**	42,866

19 Analysis of changes in net debt

The charity had no debt during the year.

20 Operating lease commitments

Total future minimum lease payments under non-cancellable operating leases are as follows:

	Group		**Charity**	
	Property		Property	
	2024	2023	**2024**	2023
	£	£	**£**	£
1 year	**-**	1,644	**-**	1,644
2 - 5 years	**-**	3,972	**-**	3,972
After more than 5 years	**-**	-	**-**	-
	-	5,616	**-**	5,616

21 Legal status of the charity

The charity is a company established by Royal Charter and has no share capital.
Following the surrender of the lease on our premises at College Lane, Hatfield, the registered address of the charity is now 483 Green Lanes, London, N13 4BS.

22 Related party transactions

There were no related party transactions other than payments to Trustees for services as detailed in note 9.

Legal and Administrative Information

Trustees who served during the year and up to the date of approval of the financial statements:	Manoj Chitnavis – Elected by membership (Chair of Trustees August 2023 Dr Susan Burr – Elected by Membership, Association Treasurer Geoff Mackey – Appointed member (retired July 2024) Bryan Berry - Appointed Member (retired July 2024) Olivia Bussey - Appointed member from August 2023 Maggie Hannon – Appointed Member (Trustee rep on Q&A Committee) Cerian Ayres – elected by Education Group Dr Leigh Hoath – elected by Education Group (Association Co Chair August 2023) Helen Harden - elected by Education Group (retired July 2024) Dr Alex Sinclair – Association Co Chair (from August 2023) Corinne Stevenson - Appointed member (from August 2024) David Allen - Appointed member (from August 2024) Jane Oldham - Chair of the Association (from August 2024)
Patron	HRH The Princess Royal
President	Professor Louise Archer - Karl Mannheim Professor of Sociology of Education at University College London
Chair of the Association	Dr Alex Sinclair and Dr Leigh Hoath (Co Chairs from 1 August 2023 - 31 July 2024) Jane Oldham (from 1 August 2024)
Chief Executive Officer	Lynn Ladbrook
Charity number:	313123
OSCR number:	SC042473
Royal Charter incorporation number:	RC000805 (England and Wales)
Principal address	483 Green Lanes London N13 4BS
Auditors	Goldwins Limited 75 Maygrove Road West Hampstead London, NW6 2EG
Bankers	NatWest Plc 35, Town centre Hatfield, AL10 0JU

THE ASSOCIATION FOR SCIENCE EDUCATION

England & Wales - Charity number 313123

Accounts

Annual Report and Accounts

for the year ending July 2023

Promoting Excellence in Science Education



ASSOCIATION FOR SCIENCE EDUCATION

Contents

Trustees Report

Welcome from Chair of the Association	2
ASE's Vision, Mission and Reach	3
Our Strategy 22/23	4-5
Activities and Impact	6-19
Plans for Future Activity	20
From the Honorary Treasurer	21
Financial Review	22-24
Statement of the Trustees' Responsibilities	25
Independent Auditors Report	26-28

Group Financial Statements for year ended 31st July 2023

Consolidated and Charity Statement of Financial Activity	29-30
Consolidated and Charity Balance Sheets	31
Consolidated Statement of Cash Flows	32
Notes to the Financial Statements	33-49
Legal and Administrative Information	50

FROM THE CHAIR

Traditionally an annual report is read as the closing chapter that tells of the year that has gone. This annual report may be better read as an opening chapter that sets the scene for future development of the association.

A key theme for the year has been change. Not change for change's sake but change to secure a future in which ASE not only survives but thrives. A future in which ASE can fulfil its charitable mission to promote excellence in science education with a growing membership from across the science education community.

Throughout this period of transition for the association our advocacy and project work have continued including our influential Inclusions in Schools programme which continues to support schools to improve diversity in STEM education.

The association, as with many organisations, is impacted by the political, economic and social landscape in which it operates. This has been a key driver for the need for change. Through member feedback and a benchmarking exercise it became clear that our existing membership structure was no longer fit for purpose. The cost-of-living crisis meant that our membership rates were not affordable for teachers and technicians who make up a core part of our membership. It was with this backdrop that our trustee body approved the reduction in membership fees.

Such a change is not without risk but it is important to realise that there are times when not to change is a greater risk.

A key legacy of my year as chair has been the clarification of the roles and responsibilities of the national committees and special interest groups and the work with our CEO Lynn to ensure that our volunteers and staff team are able to work effectively towards common goals for the association.

The commitment and positivity our national chairs and their committee members have shown throughout this year of transformation for the association is something of which I feel immense pride. The events and journals described in this report would not have been possible without their contributions.

The dedication, determination and shared sense of purpose of our volunteers and staff leave me with a sense of optimism for the years to come.



Helen Harden

HELEN HARDEN
CHAIR OF THE ASSOCIATION

"A key theme for the year has been change. Not change for change's sake but change to secure a future in which ASE not only survives but thrives."



ASE'S VISION, MISSION AND REACH

The Association for Science Education is a community of teachers, trainees, technicians, consultants and academics united by a common goal: promoting excellence in science education. By actively supporting continuous professional development, by harnessing the power of our community and by speaking with one voice on the issues that matter, we empower all science educators to deliver the best possible outcomes in their educational setting.

VISION

All learners are engaged in appropriate, valuable and interesting science education, supported by a professional science education workforce.

MISSION

To promote excellence in science education

REACH

5,115 Individual subscribers

Teachers, technicians, lecturers, academics, researchers, school leaders, teacher developers and consultants in membership.

770 Schools and Science Departments

Our support reaches science educators in primary and secondary schools and Higher Education Institutions.

9,000 subscribers to our mailings

321 communications with updates on science education topics, news, events and activities. We achieved an average 38% open rate

309,500 Web visitors

to our main website and School Science website. That amounts to 824,614 unique page views!

117 CPD events and webinars

Topics included SEND, practical science, inclusive science, leadership, assessment, sustainability, physics for non specialists and more

4,553 Event Attendees

Including our Annual, Regional and Specialist conferences, webinars, teachmeets, techmeets, and Masterclasses

OUR STRATEGY 2020-2023

Access to good science education is crucial if we are to equip future generations with the skills and knowledge they need to be healthy, contribute to a sustainable society and/or to pursue much needed careers in the STEM sector. The need to equip young people with sound understanding and application of scientific knowledge has arguably never been greater - yet our science education workforce has also arguably never been under such strain.

ASE promotes excellence in science education and supports the science education community in their work to deliver high quality, engaging, evidence informed, science education. Our work seeks to instil passion for science, deepen subject knowledge, ensure effective teaching strategies, create a positive and inclusive learning environment, and encourage life long professional learning.

Our strategy 2020 to 2023 focused on four key areas:

1 Community: Expanding our reach, ensuring our offering is fit for purpose for both membership and the wider science education community.

The ASE is a membership association and we are proud that our members find in one another extensive means of support, motivation, insights and inspiration.

Throughout **2022/23** our community of support, provided through dedicated events, conferences, teach and tech meets, has continued to help teachers, technicians, teacher trainers and providers of science education in many settings, feel less isolated, able to reach out, seek guidance, find encouragement, and access more professional opportunities. This is evident through event evaluations as well as anecdotal feedback.

However, we are conscious that our reach does not go far enough. Membership numbers continued to decline in 2022/23. **The total number of members (including by association) in 2022/23 was 5115** (2022: 6028). This year, we undertook a thorough review of our membership offer, and agreed to radically reduce membership fees and redefine membership benefits. It has taken much of the year to prepare systems to accommodate the changes but we will launch the new membership offer in September 2023/24.

2 Professional development: Supporting the professional learning journeys of all those in science education through the provision of CPD and educational resources.

In 2022/23 we continued to support the professional learning journey of members and the wider science education community through our events and publications.

We hosted **117 CPD events** - at national, regional and local level and online. These were attended in total by over 4,000 science educators and covered a wide range of topics from inclusion in science, supporting those with special education needs in science, climate change and sustainability, through to practical science and leadership skills.

We published **23 editions of our journals** (three Education in Science (EIS), five Primary Science, three ASE International, six School Science Review (SSR in Depth and in Practice), two Journal of Emergent Science (JES) (sponsored by the Primary Science Teaching Trust) and two Science Teacher Education (STE). Our Journals reach over **12,500 subscribers**. In addition, over **100 universities and institutions take out library subscriptions** to our journals helping to ensure professional development resources reach even great numbers of science educators and teacher trainees.

3 Advocacy: Amplifying the voice of the science education community, drawing on expertise to advise stakeholders and decision-makers.

In 2022/23, we continued to inform national and regional policy and fed back on a range of topics including post 16 qualifications, ITT reaccreditation, qualifications for science in Wales, plans to overhaul coursework and assessment in Scotland, and the House Of Commons enquiry on diversity and inclusion in STEM. In February, we welcomed Ofsted's science subject report: *Finding the optimum:* and in partnership with Primary Science Quality Mark (PSQM), Primary Science Teaching Trust (PSTT) and University of Manchester published guidance on the implications of the report for primary science.

We also continue to work in partnership with the Institute of Physics (IOP), Royal Society of Chemistry (RSC), the Royal Society of Biology (RSB) and the Royal Society, through the influential Science Education Policy Alliance (SEPA).

4 Organisational sustainability: Ensuring operational excellence through effective governance, IT finance and human resources.

2022/23 has been a year of transition. We welcomed a new CEO, Lynn Ladbrook, who performed a rapid assessment of operational activity, quickly identifying a number of key areas for focus during the year: these included action to tackle falling membership, work to promote clarity of purpose and joined up thinking across the organisation, boosting the profile and brand of the association realigning resources to focus on core charitable objectives.

More detail on all of our activities can be found further on in this report.

Working with members for members

ASE could not exist without the support of members and volunteers. We have over 120 members on our National Committees and Groups representing members from a across the education sector. Our committees and special interest groups (Primary, 11-19, Teacher Development (Futures), Publications, Technicians, Health and Safety and Research, as well as our Editorial Boards, Registration Board and Regional Committees are crucial to the effective running of the Association. These committees and groups not only inform and identify priority needs and activities but also help us to deliver the activities themselves. Our members feed into policy at national and regional levels, write for our publications, identify and source content for conferences, deliver sessions, curate and peer review resources and offer a vital window into the lives of practising science educators in classrooms, laboratories, lecture theatres and academic institutions across the country.

In order to ensure these committees and groups work effectively we have reviewed their terms of reference and boosted centralised support. We have also agreed this year to establish two further specialist interest groups on Policy and Conference.

We'd like to take this opportunity to thank all of our committee members both nationally and regionally for all of their hard work and commitment to the Association.

ASE: A SCIENCE EDUCATION COMMUNITY

A fundamental aspect of the service we provide is access to a community of professional support. Whether it's a teacher or technician starting out in their career, an experienced educator considering their next steps, an experienced scientist considering a career in teaching or a seasoned academic and teacher educator looking to expand their network and reach, ASE is home to all. With recruitment and retention of science teachers in crisis, this access to support is vital and can mean the difference between deciding to stay in teaching or deciding to leave.

In 2022/23 we hosted 40 regional and networking events, attended by over 840 attendees - however whilst we hear from those that attend, that these opportunities aid morale as well as professional development, we also hear that many people are simply too busy, or not allowed time out of the classroom to attend. We are looking at ways in which we can make our networks more accessible and in 2023/24 will be looking more at how we can support with local activities and one to one mentoring.

Teacher wellbeing and retention

The ASE Retention Initiative for Science Education (RISE) is a Gatsby Foundation funded initiative focusing on improving science teacher retention specifically in secondary schools in disadvantaged circumstances. The focus for this year has been to capture the perspectives of senior leaders on the management of science departments. The aim is to develop resources for schools to use that support both senior leaders and science leaders in building positive working relationships and to inform policymakers of best practice. Interviews with senior leaders took place during the summer term and are currently being analysed.

"I enjoy speaking to other science educators about the important issues that during a normal school day you may not have time to discuss."

" I would not be where I am in my career without the ASE and the incredible network I have built over the years....and the boost it has given to my own professional development, self esteem and morale."



PROFESSIONAL DEVELOPMENT AND LIFE LONG LEARNING

Good access to high quality CPD is shown to keep teachers in teaching and will result in better educational outcomes. High quality CPD leads to more knowledgeable, competent, confident and engaged teachers which in turn leads to improved learning outcomes for young people.

ASE provides a range of high quality, affordable and accessible learning and professional development events. We were pleased that a number of these could return to in person events in 2022/23. We were also able to offer a number of highly successful online CPD sessions.

Annual Conference

The ASE's Annual Conference was held at Sheffield Hallam University between 5th and 7th January 2023. The Conference programme offered over 250 sessions and was designed to reach a wide audience of teachers, technicians and subject leaders from primary, secondary and higher education, as well as trainees, early career teachers, researchers, consultants and teacher educators. Highlights included: the Presidential Address on how science can respond to the key existential threats facing the planet; our Frontier Lectures including one on cognitive science and applying psychology in the classroom and a presentation from Ofsted on the science subject report "Finding the Optimum". Delegates fed back that the conference provided them with good quality CPD, networking opportunities and practical ideas to take back to the classroom.

"The practical seminars are a great opportunity to reconsider current practice and gather new ideas..."

"I'll be implementing 'Techniques for teaching maths in A-level Biology' - from the maths workshop..."

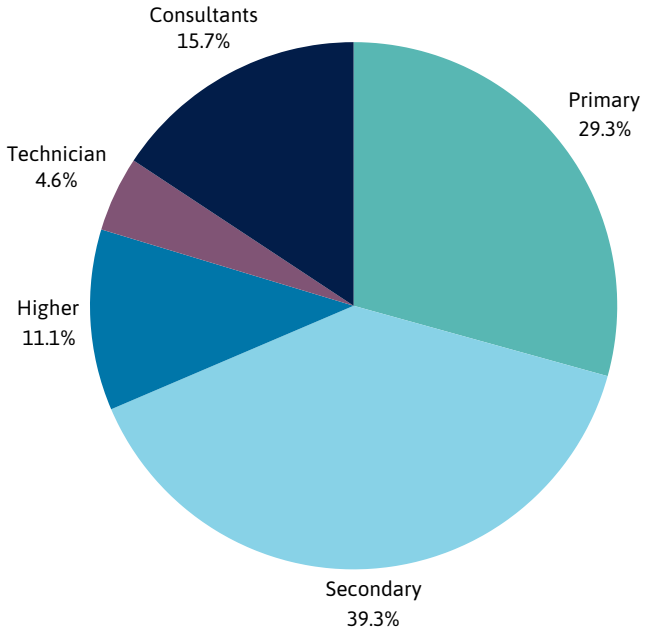
"Sessions addressing gender equality issues in physics, teaching issues associated with the Integrated Sustainable Development Goals including climate change are all very important and relevant."



Annual Conference Impact

The ASE Annual Conference attracts a wide range of science educators from different educational settings and different backgrounds. One of they key benefits of Conference is the valuable networking opportunities it offers. In addition, evaluation reveals that the majority of delegates believe the conference supports their professional development and provides them with practical ideas and knowledge that they can apply in the classroom.

Delegate Composition



1,700 *Delegates attended Conference across three days*

100 *Delegates registered to stream live content online*

250+ *CPD Sessions on a wide range of science education topics*

80%



of respondents agreed or strongly agreed that the event was 'important to professional development'

76%



of respondents agreed or strongly agreed that it 'helped subject knowledge'

74%



of respondents who were able to apply what they learnt in the classroom agreed or strongly agreed that the event would have a positive impact on classroom practice

70%



Rated networking opportunities as Good or Excellent

Thank you to our conference partners and sponsors

AQA Questions matter · Sheffield Hallam University · Philip Harris · Oxford University Press · Royal Society of Chemistry · hi-impact media



Technicians Conference

In July, our Technicians South and West Conference (sponsored by Philip Harris and hosted by Clifton College, Bristol) attracted 67 delegates. We offered 20 CPD sessions on topics such as: how to adapt practical equipment and lesson resources for students with SEND; how to minimise carbon footprint in school laboratories; teamworking and teambuilding despite often being 'lone' technicians; and, practical ideas for primary transition visits and taster sessions. 100% of respondents rated the sessions as "Good" or "Excellent", and 99% agreed they would take back practices to implement in the classroom. 78% agreed it would help them to plan their next steps.

"I took something from each workshop I attended. I particularly enjoyed the "from glowsticks to rhubarb" session. I hadn't thought of using Alka-Seltzer for a rates of reaction practical".

" I managed to talk to some other technicians and I even met for the first time the biological technician who works at the same college as me but for a different site!"

Futures Conference

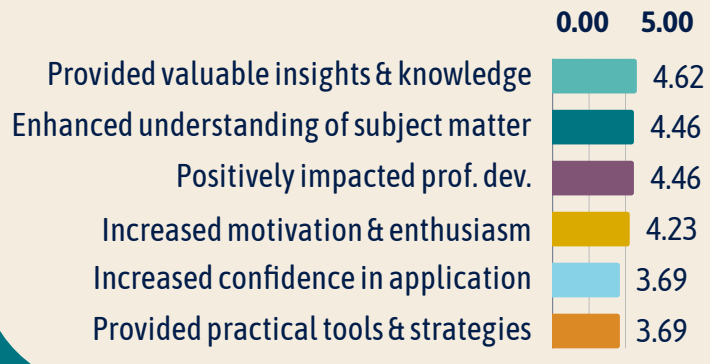
Our Futures Conference in June offers high quality CPD to teacher trainers and those involved in the professional development of science educators. This year, the event was sponsored by AQA and kindly hosted by Bishop Challoner Catholic College in Birmingham.

Although less well attended than in previous years (47 delegates across two days), this event provided a unique opportunity for networking and insights. We offered 26 sessions on a variety of topics including: Decolonising the curriculum for Initial Teacher Education; Promoting ocean literacy within the curriculum; Ofsted led sessions with both primary and secondary focus; and a session on supporting teachers to foster creativity in secondary and post 16 science.

Evaluation surveys demonstrated that sessions were rated highly for promoting subject knowledge, increasing confidence, motivation and enthusiasm. The majority of respondents also agreed they would like to attend a future event.

However, feedback also showed that a one day conference, rather than two would be more practical for delegates.

Delegate feedback on sessions at Futures Conference



*Delegates were asked to rate learning experience, knowledge gained and wider impact of sessions on a scale of 1 to 5 where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree".

ONLINE LEARNING

Maths for Teachers of A-level Biology

Now in its third phase of funding, this initiative aims to develop the capacities and confidence of biology teachers in their use of mathematics within the post 16 context, and to encourage more students to study Level 3 mathematics during the post-16 phase. The project is funded by the Department of Education in partnership with ASE and Mathematics in Education and Industry (MEI) as part of the Advanced Mathematics Support Programme (AMSP).

The most recent CPD course (nine 90 minute online sessions from November '22 to March '23) was fully booked with 56 participants.

"This course... has allowed me to gain confidence when explaining Maths in Biology to not only students but my colleagues too."

"Confidence improved and more ways to deliver the maths!"

"It has given me new ideas on how to introduce these mathematical topics to our biology students. "

"Thank you for some of the most useful training I've had in a while!'

"Most useful was learning how to think of the content from a maths perspective rather than science, using Desmos, having activities to complete and tasks to try back in the classroom."

ASE BEST Bites

This 18-month project (beginning September 2021) has two principal aims:

- to develop, as a proof of principle, three units of online continuing professional development (CPD) for teachers of science in upper primary and lower secondary schools, which is research-informed, topic-level and bitesized; and
- to evaluate the impacts of the CPD units in a sample of primary and secondary schools.

An introductory CPD unit and three CPD units (on living things, solutions and light) have been developed and are being piloted by teachers in six primary schools and 12 secondary schools. These schools have been identified as in challenging circumstances and not having previously engaged with the partner organisations.

These topics were chosen because they span the transition from primary to secondary school science, they can be challenging for teachers and learners in both primary and secondary schools, and we have identified a body of evidence in the research literature on common misunderstandings, useful teaching interventions and effective sequencing of key ideas to promote learning progression – particularly across the primary to secondary transition.

The project is funded by Wellcome Foundation legacy funding in partnership with the University of York Science Education Group and Centre for Industry Education Collaboration.

Evaluation will be carried out during FY23/24.

ASE JOURNALS

Together with our events, webinars and online learning, our family of journals offer members a wide variety of content that enhances subject and disciplinary knowledge, supports effective teaching strategies, looks in depth at new research and real world science, provides practical ideas and addressed hot topics this year such as climate change, STEM careers, drone technologies and clean energy.

In 2022/23, we produced over **166 articles** across School Science Review (in Depth and in Practice), Primary Science, Education in Science, Science Teacher Education, ASE International and the Journal of Emergent Science.

Support for Early Career Teachers

Many articles focus on supporting early career teachers as they transition from studying into the classroom. For example, Pete Robinson discussed approaches for teaching complex concepts (SSR April 23) and Joshua Piggot provided his insights into life as a new Primary Science Subject Leader (Primary Science June 23).

Inclusion in Science

A particular focus across our journals **in 2022/23** has been to ensure science educators are supported in delivering science education that is inclusive and engaging for all. For example, Rachel Chataway-Green and Zoe Schnepp discussed the importance of chemistry practicals that are accessible to vision impaired students and described an inclusive olfactory titration experiment (SSR, Oct 22); Rachel Hartley discussed the Institute of Physics, 'Limit Less' campaign which aims to challenge stereotypes in physics careers (SSR, April 23); and, Laura Hobbs and Sarah Behenna wrote on how to engage children from under-represented groups with STEM using Minecraft to link with the UN sustainable development goals (Primary Science March 23).

Practical Tips and Ideas

We also shared a wealth of practical ideas including how to make effective speakers using fizzy drinks bottles, finding the wavelength of lights using LEDS instead of lasers, using energy sticks to bring physics to life and using forensic investigation in primary science.



ASE PUBLICATIONS

The Move Towards Digital Books Sales

In 2017, ASE acquired Millgate House Education, a publishing house that specialises in the publication of science education texts. Books are sold through an online book store, millgatehouse.co.uk and through Amazon.

Books sales were negatively affected by the COVID pandemic, in part due to less face to face events at which to sell books, but books sales continue to struggle in 2022/23, with sales at just £68,184 (2022: £88,038). However in **2022/23** we have seen an increase in demand for digital versions and we now produce a digital version for all publications, all available for sale through our bookshop.

The move to ensure we have a greater digital catalogue has allowed us to explore digital lending agreements with companies such as Gardners and EBSCO, to make our digital books available for sale to academic and institutional libraries under a Digital Lending Model.

Digital books are made available on pre-agreed license terms and help make our publications more widely available within the educational setting, and in turn hopefully more accessible to student teachers and educators.

We anticipate that digital versions will be made available via Gardners and EBSCO in 2023/24.

Award Winning Publications in 2022/23

We are pleased to have a published a number of new publications in 2022/23 including: *'Discovering Science: Practical activities in biology, chemistry and physics', 'Stories for Science: It Might Come in Useful', 'Wow! But Why?'* and *'Enquiring Explorers Fairground'.*

In addition we are pleased that another ASE publication *'Saving the Planet one Science Lesson at a Time'* received both a 'Highly Commended' in the STEM category of Teach Primary 2022 awards and the Global Dimension Teacher Choice Award 2023.

What people say about ***Saving the Planet one Science Lesson at a time:***

"Lots of fabulous ideas, lesson plans and resources, easily accessible to all teachers, ready to use in class."
'Super useful for my sustainability themed science week!"





THE PROFESSIONAL REGISTERS

The Association for Science Education is proud to be a licensed body of the Science Council, able to administer Professional Registration to individuals who meet the application requirements for Registered Science Technician (RSciTech), Chartered Science Teacher (CSciTeach) and Registered Scientist (RSci). Membership of the ASE and the activities, CPD, resources and support we provide is a pathway to chartered and registered status.

The awards are equivalent to a Masters level qualification and are highly regarded amongst science education professionals and educational leaders. Applicants must be active in science teaching and learning in the UK or overseas; this includes teachers and technicians in all state and independent schools, colleges and universities, as well as advisers, inspectors, consultants and researchers. Achieving chartered or registered status demonstrates a commitment to science education, indicates depth of knowledge and experience and sends a clear signal to employers, parents, governors and students alike that the holder of the award is a high competence science education professional.

In 2022/23, we received 24 applications for CSciTeach, RSciTech and RSci.

Following a thorough review by independent assessors and our Registration Board, we awarded 7 CSciTeach awards, 13 RSciTech and 0 RSci awards.

Science Council Awards

In November 2022/23, we were delighted to hear that five ASE members had been recognised in the Science Council's CPD Awards, either winning particular awards or receiving commendations. The Science Council's CPD Awards celebrate outstanding professional development in science. The awards showcase the achievements of registrants across the four registers: Registered Science Technician (RSciTech), Registered Scientist (RSci), Chartered Scientist (CSci) and Chartered Science Teacher (CSciTeach). The following ASE members (three RSciTech and three CSciTeach) were shortlisted for this year's Science Council CPD awards: Andrea Brown, Rachel Chilton, Jon Hale, Kulvinder Johal, Man Fung Lo and Laura Smith.



PROJECTS: INCLUSION IN SCHOOLS

ASE's Inclusion in Schools Programme is Department of Education funded and delivered in partnership with the STEM Learning Science SPD Partnership. **In 2022/23** we worked with 99 secondary schools at whole-school level to create bespoke action plans to address priorities around inclusion. The project provides a wide range of CPD opportunities each school term, including commissioning experts in the field to lead webinars, as well as providing the conduit for schools to connect and share successes and challenges through network groups. An online hub provides resources. Articles are posted to that hub, along with films and case studies to support insights and further learning. Of the 99 schools engaged, 92 completed their action plans (achieving the KPI set by DfE).

The ASE Inclusion in Schools programme and the Institute of Physics' *Limit Less* campaign both aim to increase diversity in STEM by implementing whole-school equity plans. The IOP shared their objectives at a drop-in event at the Houses of Parliament in July (image below), hosted by Selaine Saxby MP, the ASE Inclusion team was on hand to demonstrate what a whole-school equity plan looks like in practice, and how a focus on inclusion can help to engage students who are underrepresented in STEM.

57 CPD Events

Live and on demand. On demand viewed more than 890 times.

305 teacher hours

Over 77 hours of CPD offered over a 17-month period: equating to over 305 teacher hours.

99% positive feedback

99% of feedback rated the CPD as 'good' or 'very good'.

15% of schools have seen an increase in A-level Physics uptake.

29% reported that inclusive careers provision had been improved by IIS.



PROJECTS: KEEPING SCIENCE PRACTICAL

Keeping Science Practical is crucial in the field of education and scientific learning. Not only is it engaging for students - stimulating curiosity and motivation, but it is vital for the application of theoretical knowledge, development of laboratory skills, data analysis, observation and other scientific disciplines. Yet many schools are struggling to deliver practical science classes for schools.

ASE's 'Keeping Science Practical' programme supports excellence in practical science in disadvantaged schools. This three-year programme, funded by the Wolfson Foundation, aims to increase student access to frequent, varied and purposeful practical science.

72 schools completed the programme over years 1 and 2. At the end of year 2, 88% of respondents in the evaluation survey agreed that 'purposeful practical science had increased as a result of project participation'. Science leader, teacher and technician focus groups reported that the support provided led to the production of practical science policies, targeted training, more practical science, improved engagement amongst pupils, and improved understanding amongst teachers holding practical science sessions.

We are pleased that we have successfully signed up 50+ schools for year 3 which began in September 2023 and look forward to reporting further success in our next annual report.

"The ECT practical webinars are an amazing resource, filling a gap in training that is sorely needed."

"The ECT training has been invaluable as there is no practical training for ECTs past that which the school can provide."

"Students have benefitted indirectly and directly through the CPD by an improved understanding of practical work and how it fits in to their science lessons and also by DOING more practical work, particularly in some lessons."

"Better informed ECTs and safer practicals."

"The main achievement has been getting staff and students talking about how to do practical work and safely."



PROJECTS: KEY MOMENTS IN HISTORY AND SCIENCE

We have over 3,200 resources and activities on our website to support teachers in the classroom. One of our most exciting projects is the **Award Winning film, Sea Dragon** which tells the story of Mary Anning, the fossil hunter. This exciting work, funded by the Templeton Foundation explores how a multidisciplinary approach (e.g. through different formats i.e. film, worksheets, drama) and through different subject areas (e.g. history and science) can help to embed and enhance learning.

Following submission of a final report this year, indicating positive impact on both teachers (including early career, experienced teachers and science leaders) and their pupils (aged 9-11 years), the Foundation has offered significant additional funding to amplify the reach and impact of this internationally recognised project. This includes a collaboration with the Museo de Ciencias, Universidad de Navarra and the Collegi Oficial Doctors, Llicenciats en Filosofia in Ciencies de Catalunya. We are currently planning our strategy and programme of work, which will include working closely with a PR advocacy company, with the Foundation.

"This film provides a clever, entertaining and moving way to learn about Mary Anning's remarkable story. It is sure to inspire young people to find out more about her and maybe even follow in her footsteps, looking for fossils out on the Jurassic Coast."

Tracy Chevalier, internationally acclaimed author of Remarkable Creatures, on the life of palaeontologist Mary Anning.



ACTIVITIES AND IMPACT: ADVOCACY

ASE is highly regarded as an authority on what constitutes excellence in science education. We draw on our wealth of expertise and our collective knowledge to shape and inform policy at national and regional level. In 2022/23 we have worked both independently and in partnership to inform policy across Westminster and Whitehall as well as the devolved nations.

In April 2023, the Education Committee published their report on the future of post-16 qualifications - we were pleased to see that the report references the joint submission by ASE, IOP, RSB and RSC submitted in March 2022 regarding regional concerns related to T levels and placements in paragraph 78. In June, SEPA submitted further evidence to the Education for 11-16 year olds Committee on grading severity in the sciences and inter-subject comparability. The evidence submission raised the issue of science subjects being graded more severely than other subjects such as English and art, which contributes to fewer students choosing the sciences and mathematics post-16.

In April, we commissioned a survey to capture how teachers and providefrs felt about the recent ITT reaccreditation. The survey was informed by members of the SEPA teaching thematic group. The results of the survey were used to inform the individual responses of the SEPA organisations to the HoC Education Committee consultation.

ASE, independently and as part of the Learned Societies Group in Scotland, responded in April, to plans to re-introduce coursework and examinations for practical subjects that were removed from the assessment of National 5, Higher and Advanced Higher subjects during the Covid-19 pandemic. We have also responded to consultations on the reform of Education Scotland and Scottish Qualifications authority.

In June, Qualifications Wales published their decisions regarding new qualifications for sciences in Wales. The announcement introduced a new single award that will be offered to learners who may not be able to complete the double award. The new GCSEs are due to be launched in September 2025. ASE, IOP, RSB and RSC published statements in response stating their concern behind the decision to introduce a new single-award GCSE alongside the double award. The SEPA organisations feel that this new development will create an unequal system and limit potential and opportunities for young people. Meetings are being arranged with Qualifications Wales, WJEC and Welsh Government to further explore the single award GCSE and guidance that will be shared with school on the new GCSE options.

SEPA organisations have been meeting as part of a Subject Matters roundtable, with joint messaging agreed in 2022. ASE, IOP, RS, RSB and RSC met with STEM Learning in July, to discuss influencing manifestos and adapting the messaging ahead of next year's general election. IOP will convene another roundtable meeting as a follow up.

In March, ASE responded to the House of Commons' Diversity and Inclusion in STEM report and offered recommendations to achieve the ambitions that are needed for young people of all backgrounds.

In addition to this proactive work to help shape science education in the UK, we are also representative on a wide number of stakeholder groups and forums such as the expert advisory group to the Education Endowment Foundation for the (recently published) Improving Primary Science guidance.

PARTNERSHIPS

We work with a wide range of partners from education, academia, science and industry. Partners include CLEAPSS, Gatsby Foundation, Institute of Physics (IoP), Ogden Trust, Primary Science Teaching Trust, Primary Science Quality Mark (PSQM), Mathematics in Education and Industry (MEI), The Royal Society, Royal Society of Biology (RSB), Royal Society of Chemistry (RSC), STEM Learning and SSERC to name just a few.

We also work with numerous universities including the University of Hertfordshire, University of Manchester, University of Sheffield and the University of York, as well as many other charities, associations, exam boards, foundations, companies and learned societies.

Our DfE funded work with MEI on the Advanced Mathematics Support Programme (AMSP) which aims to develop the capacities and confidence of biology teachers in their use of mathematics within the post-16 context, and to encourage more students to study Level 3 mathematics during the post-16 phase.

We have worked with Patana International School on their ASE Asia conference (pictured below) which took high quality training and practical workshops to over 150 delegates from across 40 international schools in the SE Asia region.

ASE were also the UK partner for Horizon 2 2020's Science Education for Action and Engagement towards Sustainability (SEAS) programme which established six open schooling networks led by universities and science centres, with partners in Austria, Belgium, Estonia, Italy, Norway, Sweden and the UK. The final report found that open schooling approaches help to build awareness and to equip young people with the tools and confidence to navigate real work challenges. We are now working to amplify and disseminate these approaches across our membership.



ORGANISATIONAL SUSTAINABILITY

Tackling falling membership numbers
Membership of the ASE has declined over a number of years - caused by the changing dynamics of the teaching workforce, the growth in freely available CPD and classroom resources, and more recently by the high cost of membership and the cost of living crisis. Whilst ASE is not alone in experiencing declining membership numbers, we felt we could do more to ensure that our membership is as accessible as possible and that the membership offer represented clear value for money. In March Trustees agreed to simplify and reduce membership subscriptions to ensure ASE's services were more affordable for all. It was agreed that we would remove the numerous types of individual membership and offer a flat-rate membership structure. This inclusive pricing model is designed to break down barriers and make membership more affordable and greater value for money. We introduced a half-price membership for Laboratory Technicians and retired members and are proud to offer free membership to Trainee Teachers. The new membership model will be launched on the 1st September 2023.

Improving committee governance
In 2022/23, we introduced new terms of reference and standard clauses for all Committees and SIGs to provide greater clarity of purpose, cross committee engagement and diversity. We allocated personnel to support the administration of committees and groups to free up members' time to focus on strategy, CPD and advocacy rather than administration.

Making financial savings
We worked throughout the year to make cost savings on print, publications and IT. We also appointed new auditors and are negotiating a new lease on smaller premises. In 2022/23 we consulted on proposals to restructure the staff team to align with charitable objectives and to save costs. The new staff structure will be implemented in September 2023.

Future strategy
In May, the committees and groups met together at St Mary's University in Twickenham to discuss a future strategy for the Association. Together, we looked at the needs and priorities of the science education workforce in the UK and how we as an organisation are uniquely placed to support them. These discussions have fed into Trustees discussions and will be used to inform the final strategy due to be launched in 2024.



OUR FUTURE PLANS

Science education as we've outlined has never been more important and those that deliver it never in more demand or under such pressure. Science as a field of study is evolving faster than ever - and science education and science educators are under tremendous pressure to keep pace. ASE is committed to supporting the science education workforce to meet these challenges.

As we enter the final year of our current strategic plan our priorities will continue to focus on our community of support, professional development offer, advocacy and curriculum innovation, whilst working to achieve greater financial stability.

In particular, in 2023/24 we will:

- Launch a **new membership structure** that helps to make membership more affordable to all and strengthens our community
- Build a programme of **wrap around professional development activities** that offers our members a more tailored approach to their life long learning journey.
- Continue to champion **the importance of practical science** through CPD,
- Continue to promote **inclusive practices** in science and schools such that all learners whatever their background feel inspired and engaged by science, engineering, technology and maths.
- Amplify and grow the reach of our **innovative Mary Anning Resources.**
- Build a **programme of support for our early career teachers and trainees** as they embark on those crucial first years in teaching.
- Support our regions to more effectively support their **local science education community**.
- Launch a new contemporary look to ASE.

We will continue to look at ways in which we can build our financial sustainability, further streamlining activities and costs. We acknowledge that 2023/24 will be a challenging year as we transition to a new staff structure and absorb the loss of income from lower subscriptions. However we are confident that reducing the barrier to entry and refocusing our efforts on our core charitable objectives will in the medium term lead to a stronger association.



FROM THE HONORARY TREASURER

This has been a year of change for the Association, with the appointment of Lynn Ladbrook as Chief Executive in October 2022. In her first year of appointment Lynn has focused on the sustainability of all aspects of the Association starting with a review of the membership structure. Further reviews will take place including staffing, journal and book production and regional support. We have worked hard to make savings to ensure a more efficient and effective organisation, whilst making sure that we continue to provide the services our members want. The impact of these changes and other future proposals will be more apparent in 2023/24 and beyond.

The strategic plan with its threads of Community, Professional development and Advocacy continues to provide a major tool in informing and supporting the financial planning of the Association. This is used in conjunction with regular risk assessments. The decision to significantly reduce member fees in September 2023 was a financial risk which was carefully assessed. The long-term vision is to attract more members and so ensure the financial sustainability of the Association.

Throughout the year, Laura Rafferty (Director of Finance and Operations) has continued to provide excellent support for myself and the trustee body. Laura and I meet regularly to discuss financial matters and Laura provides detailed accounts and notes for each Trustee meeting. Reporting is timely and transparent, and Trustees have sufficient information to assess financial risks and make decisions accordingly.

To summarise the year:

Income
Conference and business development income have risen, with other areas falling. A review of the composition of our income highlights one key risk - our dependence on project income which may be difficult to sustain.

Expenditure
There have been savings in a number of areas including staffing, journals, premises and other support costs and cost control will continue to be a focus for the coming financial year.

We have a small unrestricted deficit for the year of £25,029, with £190,848 in unrestricted reserves. Our aim is to build our reserves level over the next few years. For further details on our reserves see page 23.

The next few years are going to be challenging for all of us, trustees, members and staff. I have great faith in the future of the Association and I know that everyone will pull together to provide the synergy we need to sustain it into the future.



Susie Burr

DR SUSAN BURR
HONORARY TREASURER

"I have great faith in the future of the Association and I know that everyone will pull together to provide the synergy we need to sustain it into the future."

FINANCIAL REVIEW

The Trustees present their annual report and consolidated financial statements for the year ended 31st July 2023.

The financial statements have been prepared in accordance with the accounting policies set out in note 1 to the financial statements and comply with the Charity's constitution, the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005, regulation 8 of the Charities Accounts (Scotland) Regulations 2006 and Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS102) (effective 1st January 2019).

Public benefit

The trustees have complied with the duty in section 17 of the Charities Act 2011 to have due regard to public benefit guidance issued by the Charity Commission.

Objects and activities

Objects

The objects of the Association are to promote education by the following means:
(a) improving the teaching of science; and
(b) providing an authoritative medium through which opinions of teachers of science may be expressed on educational matters; and
(c) affording means of communication among all persons and bodies of persons concerned with the teaching of science in particular and education in general.

Activities

The Rules of the Association provide for the promotion of its objects by:-
(a) holding general and other meetings; and
(b) publishing journals and other literature including literature in electronic formats concerned with the teaching of science and ancillary matters; and
(c) establishing and maintaining of a centre or centres of administration and of information on any aspect of science education; and
(d)-(h) the administration of the Chartered Science Teacher award, CSciTeach including the register thereof and associated standards, admissions, removals disciplinary matters and appeals, and
(i) such other means as the Association may from time to time determine and as may be consistent with the charitable objects of the Association.

Structure, governance and management

The Association is governed by its Royal Charter (dated 13th October 2004) and associated By-laws (updated and approved by the Privy Council October 2012) and Rules of the Association (as adopted at the Annual General Meeting in January 2006 and amended most recently in January 2021).

The Trustee Body of the Association is responsible for all governance issues and the Education Group, comprised of elected members of the Association, is concerned with issues related to ASE's work in science education.

The Trustee Body

Trustees have responsibility for ensuring that ASE complies with relevant charity laws and regulations, that the finances are properly regulated and monitored and that appropriate policies are in place. The Trustees ensure that the activities of the Association fit with the Strategic Plan and take a long-term view of the health of the Association.

The Trustee body consists of:

- three members elected from the Education Group of the Association
- three members elected from the membership by direct vote
- four further members appointed by Trustee body
- the Chair of the Association (may be delegated to the past-Chair of the Association)

One Trustee is nominated to represent Trustees on the Quality and Audit Committee. A Chair of Trustees and a vice Chair is elected from and by the Trustee members. The Chair-Elect and Immediate Past Chair of the Association may attend meetings of the Trustee Body and may participate in Trustee discussions both at and between meetings.

Induction and training of Trustees

New Trustees are provided with a full information pack including Code of Conduct and various policies. They take part in training on functions such as charity finance, EDI and the responsibilities of trustees. On-going training consists of the circulation of Charity Commission updates and training on aspects of the Trustee's role.

Membership

Membership numbers as at July 2023:
Individual: 2,935 (2022: 3,155)
Organisations: 780 (2022: 909)
Total Members: 3,715 (2022: 4,062)
Total Subscribers: 5,115 (2022: 6,028)

The Trustees are responsible for the direction and management of the Association through its Strategic Plan. Key responsibilities include ensuring a clear vision, the corporate behaviour of the charity, legal and regulatory governance, compliance, guardianship of assets and ensuring high standards of governance. The Trustee body meets on four occasions during the year.

Trustees who served during the year and up to the date of approval of these financial statements are listed below: -

Ali Redmore (Chair): Appointed by Membership (Retired July 23)
Manoj Chitnavis: Appointed by Membership (Chair from August 2023)
Susan Burr: Elected by Membership**
Daniel Sandford Smith: Elected by Membership (Retired July 2023)
Geoff Mackey: Elected Member
Bryan Berry: Appointed Member
Olivia Bussey: Appointed Member (Appointed Aug 23)
Maggie Hannon: Appointed Member*
Cerian Ayres: Elected by Education Group
Leigh Hoath: Elected by Education Group (Co Chair of the Association from Sept 2023)
Helen Harden: Elected by Education Group Chair of the Association (appointed 1st August 2022 - July 2023)
Also in attendance:
Alex Sinclair - Co-Chair of the Association (From August 2023)
Jane Turner: Immediate Past Chair of the Association (Retired July 2023)
Jane Oldham - Chair Elect of the Association from Sept 2023 (Observer)

*Trustee rep on Q&A Committee
**Treasurer

Key management personnel

The Trustee Body and the Chief Executive are the key management personnel. In May 2022, after three years as CEO, Hannah Russell announced her intention to step down to join the British Science Association as its CEO. After a competitive appointment process, the Trustees appointed Lynn Ladbrook, an experienced CEO with a background in membership and charitable organisations.

The Chair and the Chief Executive are in regular contact to discuss ongoing matters and full reports from the Chief Executive are discussed at meetings of the Trustee Body including all matters relating to activities, finance, budgeting, strategy and future planning. The Chief Executive is subject to an annual development review by the ASE Chair and Treasurer who advise the remuneration committee of proposed awards which are then ratified by the Trustee Body.

Financial review

The financial position of the charity and the group is set out in the financial statements, including principal sources of funding and resources expended. The financial statements have been prepared in accordance with the accounting policies set out in the notes, the requirements of the Trust Deed and the Charities SORP (FRS 102) and comply with current statutory requirements. More detail on the ASE's financial performance for the year and its principal sources of income is given in the Honorary Treasurer's annual report on page 21.

Going concern

As stated in note 1b the Trustees have considered going concern. As detailed in note 1b, the Trustees have a reasonable expectation that the Charity has adequate resources to continue in operation for the foreseeable future and therefore continue to adopt the going concern basis of accounting.

Risk assessment

The Trustees have assessed the risks to which the Charity may be exposed. A risk register is produced quarterly by the Chief Executive and Director of Finance and Operations which sets out the main operational, finance and compliance risks facing the Association. Key risks are currently identified as declining membership which will result in a loss of reach and impact as well as loss of income. Mitigating actions have been taken after discussions with the Board of Trustees, and these include measures to reduce costs with savings made on print, publications, IT, staff and audit fees. To ensure membership is more affordable for all we have also taken the decision to reduce membership subscriptions from September 23 as explained elsewhere in this report.

Reserves policy

Total consolidated reserves as at 31st July 2023 are £340,051 (2022: £348,274). Of these £149,203 are restricted (2022: £132,397). Nearly all amounts in restricted funds will be spent on projects in the year ahead (see note 18a for further details). It is the policy of the Trustees to maintain unrestricted reserves at three months running costs plus the costs of an orderly wind-down of the organisation. At the time of writing this amounts to approximately £210,000. Total consolidated unrestricted reserves as at 31st July 2023 were £190,848 (2022: £215,877). Trustees acknowledge the reduction in reserves and continue to review measures to generate income and make further financial efficiencies. These include further streamlining publications, reducing costs on premises and reaching out to a more diverse pool of funders to support our work.

Key investment policy

Monies are currently held in an interest-bearing deposit account.

STATEMENT OF TRUSTEES' RESPONSIBILITIES

The Trustees are responsible for preparing the report of the Trustees and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England and Wales and in Scotland requires the Trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charity and the group and of the incoming resources and application of resources of the group for that period.
In preparing these financial statements, the Trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities Statement of Recommended Practice (SORP);
- make judgments and estimates that are reasonable and prudent;
- state whether applicable United Kingdom accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity and group will continue in operation.

The Trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charity and the group and enable them to ensure that the financial statements comply with the Charities Act 2011, the Charity (Accounts and Reports) Regulations 2008, the Charities and Trustee Investment (Scotland) Act 2005, the Charities Accounts (Scotland) Regulations 2006 and the provisions of the charity's constitution. They are also responsible for safeguarding the assets of the charity and group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Disclosure of information to auditor

Each of the Trustees has confirmed that there is no information of which they are aware which is relevant to the audit, but of which the auditor is unaware. They have further confirmed that they have taken appropriate steps to identify such relevant information and to establish that the auditor is aware of such information.

Auditor

Goldwins were appointed as new auditors to the charity in June 2023. A resolution proposing that they be re-appointed will be put to the next Annual General Meeting.

On behalf of the Trustee Body



Manoj Chitnavis
Chair of Trustees

Dated: 16th March 2024

INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED 31ST JULY 2023

Opinion

We have audited the financial statements of The Association for Science Education (the 'Charity') for the year ended 31 July 2023 which comprise the consolidated Statement of Financial Activities, the group and parent Charity's Balance Sheets, group's statement of cash flows and notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 102: The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

In our opinion, the financial statements:

- give a true and fair view of the state of the group's and charity's affairs as at 31 July 2023 and of its income and expenditure for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice;
- have been prepared in accordance with the requirements of the charity's Royal Charter, the Charities and Trustee Investment (Scotland) Act 2005 and regulation 8 of the Charities Accounts (Scotland) Regulations 2006 (as amended) and Charities Act 2011.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Charity in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the trustees' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the charitable company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the trustees with respect to going concern are described in the relevant sections of this report.

Other information

The trustees are responsible for the other information. The other information comprises the information included in the annual report other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial

statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the Charity and environment obtained in the course of the audit, we have not identified material misstatements in the Trustees' Annual Report.

We have nothing to report in respect of the following matters in relation to which the Charities Act 2011 or the Charity Accounts (Scotland) Regulations 2006 (as amended) requires us to report to you if, in our opinion:

- sufficient accounting records have not been kept;
- the financial statements are not in agreement with the accounting records and returns; or
- we have not obtained all the information and explanations necessary for the purposes of our audit.

Responsibilities of the trustees

As explained more fully in the trustees responsibilities statement, the trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the trustees are responsible for assessing the Charity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to liquidate the Charity or to cease operations, or have no realistic alternative but to do so.

Our responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud are set out below.

Capability of the audit in detecting irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, our procedures included the following:

- We enquired of management, which included obtaining and reviewing supporting documentation, concerning the charity's policies and procedures relating to:
  - Identifying, evaluating, and complying with laws and regulations and whether they were aware of any instances of non-compliance;
  - Detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected, or alleged fraud;
  - The internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations.
- We inspected the minutes of meetings of those charged with governance.
- We obtained an understanding of the legal and regulatory framework that the charity operates in, focusing on those laws and regulations that had a material effect on the financial statements or that had a fundamental effect on the operations of the charity from our professional and sector experience.
- We reviewed the financial statement disclosures and tested these to supporting documentation to assess compliance with applicable laws and regulations.
- We performed analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud.
- In addressing the risk of fraud through management override of controls, we tested the appropriateness of journal entries and other adjustments, assessed whether the judgements made in making accounting estimates are indicative of a potential bias and tested significant transactions that are unusual or those outside the normal course of business.

Because of the inherent limitations of an audit, there is a risk that we will not detect all irregularities, including those leading to a material misstatement in the financial statements or non-compliance with regulation. This risk increases the more that compliance with a law or regulation is removed from the events and transactions reflected in the financial statements, as we will be less likely to become aware of instances of non-compliance. The risk is also greater regarding irregularities occurring due to fraud rather than error, as fraud involves intentional concealment, forgery, collusion, omission or misrepresentation.

A further description of our responsibilities is available on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of our report

This report is made solely to the Charity's trustees, as a body, in accordance with the charity's Royal Charter, section 144 of the Charities Act 2011 and the regulations made under section 154 of that Act, regulation 10 of the Charities Accounts (Scotland) Regulations 2006 (as amended) and under Section 44(1) (c) of the Charities and Trustee Investment (Scotland) Act 2005. Our audit work has been undertaken so that we might state to the Charity's trustees those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Charity's trustees as a body, for our audit work, for this report, or for the opinions we have formed.

Goldwins

Dated: 16th March 2024

Goldwins Limited
Chartered Accountants
Statutory Auditor
75 Maygrove Road
London
NW6 2EG

Goldwins Limited is eligible for appointment as auditors of the charity by virtue of its eligibility for appointment as auditors of a company under section 1212 of the Companies Act 2006.

CONSOLIDATED STATEMENT OF FINANCIAL ACTIVITIES FOR YEAR ENDING 31ST JULY 2023

	Note	Unrestricted £	Restricted £	2023 Total £	2022 Total see Note 2a £
Income from:					
Donations and legacies	**3**	3,013	-	3,013	39,740
Charitable activities	**4**	780,775	712,825	1,493,600	1,701,727
Other income					
Government Grants	**5**	-	-	-	5,080
Other trading activities					
Sponsorship and advertising	**6**	66,334	-	66,334	75,381
Investments	**7**	3,328	-	3,328	150
Total income		**853,450**	**712,825**	**1,566,275**	**1,822,078**
Expenditure on:					
Raising funds:					
Sale of educational materials	**8a/b**	95,278	-	95,278	105,316
Charitable activities	**8a/b**	**783,201**	**696,019**	**1,479,220**	**1,601,045**
Total expenditure		**878,479**	**696,019**	**1,574,498**	**1,706,361**
Net income / (expenditure) for the year and net movement in funds	**9**	**(25,029)**	**16,806**	**(8,223)**	**115,717**
Reconciliation of funds:					
Total funds brought forward at 1st August		215,877	132,397	348,274	232,557
Total funds carried forward at 31st July		**190,848**	**149,203**	**340,051**	**348,274**

All of the above results are derived from continuing activities.
There were no other recognised gains or losses other than those stated above.
The attached notes form part of these financial statements.

CHARITY STATEMENT OF FINANCIAL ACTIVITIES FOR YEAR ENDING 31ST JULY 2023

	Note	Unrestricted	Restricted	2023 Total	2022 Total see Note 2b
		£	£	£	£
Income from:					
Donations and legacies	**3**	3,013	-	3,013	39,740
Charitable activities	**4**	712,592	712,825	1,425,417	1,613,689
Other income					
Government Grants	**5**	-	-	-	5,080
Other trading activities					
Sponsorship and advertising	**6**	66,334	-	66,334	75,381
Investments	**7**	3,328	-	3,328	150
Total income		**785,267**	**712,825**	**1,498,092**	**1,734,040**
Expenditure on:					
Raising funds:					
Primary purpose trading activities	**8**	95,278	-	95,278	105,316
Charitable activities	**8**	**706,265**	**696,019**	**1,402,284**	**1,549,789**
Total expenditure		**801,543**	**696,019**	**1,497,562**	**1,655,105**
Net income / (expenditure) for the year and net movement in funds	**9**	**(16,276)**	**16,806**	**530**	**78,935**
Reconciliation of funds:					
Total funds brought forward at 1st August		233,261	132,397	365,658	286,723
Total funds carried forward at 31st July		**216,985**	**149,203**	**366,188**	**365,658**

All of the above results are derived from continuing activities.
There were no other recognised gains or losses other than those stated above.
The attached notes form part of these financial statements.

CONSOLIDATED AND CHARITY BALANCE SHEETS AS AT 31ST JULY 2023

	Note	**Group 2023 £**	Group 2022 £	**Charity 2023 £**	Charity 2022 £
Fixed assets:					
Investment in Subsidiary	**12**	-	-	-	-
		-	-	-	-
Current assets:					
Stock	**13**	**17,825**	26,145	**-**	-
Debtors	**14**	**151,308**	307,666	**337,809**	430,735
Cash at bank and in hand		**427,232**	387,694	**282,602**	304,909
		596,365	721,505	**620,411**	735,644
Liabilities					
Creditors: amounts falling due within one year	**15**	**(256,314)**	(373,231)	**(254,223)**	(369,986)
Net current assets		**340,051**	348,274	**366,188**	365,658
Total net assets		**340,051**	348,274	**366,188**	365,658
Funds	**16, 17,18**				
Restricted funds		**149,203**	132,397	**149,203**	132,397
Unrestricted funds:					
General funds		**190,848**	215,877	**216,985**	233,261
Total funds		**340,051**	348,274	**366,188**	365,658

Approved by the trustees on 16th March 2024



Manoj Chitnavis
Trustee

The attached notes form part of the financial statements

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31ST JULY 2023

	Note	2023	2023	2022	2022
		£	£	£	£
Cash flows from operating activities:					
Net cash provided by / (used in) operating activities	**20**		42,866		(1,611)
Cash flows from investing activities:					
Interest receivable		(3,328)		(150)	
Cash provided by / (used in) investing activities			(3,328)		(150)
Change in cash and cash equivalents in the year			39,538		(1,761)
Cash and cash equivalents at the beginning of the year			387,694		389,455
Cash and cash equivalents at the end of the year	**20**		427,232		387,694

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST JULY 2023

1 Accounting policies

a) Basis of preparation

The financial statements have been prepared in accordance with the charity's Rules of Association, the Charities Act 2011, the Charities and Trustee lnvestment (Scotland) Act 2005, the Charities Accounts (Scotland) Regulations 2006 (as amended) and "Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of lreland (FRS 102) (effective 1st January 2019)".

The charity and group meet the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy or note.

b) Going concern

We have set out in the Trustees' Report a review of financial performance and the charity's reserves position. Unrestricted reserves at the end of July 2023 are closer to our target reserves position and further work is being done to improve the position.

In common with other membership organisations, the Association for Science Education relies upon membership subscriptions, publishing income and events for a substantial part of its annual income. Taking a prudent view of this income, the trustees have prepared cash flow projections for the period to March 2024, which show that the charity would be able to continue in operation for that period. Accordingly, the trustees consider that there are no material uncertainties about the charity's or the group's ability to continue as a going concern for the foreseeable future. Thus the trustees continue to adopt the going concern basis of accounting in preparing the financial statements.

c) Basis of consolidation

These financial statements consolidate the results of the charity and its wholly-owned subsidiary Millgate House Education Limited on a line by line basis. Transactions and balances between the charity and its subsidiary have been eliminated from the consolidated financial statements. Balances between the companies are disclosed in the note to the charity's balance sheet.

d) Income

Incoming resources are recognised in the period in which the group is entitled to receive them and the amount can be measured with reasonable certainty and it is probable that income will be received. Income is deferred only when the group has to fulfil conditions before becoming entitled to it or where the donor or funder has specified that the income is to be expended in a future accounting period.

1. Accounting policies continued

Grants from the government and Trusts and Foundations have been included as income from activities in furtherance of the group's objectives where these amount to a contract for services, but as donations where the money is given in response to an appeal or with greater freedom of use, for example, monies for core funding.

Investment income is accounted for on an accrual basis.

e) Expenditure
Expenditure is included in the statement of financial activities when incurred and includes attributable VAT which cannot be recovered.
Expenditure comprises the following:
a. Expenditure on charitable activities comprises monies spent on the charity's primary charitable purposes as described in the Trustees' report. It also includes appropriately apportioned salary costs and support costs (see note 8).
b. The costs of raising funds comprises the expenditure incurred in primary purpose trading activities by the charity and consists of salaries, direct costs and overheads.
c. Support costs represent indirect charitable expenditure. In order to carry out the primary purposes of the group it is necessary to provide support in the form of financial procedures, provision of office services and equipment and a suitable working environment. Salary costs have been allocated based on staff time.

f) Fixed assets
Tangible
Assets costing in excess of £1,000 and with an expected useful life exceeding one year are capitalised.
Depreciation is charged on these assets at the following annual rates in order to write them off over their estimated useful lives:

Computer and other equipment/software	25% straight line

g) Investments
Investment in the subsidiary company is stated in the charity at cost.

h) Stocks
Stocks are valued at lower of cost and net realisable value after making due allowance for obsolete and slow-moving items. Cost includes all expenditure in bringing stock to their present location and condition.
Net realisable value is based on estimated selling price less the anticipated costs to sell.

1. Accounting policies continued

i) Leased assets
Rentals applicable to operating leases where substantially all of the benefits and risks of ownership remain with the lessor are charged to the statement of financial activities on a straight line basis over the life of the lease.

Assets purchased under hire purchase agreements are capitalised as fixed assets. Obligations under such agreements are included in creditors. Charges are written off to the SOFA over the period of the agreement so as to produce a constant periodic rate of charge.

j) Fund accounting
The unrestricted fund comprises those monies which may be used towards meeting the charitable objectives of the group and which may be applied at the discretion of the Trustees.

The restricted funds are monies granted for, and their use restricted to, a specific purpose, or donations subject to donor-imposed conditions.

k) Pensions
The Association operates a defined contribution group personal pension for employees. The funds are managed by Scottish Widows and contributions are paid monthly by direct debit and charged to the Statement of Financial Activities (SOFA) as incurred.

l) Financial Instruments
The Charity has elected to apply the provisions of Section 11 'Basic Financial Instruments' and Section 12 'Other Financial Instruments Issues' of FRS 102 to all of its financial instruments. The Charity only has financial assets and financial liabilities of a kind that qualify as basic financial instruments. Basic financial instruments are recognised as the amount payable or receivable when the instrument is first recognised together with any subsequent transaction costs but modified in respect of trade debtors for an assessment of potential bad debt.

m) Critical Accounting estimates and judgements
In the application of the Charity's accounting policies, the Trustees are required to make judgements, estimates and assumptions about the carrying amount of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised where the revision affects only that period, or the period of the revision and future periods where the revision affects both current and future periods. The Trustees believe there are no critical estimates or judgements relevant to the financial statements.

2a Detailed comparatives for the consolidated statement of financial activities

	2022 Unrestricted £	2022 Restricted £	2022 Total £
Income from:			
Donations and legacies	39,740	-	**39,740**
Charitable activities	726,495	975,232	**1,701,727**
Other income			
Government Grants	5,080	-	**5,080**
Other trading activities			
Sponsorship and advertising	75,381	-	**75,381**
Investments	150	-	**150**
Total income	**846,846**	**975,232**	**1,822,078**
Expenditure on:			
Raising funds:			
Sale of educational materials	105,316	-	**105,316**
Charitable activities	732,078	868,967	**1,601,045**
Total expenditure	**837,394**	**868,967**	**1,706,361**
Net income / (expenditure) for the year and net movement in funds	9,452	106,265	**115,717**
Reconciliation of funds:			
Total funds brought forward at 1 August	206,425	26,132	**232,557**
Total funds carried forward at 31 July	**215,877**	**132,397**	**348,274**

2b Detailed comparatives for the Charity statement of financial activities

	2022 Unrestricted £	2022 Restricted £	2022 Total £
Income from:			
Donations and legacies	39,740	-	**39,740**
Charitable activities	638,457	975,232	**1,613,689**
Other income			
Government Grants	5,080	-	**5,080**
Other trading activities			
Sponsorship and advertising	75,381	-	**75,381**
Investments	150	-	**150**
Total income	**758,808**	**975,232**	**1,734,040**
Expenditure on:			
Raising funds:			
Sale of educational materials	105,316	-	**105,316**
Charitable activities	680,822	868,967	**1,549,789**
Total expenditure	**786,138**	**868,967**	**1,655,105**
Net income / (expenditure) for the year and net movement in funds	(27,330)	106,265	**78,935**
Reconciliation of funds:			
Total funds brought forward at 1 August	260,591	26,132	**286,723**
Total funds carried forward at 31 July	**233,261**	**132,397**	**365,658**

3. Income from donations and legacies

	2023	2022
	Unrestricted	Unrestricted
	£	£
Individual donations	**3,013**	7,824
Legacies	**-**	31,916
	3,013	39,740

4. Income from charitable activities

	2023	2022
	Total	Total
	£	£
Unrestricted income		
Member subscriptions	**404,096**	456,181
Sales of publications and journals	**132,408**	161,241
Conference and workshop income	**184,048**	89,376
Income from sponsored projects	**60,223**	19,697
	780,775	726,495
Restricted Income		
Income from sponsored projects	**712,825**	975,232
Total income from charitable activities	**1,493,600**	1,701,727

Included above is £68,183 (2022: £88,038) sales of publications and journals relating to the subsidiary company. The charity only total is £1,425,417 (2022: £1,613,689).

5 Government grants

The group received £nil (2022: £5,080) from the government's Coronavirus Job Retention Scheme in the year. Included is £nil (2022: £nil) relating to the subsidiary company.

6. Income from other trading activities

	2023	2022
	Unrestricted	Unrestricted
	£	£
Advertising and sponsorship	**66,334**	75,381
	66,334	75,381

Income is from journal and conference advertising and sponsorship and is all primary purpose trading.

7. Investments

	2023	2022
	Total	Total
	£	£
Bank Interest	**3,328**	150
	3,328	150

8a Analysis of expenditure year ended 31st July 2023	Staff costs	Other costs	**2023 Total**
	£	£	**£**
Raising funds			
Sale of educational materials	74,873	20,405	**95,278**
Charitable Activities:			
the promotion and improvement of the teaching of science:			
Members registration and services	67,611	17,966	**85,577**
Book sales	37,915	39,019	**76,934**
Journal expenditure	25,534	72,394	**97,928**
Conferences and other CPD	56,279	122,283	**178,562**
Regional expenses	74,426	7,630	**82,056**
Advocacy & other projects	42,333	9,504	**51,837**
Support costs	84,997	83,634	**168,631**
Governance costs	28,876	12,800	**41,676**
Restricted project expenditure (see note 18a and 18b)	302,254	393,765	**696,019**
Total expenditure 2023	795,098	779,400	**1,574,498**
Restricted expenditure	302,254	393,765	**696,019**
Unrestricted expenditure	492,844	385,635	**878,479**
Total expenditure 2023	795,098	779,400	**1,574,498**

Included above is £76,936 book sales related to the subsidiary company. The charity's only expenditure on raising funds and charitable activities is £1,497,562.

Non-staff related support costs of £83,635 consist of premises costs, insurance, bank fees and other professional fees and subscriptions

8b Analysis of expenditure year ended 31st July 2022

	Staff costs	Other costs	**2022 Total**
	£	£	**£**
Raising funds			
Sale of educational materials	83,626	21,690	**105,316**
Charitable Activities:			
the promotion and improvement of the teaching of science:			
Members registration and services	43,002	24,222	**67,224**
Book sales	42,656	58,601	**101,257**
Journal expenditure	45,709	103,453	**149,162**
Conferences and other CPD	54,817	53,530	**108,347**
Regional expenses	75,800	405	**76,205**
Advocacy & other projects	15,843	15,868	**31,711**
Support costs	59,177	99,938	**159,115**
Governance costs	24,712	14,345	**39,057**
Restricted project expenditure (see note 18a and 18b)	397,848	471,119	**868,967**
Total expenditure 2022	843,190	863,171	**1,706,361**
Restricted expenditure	397,848	471,119	**868,967**
Unrestricted expenditure	445,342	392,052	**837,394**
Total expenditure 2022	**843,190**	**863,171**	**1,706,361**

Included above is £101,257 book sales expenditure related to the subsidiary company. The charity only expenditure on raising funds is £105,316 and charitable activities is £1,549,788. Non-staffing related support costs of £99,938 consist of premises costs, insurance, bank fees and other professional fees and subscriptions.

9. Net income / (expenditure) for the year

This is stated after charging / (crediting):	**2023**	2022
	£	£
Amortisation	**-**	30,000
Payments under operating leases	**2,096**	2,096
Auditor's remuneration:		
Audit fees	**7,500**	9,750
Non audit fees	**0**	666

10. Analysis of staff costs, trustee remuneration and expenses, and the cost of key management personnel

Staff costs were as follows:	**2023**	2022
	£	£
Salaries and wages	**693,519**	740,551
Social security costs	**50,492**	48,817
Employer's contribution to defined contribution pension schemes	**51,087**	53,822
	795,098	843,190

The following number of employees received employee benefits (excluding employer pension) during the year between:

	2023	2022
	No.	No.
£60,001 -£70,000	**-**	1

The total employee benefits including pension contributions of the key management personnel were £72,087 (2022: £65,154).

Five trustees were reimbursed expenses during the year for travel, accommodation and subsistence costs totalling £2,730 (2022: £2,154).

No Trustee received remuneration or benefits as a trustee however the following trustees received remuneration for the following services provided to the charity: Bryan Berry £250 (2022: £6,293) for CPD delivery, Susan Burr £600 (2002: £nil) for resource evaluation, Jane Turner £500 (2022: £1,500) for journal editing and Helen Harden £3,625 (2022: £2,138) for journal editing and commissioning. Remuneration to trustees for services provided to the charity were paid under the provisions in Section 5 of the Association's Royal Charter.

10 Analysis of staff costs, trustee remuneration and expenses, and the cost of key management personnel continued

Staff numbers

The average number of employees (head count based on number of staff employed) during the year was as follows:

Staff costs were as follows:	**2023**	2022
	No.	No.
Millgate House Education employees	**2**	2
The Association for Science Education employees	**32**	33
	34	35

11. Taxation

The charitable company is exempt from corporation tax as its non-primary purpose trading income is below the small trading limit allowable for charities.

12. Investments

Millgate House Education Limited
On 1st September 2017 the Association for Science Education acquired Millgate House Education Limited, a company incorporated in the United Kingdom and limited by guarantee. Its results have been consolidated in these financial statements. Millgate House Education is considered by the Trustees of the charity to be undertaking primary purpose trading, namely selling science publications.

The registered office of Millgate House Education Limited is College Lane, Hatfield, Hertfordshire, AL10 9AA. Its company registration number is 10875129. It had a deficit for the year of £8,750 (2022: surplus of £36,779) and at the end of the year its net liabilities were £26,139 (2022: £17,389).

13. Stock

Stock	**Group**	Group	**Charity**	Charity
	2023	2022	**2023**	2022
	£	£	**£**	£
Publications for resale	**17,825**	26,145	-	-
	17,825	26,145	-	-

14 Debtors	**Group**	Group	**Charity**	Charity
	2023	2022	**2023**	2022
Due within one year	**£**	£	**£**	£
Trade Debtors	**105,615**	198,528	**101,993**	188,924
Amount due from subsidiary	**-**	-	**190,123**	132,673
Other debtors	**149**	483	**149**	483
Prepayments and accrued income	**45,544**	108,655	**45,544**	108,655
	151,308	307,666	**337,809**	430,735

15 Creditors: amounts falling due within one year

	Group	Group	**Charity**	Charity
	2023	2022	**2023**	2022
Due within one year	**£**	£	**£**	£
Trade creditors	**16,869**	35,786	**17,101**	32,541
Taxation and social security	**34,128**	55,026	**34,128**	55,026
Accruals	**59,559**	101,102	**57,236**	101,102
Member subscriptions in advance	**119,906**	160,200	**119,906**	60,200
Journal subscriptions in advance	**20,852**	21,117	**20,852**	21,117
Journal subscriptions in advance	**5,000**	-	**5,000**	-
Prepayments and accrued income	**256,314**	373,231	**254,223**	369,986

Member subscriptions are generally paid in advance for a period of one year or three years and therefore a proportion of this payment is deferred into the following financial year(s). Library subscriptions are paid one year in advance.

16. Analysis of net assets between funds - Group

	Group Unrestricted £	Group Restricted £	**Group Total funds £**
Current assets	447,162	149,203	**596,365**
Creditors due within one year	(256,314)	-	**(256,314)**
Net assets at the end of the year	**190,848**	**149,203**	**340,051**

Analysis of net assets between funds - Charity	Charity Unrestricted £	Charity Restricted £	**Charity Total funds £**
Current assets	471,208	149,203	**620,411**
Creditors due within one year	(254,223)	-	**(254,223)**
Net assets at the end of the year	**216,985**	**149,203**	**366,188**

17. Analysis of net assets between funds - prior year - Group

	Group Unrestricted £	Group Restricted £	**Group Total funds £**
Fixed Assets	-	-	**-**
Current assets	589,108	132,397	**721,505**
Creditors due within one year	(373,231)	-	**(373,231)**
Net assets at the end of the year	**215,877**	**132,397**	**348,274**

Analysis of net assets between funds - Charity

	Charity Unrestricted £	Charity Restricted £	**Charity Total funds £**
Fixed Assets	-	-	**-**
Current assets	603,247	132,397	**735,644**
Creditors due within one year	(369,986)	-	**(369,986)**
Net assets at the end of the year	**233,261**	**132,397**	**365,658**

18a. Movements in restricted funds - Group and Charity

	At the start of the year	Incoming resources	Outgoing resources	**At the end of the year**
	£	£	£	**£**
Restricted funds:				
Alexander Memorial	9,819	-	-	**9,819**
Gatsby Rise (Retention Initiative for Science Education)	-	9,100	(9,100)	**-**
Gatsby post 16 resources	1,900	-	(1,900)	**-**
Wolfson Keeping Science Practical	30,192	83,296	(47,731)	**65,757**
Wellcome - Topic Level micro accredited CPD	-	38,830	(17,896)	**20,934**
Key Moments in history: a fossil hunter's story	8,600	-	(8,337)	**263**
Science Education for Action and Engagement towards Sustainability (SEAS)	2,441	-	(2,411)	**30**
Science on stage UK	1,281	-	-	**1,281**
IoP Inclusion in Schools	39,978	-	(16,959)	**23,019**
SLI Inclusion in Schools	38,186	581,599	(588,445)	**31,340**
Key Moments in history: a fossil hunter's story Amplification	-	-	(3,240)	**(3,240)**
Total restricted funds	132,397	712,825	(696,019)	**149,203**

18b. Movements in restricted funds - prior year - Group and Charity

	At the start of the year	Incoming resources	Outgoing resources	**At the end of the year**
	£	£	£	**£**
Restricted funds:				
Alexander Memorial	9,819	-	-	**9,819**
Science Teacher SOS	1,387	-	(1,387)	**-**
Gatsby Rise (Retention Initiative for Science Education)	-	24,800	(24,800)	**-**
Gatsby post 16 resources	-	22,900	(21,000)	**1,900**
Wolfson Keeping Science Practical	-	66,374	(36,182)	**30,192**
Wellcome - Topic Level micro accredited CPD	-	69,475	(69,475)	-
Key Moments in history: a fossil hunter's story	11,398	40,564	(43,362)	**8,600**
Science Education for Action and Engagement towards Sustainability (SEAS)	4,222	3,093	(4,874)	**2,441**
Science on stage UK	1,281	-	-	**1,281**
IoP Inclusion in Schools	(1,975)	550,350	(508,397)	**39,978**
SLI Inclusion in Schools	-	197,676	159,490)	**38,186**
Total restricted funds	26,132	975,232	(868,967)	**132,397**

Purposes of restricted funds

Alexander Memorial
The Alexander Memorial Fund represents a legacy of £10,000 from the late Professor and Mrs Alexander which the ASE has been requested to administer for a memorial award until the funds expire. No prizes were awarded in 2022/23.

Gatsby Rise (Retention Initiative for Science Education)
A programme to expand the reach and impact of the Science Teacher SOS Framework and survey by developing an accompanying package of support that can be used proactively by science leaders to support the wellbeing, career development and ultimately retention of their team throughout the year.

Gatsby post 16 resources
Funding to enable the ASE to support implementation of Benchmarks 1 and 2 of the Gatsby Charitable Foundation's Good Practical Science Report, which provides a framework for good practical science in schools and colleges. Further information is available on both the ASE and the Gatsby Charitable Foundation's websites and in the Trustees' Report.

Purposes of restricted funds continued

Wolfson Keeping Science Practical
A programme to provide extended support for disadvantaged secondary schools across the UK, focused particularly on practical science. Delivered through a targeted and tailored programme of online and face to face CPD for heads of science, early careers teachers and school science technicians.

Wellcome - Topic Level Micro-accredited CPD in Science
A project to test the impact and value of delivering subject-specific CPD in upper primary and lower secondary science through 'bite-sized' online courses linked to micro-accreditation.

Key Moments in history: a fossil hunter's story
This project is producing teaching resources and professional learning strategies for primary teachers of children aged 9-11 years to support their knowledge and understanding of the big ideas of evolution, the nature of scientific enquiry and the strengths and limitations of scientific knowledge. The project is supported by the Templeton World Charity Foundation and more information is given in the Trustees' Report.

Science Education for Action and Engagement towards Sustainability (SEAS)
ASE is a partner organisation for this EU Horizon 2020 funded project which is led by the University of Oslo. More information is provided in the Trustees' Report.

Science on stage UK
Funding to pilot an end-use and effectiveness study of the Science Teacher SOS framework, more information is provided in the Trustees' Report.

IoP Inclusion in Schools
ASE was subcontracted by the Institute of Physics to deliver the Inclusion in Schools project on behalf of the DfE from 1st August 2021 to March 2022. The primary purpose of this project was to significantly increase the number of students from under-represented groups progressing to physics-based routes (A-level physics, vocational or technical) post the age of 16.

SLI Inclusion in Schools
From April 2022, the ASE was subcontracted by STEM Learning to continue to deliver the Inclusion in Schools project on behalf of the DfE.

Key Moments in history: a fossil hunter's story - Amplification
ASE was awarded a new grant from the Templeton World Charity Foundation in 2023-24 to amplify the impact of the Key Moments in history project detailed above.

19. Reconciliation of net income / (expenditure) to net cash flow from operating activities

	2023	2022
	£	£
Net income / (expenditure) for the reporting period (as per the consolidated statement of financial activities)	**(8,223)**	115,717
Interest received	**3,328**	150
Depreciation and amortisation	**-**	30,000
(Increase) / decrease in stock	**8,320**	5,788
(Increase) / decrease in debtors	**156,358**	(143,981)
Increase / (decrease) in creditors	**(116,917)**	(9,285)
Net cash provided by / (used in) operating activities	**42,866**	(1,611)

20. Analysis of changes in net debt

The charity had no debt during the year.

21. Operating lease commitments

Total future minimum lease payments under non-cancellable operating leases are as follows:

	Group		**Charity**	
	Property		Property	
	2023	2022	**2023**	2022
	£	£	**£**	£
1 year	**1,644**	2,096	**1,644**	2,096
2 - 5 years	**3,972**	4,932	**3,972**	4,932
After more than 5 years	**-**	-	**-**	-
	5,616	7,028	**5,616**	7,028

22. Legal status of the charity

The charity is a company established by Royal Charter and has no share capital.

23. Related party transactions

There were no related party transactions other than payments to Trustees for services as detailed in note 10.

Legal and Administration Information

Trustees who served during the year and up to the date of approval of the financial statements:	Ali Redmore - Appointed by Membership and Chair of Trustees (retired July 2023) Manoj Chitnavis – Appointed by membership (Chair of Trustees from August 2023) Susan Burr – Elected by Membership, Association Treasurer Daniel Sandford Smith – Elected by Membership (retired July 2023) Geoff Mackey – Elected member Bryan Berry - Appointed Member Olivia Bussey - Appointed member from August 2023 Maggie Hannon – Appointed Member (Trustee rep on Q&A Committee) Cerian Ayres – elected by Education Group Leigh Hoath – elected by Education Group (Co Chair of the Association from August 2023) Helen Harden - elected by Education Group and Chair of the Association (August 2022 - July 2023) Alex Sinclair – Co Chair of the Association (from August 2023) Jane Turner – Immediate past Chair of the Association (retired July 2023) Jane Oldham - Chair Elect of the Association from Sept 2023 (Observer)
Patron	Following the death of HRH The Prince Philip, Duke of Edinburgh, KG,PC, KT, GMBE, FRS we await notification of our new Royal Patron
President	Prof Michael J Reiss
Chair of the Association	Helen Harden (1st August 2022 – 31st July 2023) Dr Alex Sinclair and Dr Leigh Hoath (Co Chairs from 1st August 2023 - 31st July 2024)
Chief Executive Officer	Hannah Russell (until 9th October 2022) Lynn Ladbrook (from 10th October 2022)
Charity number:	313123
OSCR number:	SC042473
Royal Charter incorporation number:	RC000805 (England and Wales)
Principal address	College Lane Hatfield AL10 9AA
Auditors	Goldwins Limited 75 Maygrove Road West Hampstead London NW 6 2EG
Bankers	NatWest Plc 35, Town centre Hatfield AL10 0JU



First published 2024
Association for Science Education
College Lane, Hatfield, Herts AL10 9AA
Tel: +44 (0)1707 283000
Email: info@ase.org.uk
Website: www.ase.org.uk
© 2024 Association for Science Education

The materials in this publication may be reproduced for personal and educational use of a non commercial nature without the permission of the publisher or author provided that the source is acknowledged. Permission is needed to copy or reproduce for any other purpose, and requests should be addressed to the ASE.

THE ASSOCIATION FOR SCIENCE EDUCATION

England & Wales - Charity number 313123

Accounts







Trustees' annual report and group financial statements for the year ended 31 July 2022

The Association for Science Education

The Association for Science Education

Contents

Trustees' Report
- Legal and Administrative information 2
- Chair's Introduction 3
- Highlights of 2021/22 5
- Achievements and Performance 6
- Plans for 2022/23 16
- National Committees 17
- Honourary Treasurer's Report 19
- Trustees' report 20

Statement of Trustees' responsibilities 23
Independent Auditors' Report to the Trustees 24
Consolidated Statement of Financial Activities 27
Charity Statement of Financial Activities 28
Consolidated and Charity Balance Sheets 29
Consolidated Statement of cash flows 30
Notes to the financial statements 31

First published 2023
Association for Science Education
College Lane, Hatfield, Herts AL10 9AA

Tel: +44 (0)1707 283000
Email: info@ase.org.uk
Website: www.ase.org.uk

© 2023 Association for Science Education
The materials in this publication may be reproduced for personal and educational use of a non-commercial nature without the permission of the publisher or author provided that the source is acknowledged. Permission is needed to copy or reproduce for any other purpose, and requests should be addressed to the ASE.

Legal and Administrative information

Trustees who served during the year and up to the date of approval of the financial statements:	Ali Redmore - Elected by Membership and Chair of Trustees Roger McCune MBE - Appointed Member, Association Treasurer (until 31 July 2022) Bryan Berry - Appointed Member Maggie Hannon – Appointed Member (Trustee rep on Q&A Committee) Daniel Sandford Smith – Elected by Membership Susan Burr – Elected by Membership, Association Treasurer (from 1 August 2022) Simon Quinnell – representing Education Group and immediate past Chair of the Association (until 31 July 2022) Leigh Hoath – representing Education Group Manoj Chitnavis – elected by Membership (appointed 1 August 2022) Cerian Ayres – representing Education Group (appointed 1 August 2021) Jane Turner – representing Education Group and past Chair of the Association (appointed 1 August 2021) Geoff Mackey – elected by Membership (appointed 1 August 2021) Helen Harden, Chair of the Association (appointed 1 August 2022)
Patron:	Following the death of HRH The Prince Philip, Duke of Edinburgh, KG,PC, KT, GMBE, FRS we await notification of our new Royal Patron
President:	Prof Michael J Reiss
Chair of the Association:	Jane Turner (1 August 2021 – 31 July 2022) Helen Harden (1 August 2022 – 31 July 2023)
CEO:	Hannah Russell (until 9 October 2022) Lynn Ladbrook (from 10 October 2022)
Charity Number:	313123
OSCR:	SC042473
Royal charter incorporation number:	RC000805 (England and Wales)
Principle Address:	College Lane, Hatfield, AL10 9AA
Auditors:	HW Fisher LLP Acre House, 11-15 William Road, London, NW1 3ER
Bankers:	NatWest Plc 35, Town centre, Hatfield, AL10 0JU

Chair's Introduction

As the teaching community emerges from the challenges of dealing with Covid-19 into a still-challenging education landscape, the ASE has remained ever-strong in its commitment to the pursuit of excellence in science education.

As the impact of Covid-19 persisted through the academic year 2021-22, ASE members across the UK and internationally worked together with staff and trustees to ensure that our vision, community and shared expertise continue to support all members in their professional roles.

Together we have offered a wide range of opportunities for professional learning and friendship, ensured members' voices are heard at national policy level and delivered innovative and influential projects, all driving our mission to promote excellence in science education.

At the heart of our strategic plan and operational delivery are our volunteer committees. As chair of the ASE 2021-22, I have been privileged to witness at first hand much of this committee activity, via Education Group and also (my highlight of the year) the joint committees' face-to-face meeting held at the impressive Institute of Physics building in London in June. After two years of Zoom meetings, it was wonderful to be together with so many members, to share ideas and challenges and be able to thank committee members for the work they do and feel the ASE buzz.

Many of us have the professional joy of experiencing that buzz many times over at national conferences and were very sad that, as a result of a surge in Covid-19 cases, it was not possible to hold a face-to-face event in January 21. However, thanks to the hard work of the team and Honorary Conference Secretary, Professor Christine Harrison, we pivoted with remarkable speed to deliver four excellent online conference days, where the ASE buzz could be felt through the Wi-Fi. I am delighted that the experience of putting on successful on-line events has been used to build a new model for national conference from January 23 onwards, when there will be a combined face-to-face and



live-streamed programme which will enable more members to attend and benefit from one of the key elements of the ASE offering.

This approach chimes with our work to create a more diverse, equitable and inclusive association where all science educators can share in the advantages and benefits of ASE membership. Field Officer Rob Butler has led this significant work with diligence and modest flair, expertly informing, training and listening to committee members, and raising our awareness and capacity to shape our association as a community for all science teachers and technicians.

The regional committees and field officers play a big part in ensuring all members have access to ASE membership benefits and advantages, through local activities both face-to-face and

online. It has been good to meet together at twice yearly Regional Officer on-line meetings to share what works. The expertise of this group, along with that of the national committees, has played an important role in informing the proposal for an ASE-wide CPD strategy which was taken to trustees by Education Group in March. The proposal is for a regular guaranteed CPD offer for all members, encompassing the regional and national events offer, building on our combined experience of online delivery and maximizing the potential of our community of experts.

My tenure ended shortly before that of Hannah Russell, who moved to the British Science Association in October. She hands over the leadership baton, which she has expertly carried through a very challenging time, to Lynn Ladbrook, who we welcome as our new CEO. I want to thank Hannah for her professionalism and kindness: she has been an inspirational colleague, amongst other inspirational figures in the ASE community.

When everyone works so hard, and shows so much commitment to the ASE mission, it feels wrong to mention only a few close colleagues, but I cannot end this report without thanking firstly Jane Hanrott, whose hard work and wisdom has guided the ASE journals for more years than she would like me to mention and who took a big (but thankfully not total) step towards retirement from ASE this year.

I also want to thank my partners in the chair trio, Simon Quinell and Helen Harden. They both exemplify the ASE: they are passionate about science education and care passionately for science educators, working tirelessly to ensure that the ASE offers multiple individual professional benefits, as well as career-developing advantages to all members. And they do this, like all other committee members, staff and trustees, with a strong commitment to excellent communication and collegiality within a warm and professional community.

However, my final thanks go to each and every member of the ASE community for their contribution to our shared endeavour to promote excellence in science education, and to making our community so strong, supportive and effective. Together, as this report demonstrates, we can do so much.

#WearetheASE

Jane Turner

Chair of the Association 2021/22





Highlights of 2021/22

- ASE launched the hugely successful A Fossil Hunter's Story hub: a high-quality suite of resources for pupils aged 9-11 years – including a multi-award winning short film – that give insight into the life of fossil hunter Mary Anning. This resource explores the science of fossils and evolution while reflecting on the influence of historical, cultural and religious thinking in changing ideas.

- Our Inclusion in Schools programme continued to grow and make real-world impact as we support secondary schools to improve their inclusive practice to help student engagement, attendance, attainment and well-being.

- Our Online Annual Conference (as a result of the surge in Omicron cases) attracted nearly 1,000 delegates over four one-day multi-stream events in January and February 2022.

- Our face-to-face summer conferences (South East, Scotland, Futures and Technicians) brought over 300 local teachers and technicians together for the first time since the pandemic and more than 100 delegates registered for the biennial ASE Northern Ireland Conference.

- Our series of topical webinars relating to Ofsted – including discussion about the recent science research review – attracted more than 1,700 educators.

- Our regional field officers were able to bring over 2,000 local teachers, technicians and teacher educators together to learn, share best practice and access crucial peer support.

- We ran a series of online professional registration workshops, helping to attract 54 successful applications for professional registration.

- The Science Department membership – introduced in 2020/21 – has seen more than 270 schools and colleges sign up. This represents more than 1,300 individuals who are now part of the ASE family.

- Following feedback from members and committees we launched our new format School Science Review. SSR In Practice (print and online) draws on the expertise of our entire community and offers practical ideas, continuous professional development (CPD) and real world science. SSR in Depth carries more in-depth articles and scientific thinking to support science teaching and learning.

About the ASE

The Association is structured as a charity, registered with the Charity Commission in England and with the Office of the Scottish Charity Regulator in Scotland and incorporated by Royal Charter. The ASE is obliged in law to confer public benefit – it does this through its aims, which are wholly concerned with education.

The aims express a commitment to improving science education for all young people, primarily but not exclusively across the UK. This is achieved by supporting science educators across the sector, including trainees, teachers, technicians, initial teacher educators, consultants, researchers and others concerned in the provision of science education in schools and colleges, and by influencing components of society, including government, such that science education can flourish. The ASE has its focus solely on science education and, as such, we are uniquely placed among professional bodies in supporting everyone working in education across the sciences.

The ASE is governed by a Board of Trustees and supported by membership committees and a head office team of staff.

Our activities and priorities are informed by the work of our Education Group, made up of 25 members who advise the charity on all aspects of Science Education. The Education Group is ably support by dedicated committees and specialist groups again, comprised of members of the teaching and technician community. Our members groups are as follow:

- Primary Committee
- 11-19 Committee
- Laboratory Technicians Committee
- Futures Committee

Our Special Interest groups include:

- International Group
- Research Group
- Health and Safety Group
- Registration Board
- Publications Groups

Committee members contribute articles to journals, speakers and topics for conference, they support with our social media, our communications, input into resources and best practice guides and are strong advocates of professional registration and continuous professional development across the community.

We greatly value the time, expertise and contributions our committee members make. Without their input and support, the ASE would be unable to produce the resources, insights, opinion, journals, professional development and all of the other activities and support it puts together. A brief summary of committee activity can be found on page 17.

Strategic Plan 2020–2024

We have committed to focusing on the following challenges over the next three years, embedding them across 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;

The 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.

A commitment to **embedding equality, diversity and inclusion** across our activities, systems and processes.

To meet these challenges, we have identified four strategic themes, together with key deliverables that will help us to measure our impact:

- **Community** – Expanding our reach and ensuring our ongoing offering is fit for purpose for both our membership and the wider science education community.

- **Professionalism** – Supporting the professional learning journeys of all those associated with the field of science education through the provision of both CPD and educational resources.

- **Advocacy** – Amplifying the voice of the science education community and drawing upon its expertise to advise stakeholders and decision-makers.

- **Organisational sustainability** – Ensuring operational excellence through effective use of governance, information technology (IT), marketing and communications, finance and human resources and identifying new revenue generation opportunities.

We recognise that working in partnership is and will continue to be vital in delivering our strategy. We value our work with key partners and will continue to engage with stakeholders in the UK and internationally to support our community and achieve our mission.

A full copy of our strategic plan can be found online at www.ase.org.uk/governance

Community

We are committed to fostering and supporting the science teaching community – to bringing together teachers, educators and technicians, across all sectors and career stages, from within the UK and internationally. We aim to promote collaboration, share best practice and facilitate access to expertise and knowhow. We do this through our regional teams, membership committees, conferences, activities and communications.

Our Membership

The ASE has over **6,500 members** and includes individual primary school teachers, 11-19 teachers, technicians, early career teachers, trainees and retired individuals. We also have more than 650 primary schools and 270 secondary schools and colleges as institutional members, bringing with them more than 3,700 named educators into our community.

A key component of our community support is our regional network. Led by our regional committees and co-ordinated by eight field officers, our regional network supports the ASE membership and wider science education community in their local area through regional events and distribution of information. Local events run by our regional team have helped to bring together over 2,000 educators to learn, share best practice and access support from like minded colleagues. These networks provide an invaluable community of support: a key pillar of our membership offer.



Recruitment, Retention and Wellbeing

Another important strand of activity is our ASE RISE project. **The ASE RISE project** – or the Retention Initiative for Science Education – seeks to understand the needs of and support the wellbeing of teachers. Data from anonymised surveys completed by teachers at participating schools on various aspects of personal wellbeing, is shared with school leaders, helping them to identify the needs and concerns of their teaching workforce. In addition, we provide an extensive range of resources on the RISE website hub to help guide them through the process of analysing their school's results and providing tools to help them address key concerns. While the pandemic has impacted initial registrations for this project, we look forward to extending this project into 2023.

The goal of keeping teachers in teaching was behind the **Science Teachers SOS** initiative begun in 2017. The resources on our Science Teacher SOS site continue to be popular – with over 3,000 downloads of the SOS booklet so far. We were delighted in 2021/22 to repurpose this document to specifically address the needs of school technicians. Technicians play a key role in enabling students to access safe and effective practical science as well as providing vital support to science teachers and it is vital that we retain as many in their role as possible.

Conferences and Events

We offer a wide range of conferences and events, providing not only important opportunities for CPD, but also networking and peer support.



Our **Annual Conference** took place online in January, offering sessions and workshops on a wide range of topics including sustainability, science in early years, the development of science capital and cross-curricular approaches to teaching evolution and attracted nearly 1,000 delegates across four days. We would like to thank all of our committees, speakers, partners and sponsors – particularly headline sponsors AQA – for supporting this event and look forward to returning to a face-to-face format in 2023.

We also held face-to-face **conferences in Scotland** (in partnership with SSERC) and in the **South-East**. In addition, we hosted a **Technicians Summer Conference South** in Surrey in June and a **'Futures' Conference** in Northampton. Although numbers were slightly impacted by the pandemic, these were well received and attended in total by 271 delegates. The biennial Northern Ireland Conference, meanwhile, went ahead following an online model, and once again was well-received with more than 100 delegates signing up.

ASE continues to provide the secretariat for **Science on Stage UK** (SonS). The festival this year was held in Prague. The UK sent 13 delegates, two of whom were representatives of ASE. Our thanks go to Stuart Farmer, David Featonby and all the members of the UK SonS Committee, who continue to support and encourage prospective applicants.

The Great Bug Hunt is an annual primary school competition run by the ASE in partnership with the Royal Entomological Society. The ever-popular competition – now in its seventh year - was created to help encourage teachers to take science learning out of the classroom and bring it to life in the outdoors. This year's competition attracted more than 1,100 entries and, as always, we were delighted to receive a fantastic range of entries in the form of workbooks, posters and factsheets.



Professionalism

We offer a comprehensive learning journey for all those with an interest and career in science education. We offer continuous professional development through events, publications, projects, online webinars and workshops. In addition, we offer professional registration, and there are many and varied opportunities to grow skills through direct involvement with the ASE itself.

Publications and Book Sales

In 2021/22 our range of publications continue to be a keystone in the provision of professional development and best practice.

New books released in the past 12 months include Understanding chemistry through microscale practical work, Teaching Primary Science Outdoors and Superhero Scientists, the latter winning the STEM category at the annual Teach Primary! Awards.

We continue to sell older titles, such as Concept Cartoons, Be Safe and It's Not Fair, while all three Hodder books for Teaching Secondary Physics, Biology and Biology are now available through our online bookshop.

ASE Journals continue to be an important source of information, news, the latest research, pedagogy and practical science:

- ***Education in Science*** provides all the latest news and practical science with themed editions looking specifically at climate change; the 2022 Annual Conference and practical science.

- In 2021/22 we launched the new two part-format of the triannual ***School Science Review*** (SSR). SSR In Practice is a practitioner-focused, professionally-reviewed magazine and is intended to be read in conjunction with the more in-depth, academically-reviewed, SSR in Depth.

- We welcomed new editor Robert Collins to our ***Primary Science*** journal. Themes for the five issues this year included Models and Analogies, Remote learning and the Nature of Science and Diversity in science. There was a special issue on Growing Science Capital sponsored by the Centre for Industry Education Collaboration (CIEC).



- ***The Journal of Emergent Science*** complements our Primary Science journal with a focus on the implications of research on practice and provision. It is supported by the Primary Science Teaching Trust (PSTT).

- ***Science Teacher Education*** continues to focus on the professional development of science teachers including guidance for trainees in the classroom.

- Themes for this year's two editions ***ASE International*** included distance education and play for learning, climate education and sustainability.

We are extremely grateful to our editors, their editorial boards, reviewers and our authors, without whom ASE journals would not exist.



Digital Resources

The most notable of our new online resources was the hub-page for **A Fossil Hunter's Story** – which was officially launched in early 2022. Embedded at the heart of this project is our award-winning film Sea Dragon, which won three international film festival awards including Children's Jury first place at the Chicago International Children's festival (CICFF) 2021 in the live-action Short Film category. **The film sets the scene for a series of enquiry-based activities - all with in-depth accompanying teachers notes** - through which children explore the lives, ideas and events that were significant in the development of scientific ideas and thinking in the 19th century. The hub-page quickly became the most visited page on the ASE website and has remained one of the five most popular resource pages, with nearly 2,500 views.

We have also updated many of our online **11-19 resources** and sub-divided the resources into "Classroom" and "Departmental / CPD". We have also built a new video hub hosting a series of 22 recordings from webinars/conferences of particular relevance to secondary educators.

With the financial support of the Gatsby Foundation, we have **audited and curated over 800 post-16 resources** developed over the last 25 years with a view to providing a dedicated Post-16 resource on our website in the next financial year.

With support from our Technicians Committee, we have also launched a new **Technicians Resource hub**, featuring, among other things, the new **Science Technicians SOS** document, a self-help guide aimed at technicians considering leaving the profession.

We have also accredited eight new resources under our **Green Tick accreditation scheme**: a scheme which enables commercial organisations to submit their educational resources for ASE evaluation.

Online Learning

We continued to provide high quality online learning opportunities throughout the year including sessions on **Technician CPD** (delivered by Simon Quinell), **SEND** (Rob Butler) and **Physics for Non-Specialists** (Physics Partners Ltd). In total our paid-for online learning modules attracted 402 delegates.

We ran a series of Ofsted-related webinars on both the recent Ofsted Research review and general advice on preparing for an Ofsted inspection, attracting a total of more than 1,700 sign-ups, and an autumn series of environmental education facing webinars (tying in with COP-26) generating more than 500 registrations in total.

Projects and initiatives

ASE works in partnership to develop dedicated projects and initiatives that address specific issues and provide an innovative approach to curriculum development.

Science Education for Action and Engagement towards Sustainability (SEAS) The Horizon 2020 programme – SwafS-2018-2020 (Science with and for Society) – established six open schooling networks led by universities and science centres, with partners in Austria, Belgium, Estonia, Italy, Norway, Sweden and the UK. The lead organisation is the University of Oslo, with ASE a UK partner. The focus for this final year has been on working with an assessment framework for evaluating the project's impact, and disseminating this impact, including at ASE's annual conference and as part of ASE's summer webinar programme.

Advanced Mathematics Support Programme (AMSP) Now entering its third phase of funding, this Department for Education-funded project in partnership with Mathematics in Education and Industry (MEI) as part of the AMSP aims to develop the capacities and confidence of biology teachers in their use of mathematics within the post-16 context, and to encourage more students to study Level 3 mathematics during the post-16 phase. Supported by a focus group of experienced school science leaders who teach post-16 biology and individuals with experience of curriculum and assessment design, the project delivered two very popular and well-received online courses.

Keeping Science Practical With thanks to support from the Wolfson Foundation, we launched a practical science support programme for up to 120 schools in disadvantaged communities across the UK over a three-year period. Year One met our success criteria with, for instance, only 6% of responses to a baseline survey reported having a written policy for practical work compared with 57% at the end of Year One, and 68% of respondees agreeing with the statement 'Has purposeful practical science increased as a result of project participation?' at the end of Year One. These findings are also reflected in feedback from science leader, teacher and technician focus groups. Recruitment for Year Two was also ongoing through 2021-21, with our target of 40 schools met and 20 more on the waiting list for Year Three.

ASE BEST Bites CPD With thanks to funding from the Wellcome Trust we are working in partnership with the University of York Science Education Group, supported by CIEC, to develop and pilot the impact of using topic level bite-sized online CPD in science to support teachers in upper primary and lower secondary. The project involves using a learning management system to create four- to five-hour modules focusing on three different areas of the Key Stage 2/3 curriculum – light and shadows, living things and properties and changes of materials – with the aim that a non-subject specialist would be confident in teaching a lesson on that particular topic upon completion of the module. The modules will be piloted in Q1 of 2023, ahead of a full roll-out during the summer term.

Inclusion in Schools We are proud to have been subcontracted by the Institute of Physics as their delivery partner for the Inclusion in Schools aspects of their contract with the Department for Education. Following successful completion of this work, we secured further funding from the Department for Education through a Science CPD Partnership, led by STEM Learning. The project involves recruiting schools in disadvantaged areas and, through a team of specialist consultants and resources, helping them to formulate and then act-upon a school-wide inclusion policy. This work is very much in line with our strategic commitment to diversity and inclusion.

Professional Registration

A cornerstone of the ASE's professional offer is our professional accreditation. As a licensed body of the Science Council, the ASE is empowered under the terms of its Royal Charter to administer Professional Registration awards to individuals who meet the application requirements. Applicants must be active in science teaching and learning in the UK or overseas; this includes teachers and technicians in all state and independent schools, colleges and universities, as well as advisers, inspectors, consultants and researchers.

The Registration Board has awarded or reconfirmed members for Chartered Science Teacher (CSciTeach), the Registered Scientist Award (RSci) and Registered Science Technician (RSciTech). As of July 2022, we currently have 160 members with CSciTeach, 110 with RSciTech and 39 with RSci accreditation.



Advocacy

ASE is the voice of the science education community – we work to raise the profile of science teaching and learning and champion the needs of those working across science education. We work closely with partners, policy makers and stakeholders to help shape science education policy and practice and to highlight the key challenges facing our community, drawing on research and evidence to inform our policy activities.

During 2021/22 we have responded to a range of consultations, inquiries, surveys and stakeholder forums and attended meetings with Ministers, MPs and policy makers in Government Departments and other professional bodies.

We have lobbied on a number of key issues throughout this year including, for example:

- **On school Inclusion and SEND**: we've called for a requirement for all school leaders, teachers and supporting staff to undertake training, including unconscious bias training, and careers guidance where appropriate; a requirement for all schools to publish an evidence-based whole school equity action plan alongside their inclusion policy; a requirement for Ofsted to inspect progress against these plans, and comment on inclusion within all school inspections; and a requirement for Local Authorities to monitor equality action plans and inclusion policies.

- **On Curriculum Development**: we called for the involvement of subject associations in quality assurance roles in the new "arm's length curriculum body" of the Department for Education.

- **On Recruitment and Retention**: We have called for more focus on wellbeing, job satisfaction and active interventions that help to keep teachers and technicians in schools.

- **On Initial Teacher Training**: Whilst we've welcomed some of the intended outcomes of the market review, we've questioned the need for wholesale reform, the rushed timescale for implementation and the lack of a robust evidence base underpinning the review.

- **On Professional Development and Learning**: we have worked with Institute of Physics, Royal Society of Biology and Royal Society of Chemistry and others, to call for further support for the subject aspects of lifelong professional learning to support and supplement Initial Teacher Training, the Early Career Framework, the Subject

Knowledge Enhancement course, and National Professional Qualifications.

- **On Primary Science**: we have expressed concerns about over-emphasis on maths and English at the possible expense of science, called for more support and pilot programmes to promote quality assurance, higher teaching quality and learning and cluster moderation of teacher assessment amongst primary schools, and support for the expansion and support of the Primary Science Quality Mark.

- **On Practical Work**: we've called for a continuing emphasis on the importance of practical work in science, particularly following a reduction during the pandemic years, and for recognition of the often undervalued role played by school technicians.

- **On Post-16 qualifications**: while welcoming new Science T Levels, we have, in a joint response with the Institute of Physics, Royal Society of Biology and Royal Society of Chemistry, expressed concern that the rapid removal of funding from applied qualifications in STEM at Level 3 will limit opportunities to study STEM, reduce progression of learners and disproportionately affect those from underrepresented groups.

- **On Scottish Education**: we've raised concerns about the restructuring of Education Scotland and the replacement of the Scottish Qualifications Authority (SQA) as well as the disconnect between curriculum phases. We also contributed to a government consultation on data collection.

- **On Curriculum for Wales and Qualifications Wales**: we've fed back on the development and implementation of the science and technology area of learning and new science GCSE together with our partners at the Science Education Policy Alliance and ASE Cymru.

The ASE works independently in our advocacy work, but believes strongly in the power of partnerships. To this end we work collaboratively with a wide range of stakeholders in England, Scotland, Wales and Northern Ireland including the Royal Society, the Institute of Physics, Royal Society of Chemistry, Royal Society of Biology, the Institute for Research in Schools, STEM Learning, the Science Council, Primary Science Teaching Trust, SERCC, CLEAPPS and the Primary Science Quality Mark, as well as many other subject associations and professional bodies.

We are an active member of the Council for Subject Associations (CfSA) and the Science Working Group convened by STEM Learning. We are also represented in England on the Science Education Policy Alliance, in Scotland on the Royal Society of Edinburgh's Learned Societies' Group on Scottish Science Education (LSG); in Wales on the Senedd Cross Party Group on STEMM and are part of the Northern Ireland Assembly All Party Group on STEM.

The ASE also has active links with science associations from other countries, for example with the National Science Teachers Association (NSTA) and several sister associations across Europe, as much of our work has international relevance.



Organisational Sustainability

We recognise that in order to deliver on our strategic plan and our objectives of professionalism, community and advocacy, our organisation must be well run, well governed and financially sustainable. We believe equality, inclusion and diversity is a key strength and strive to ensure we are a welcoming, inclusive and forward thinking organisation.

The governance structure of the Association continues to follow charity sector best practice.

The Trustees have delegated the authority to manage the Association to the Chief Executive, who reports on the performance of the Association against the strategic plan approved by the Trustees. The Chief Executive, Hannah Russell left the organisation in September of 2022 to become CEO of the British Science Association. Following a competitive recruitment process, Hannah was succeeded in October 2022 by Lynn Ladbrook – who joins the organisation having previously been CEO at another professional society.

The Association is keen to encourage as wide a representation of its community as possible on its committees. We have worked this year to increase the visibility and profile of the national committees and groups by flagging more clearly their contributions to journals and including information on various committees in our journals. Members are invited to apply for committee vacancies through announcements in the ***Education in Science*** magazine and on the website.

We continue to review our IT to ensure systems and infrastructures are up to date and fit for purpose. We have continued to upgrade hardware and software to further facilitate remote working and reduce costs. In addition, we have committed to securing CyberEssentials Plus accreditation.





Following on from our participation in the 2021 Science Council and Royal Academy of Engineering Diversity & Inclusion benchmarking framework, the Association remains committed to embedding equality, diversity and inclusion across our activities. Training and workshops have been delivered on diversity and inclusion across Trustees, staff and committee members; our Trustee board has appointed an EDI champion, we have established an EDI group that monitors and actively works to improve aspects of our programmes and activities. We have made EDI a focus of articles in our journals and across our online and conference activities.

We maintain a wide number of governance policies and protocols pertaining to our internal good governance and compliance such as GDPR, conflicts of interest, professional conduct, health and safety, and safeguarding. These are reviewed regularly and accessible via our website.

Plans for 2022/2023

Promoting excellence in science education, improving outcomes and supporting our members and the wider science education community remains at the heart of the ASE.

As we look ahead to 2022/23, we will continue to work to deliver aspects of the Strategic Plan.

We will continue to focus on meeting the needs of our membership and reaching out to the wider professional teaching and technician community. We recognise that the teaching community faces fresh challenges, and increasingly competitive demands on their time as schools begin to understand the wider adverse consequences of Covid-19.

We anticipate that the rising cost of living may potentially impact the ability of members to maintain membership of professional societies and professional registrations and we will work hard to ensure our members get value for money. We will make our voice heard on their behalf to campaign for high quality science education, which is well funded, well structured, evidence-based and supports teacher recruitment, retention, training and wellbeing.

We return to more face-to-face events – at both Sheffield Hallam University for our Annual conference in January 2023, and at our regional and specialist conferences. And we look forward to expanding our activities internationally as we revisit Covid-disrupted plans to work with international partners in Europe, China, Bangkok and America.

We will seek to implement proposals for an association-wide CPD strategy as well as continuing to deliver a variety of online webinars and workshops, digital resources and publications.

We look forward to a time of innovation and change under the leadership of our new CEO and to working with all of our partners and supporters to address the many issues that face our science teaching community.

We will continue to explore opportunities to either lead on, or be a part of, external projects – measuring the value of engagement through the prism of both income/resource commitment to the organisation and potential impact/benefit on our membership and the science education community at large.



National Committees

During the year, the Association's committees continued to be active in furthering support and professional practice in science education. We provide here a short outline of some of the main activities of each committee for this financial year.

Education Group:

- Helped devise and shape proposal for an association-wide CPD strategy
- Informed ASE responses to consultations on ITE, Climate Change and Education White Paper
- Improved communications through establishment of WhatsApp group an online communication platform (Discord)
- Undertook Equality, Diversity and Inclusion training (run by staff member Rob Butler)
- Begun programme of work to review the structure and role of the national committees and groups

11-19 committee:

- Contributed to ASE's 11-19 subject-specific support including promoting and reviewing resources (such as Best Practice Guidance, the Curriculum Evolution document)
- Helped to shape annual conference sessions as well as active in presenting and hosting webinars
- Contributed to online twitter chat; #ASEchat
- Contributing articles to Education in Science and SSR in Practice
- Helped to shape, support and promoted science department membership.
- Attended Equality Diversity and Inclusion (EDI) workshop
- Contributed to ASE responses on recruitment and retention and helped promote ASE Science Teacher SOS and ASE RISE (Retention Initiative for Science Education) and engaged with results of the ASE RISE survey to suggest interventions

Primary Committee

- Helped shape sessions at ASE Annual Conference with engaging keynotes and a wide range of impactful workshops
- Reviewed and updated publications such as the Primary Science Leader's Survival Guide
- Contributed articles and reviews to the Primary Science Journal
- Members of the committee are also working with Explorify to develop plans to produce podcasts in the coming year with Explorify to support primary science and to promote the role of ASE
- Attended EDI workshop

Laboratory Technicians Committee

- Put together a varied technicians programme for the online Annual Conference
- Developed programme of workshops for the face-to-face Technicians Summer Conference South.
- Write the Prep-Room pages of Education in Science and the Practical Ideas pages of the new SSR in Practice
- Continue to act as strong advocates of

professional registration (RSciTech) in the community

- Oversaw production of The Technician SOS document

International Group

- Structured the online International Day as part of the Annual Conference 2022

- Ensured continued publication inclusion of innovative articles for the International Journal with the editor being part of the group

- Shaped International sessions at the annual conference (January 2023) which were embedded within the main conference days, enabling more members to have access to these sessions

Health and Safety Group

- Produced best practice guidance document on Health and Safety Monitoring of Science in Secondary Schools and Colleges as well as a second guidance document that explains ASE's position on managing health and safety in support of good practical science.

- Helped inform new 'in Practice' component of the new format of School Science Review (SSR)

- Continues to provide guidance on more challenging aspects of hazards in science through publications such as 'Topics in safety' and Education in Science

Futures Group

- Contributed to the Initial Teacher Training Market Review, the All Party Parliamentary Group response to the Initial Teacher Training and Early Career Framework; also to the 2022 Education White Paper and the STEM Learning national standards for subject-specific CPD subject component to the national standard for teaching

- Organised the Futures Conference which makes a valuable contribution to Futures members' professional development

- Hosted Futures Webinar on 'The ITT Market Review' with Sam Twistleton

- The group has also started a sequence of six webinars across the year to support the wider membership of the association

Research Group

- Members of the group work with the Education Endowment Foundation Research School network and other organisations in their professional roles and enable policy and practices promoted by ASE to influence policy elsewhere

- Led webinars and online sessions at the 2022 Annual Conference

- Contributed to articles for ASE journals and helped establish and provided articles for the new two-part School Science Review

Publications Group

- Appointed a new chair to help reinvigorate the work of the Group.

- Meets to discuss and inform ASE publications

- Helped shape the implement smooth transition to the new format for School Science Review

- Worked to established improved EDI representation across the Group and ensure there is representation within all member-facing materials

The Registration Board

- Met to award or reconfirm members for Chartered Science Teacher (CSciTeach), the Registered Scientist Award (RSci) and Registered Science Technician (RSciTech). Applications have been supported by online professional registration workshops delivered by the Field Officer team, as well as support from committee members

Honorary Treasurer's Report

As the new Hon Treasurer appointed August 2022 by the Trustees my role is to oversee financial matters of the Association on behalf of the Trustees and membership. The Trustees extend their thanks to Roger McCune who has held the post for the last five years.

For the year ending July 22, Chief Executive Hannah Russell and Director of Finance and Operations Laura Rafferty have provided support, clear financial information and planning, together with advice for the trustees.

The Strategic Plan with its threads of Community, Professionalism, Advocacy and Organisational Sustainability has been a major tool in informing and supporting the financial planning of the Association together with regular Risk Assessment of all aspects of our operation.

The Covid pandemic has had a major impact on our finances especially with the cancellation of face to face events including the Annual Conference 2022. In spite of these difficult times we have continued to support membership and have had some more positive opportunities too. For example, we were fortunate and are grateful to receive a further legacy from Rosemary Pickup and the residual part of legacy for the late John Barker.

Our income has increased by two thirds, largely thanks to increased project activity of which Inclusion in Schools has been the most financially significant. Increased project activity contributes to core costs and costs of individual projects are closely monitored. The pipeline will need to be maintained so that this stream of income continues to contribute towards our financial sustainability.

Our other main source of income is membership subscriptions. We have seen a continuing decline in individual membership over recent years, but the newly introduced secondary department membership has been successful and continues to grow. This will not fill the gap and future plans include a radical look at our membership offering and growth in other incomes streams, including business development. Our unrestricted funds are close to target level but will be monitored carefully.

At all times costs are closely monitored and a review of our journal offering and the increased move towards the use of online versions has had the added benefit of reducing print costs.

We have also finalised negotiations with the University of Hertfordshire to reduce our office space and associated costs.

Thanks to all members and staff who have contributed in many and various ways to the running of the Association in these difficult and challenging times.

I look forward with confidence to the leadership of our new Chief Executive, Lynn Ladbrook, and the continuing contribution of Finance Director Laura Rafferty.

Dr Susan Burr
Honorary Treasurer

Trustees' report

The financial statements have been prepared in accordance with the accounting policies set out in note 1 to the financial statements and comply with the Charity's constitution, the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005, regulation 8 of the Charities Accounts (Scotland) Regulations 2006 and Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS102) (effective 1 January 2019).

Objectives and activities

Objects

The objects of the Association are to promote education by the following means:

(a) improving the teaching of science; and

(b) providing an authoritative medium through which opinions of teachers of science may be expressed on educational matters; and

(c) affording means of communication among all persons and bodies of persons concerned with the teaching of science in particular and education in general.

Activities

The Rules of the Association provide for the promotion of its objects by:-

(a) holding general and other meetings; and

(b) publishing journals and other literature including literature in electronic formats concerned with the teaching of science and ancillary matters; and

(c) establishing and maintaining a centre or centres of administration and of information on any aspect of science education; and

(d)-(h) the administration of the Chartered Science Teacher award, CSciTeach including the register thereof and associated standards, admissions, removals, disciplinary matters and appeals, and

(i) such other means as the Association may from time to time determine and as may be consistent with the charitable objects of the Association.

Public Benefit

The trustees have complied with the duty in section 17 of the Charities Act 2011 to have due regard to public benefit guidance issued by the Charity Commission.

Structure, governance and management

The Association is governed by its Royal Charter (dated 13 October 2004) and associated By-laws (updated and approved by the Privy Council October 2012) and Rules of the Association (as adopted at the Annual General Meeting in January 2006 and amended most recently in January 2021).

At the Annual General Meeting in January 2011, members voted to change the governance structure of ASE to create a smaller body, which is the Trustee Body of the Association, (Council), responsible for all governance issues, and a larger Education Group, (Assembly), which concerns itself largely with issues related to ASE's work in science education and with communication. At the Annual General Meeting in January 2016, it was agreed that subject to formal changes to documentation and rules as necessary Council would now be known as the Trustee Body and Assembly as the Education Group.

The Trustees have responsibility for ensuring that ASE complies with relevant charity laws and regulations, that the finances are properly regulated and monitored and that appropriate policies are in place. The Trustees ensure that the activities of the Association fit with the Strategic Plan and take a long-term view of the health of the

Association.

The Trustee body consists of:

- three members elected from the Education Group of the Association
- three members elected from the membership by direct vote
- four further members appointed by Trustee body
- the Chair of the Association (may be delegated to the past-Chair of the Association)

One of the Trustees will be identified to represent Trustees on the Quality and Audit Committee. A Chair of Trustees and a vice Chair shall be elected from and by the Trustee members. The Chair-Elect and Immediate Past Chair of the Association may attend meetings of the Trustee Body and may participate in Trustee discussions both at and between meetings.

New Trustees take part in training on the management of the finances of the Association and on the responsibilities of trustees. They are given associated literature. On-going training consists of the circulation of Charity Commission updates and training on aspects of the Trustee's role.

The Trustees are responsible for the direction and management of the Association through its Strategic Plan. Key responsibilities include ensuring a clear vision, the corporate behaviour of the charity, legal and regulatory governance, compliance, guardianship of assets and ensuring high standards of governance. Day to day operational management of the organisation is delegated to the Chief Executive and the staff team who are accountable to the Trustees.

The Trustee body normally meets on three/four occasions during the year. Trustees who served during the year and up to the date of approval of these financial statements are listed below: -

Ali Redmore – Elected by Membership and Chair of Trustees

Roger McCune MBE – Appointed Member, Association Treasurer (until 31 July 2022)

Bryan Berry – Appointed Member

Maggie Hannon – Appointed Member (Trustee rep on Q&A Committee)

Daniel Sandford Smith – Elected by Membership

Susan Burr – Elected by Membership, Association Treasurer (from 1 August 2022)

Simon Quinnell – Representing Education Group and immediate past Chair (until 31 July 2022)

Leigh Hoath – Representing Education Group

Manoj Chitnavis – Elected by Membership (appointed 1 August 2022)

Cerian Ayres – Representing Education Group (appointed 1 August 2021)

Jane Turner – Representing Education Group and past Chair of the Association (appointed 1 August 2021)

Geoff Mackey – Elected by Membership (appointed 1 August 2021)

Helen Harden - Chair of the Association (appointed 1 August 2022)

Key Management Personnel

The Trustee Body and the Chief Executive are the key management personnel. The Chair and the Chief Executive are in regular contact to discuss ongoing matters and full reports from the Chief Executive are discussed at meetings of the Trustee Body including all matters relating to activities, finance, budgeting, strategy and future planning.

The Chief Executive is subject to an annual development review by the ASE Chair and Treasurer who advise the remuneration committee of proposed awards which are then ratified by the Trustee Body.

Financial review

The financial position of the charity and the group is set out in the financial statements, including

principal sources of funding and resources expended. The financial statements have been prepared in accordance with the accounting policies set out in the notes, the requirements of the Trust Deed and the Charities SORP (FRS 102) and comply with current statutory requirements.

Going concern

As stated in note 1b the Trustees have considered going concern. As detailed in note 1b, the Trustees have a reasonable expectation that the Charity and the group have adequate resources to continue in operation for the foreseeable future and therefore continue to adopt the going concern basis of accounting.

Risk assessment

The Trustees have assessed the risks to which the Charity and the group may be exposed. A risk register is produced quarterly by the Chief Executive and Director of Finance and Operations which sets out the main operational, finance and compliance risks facing the Association. Key risks are currently identified as the possible reduction in events and membership income due to the cost-of-living crisis and the resulting impact on the ability of the organisation to break even financially. Appropriate mitigating actions have been taken after discussions with the Board of Trustees, and these include the introduction of a hybrid offer at annual conference and a review of our membership model early in 2023.

Reserves Policy

Total group reserves as at 31 July 2022 are £348,274 (2021: £232,557). Of these £132,397 are restricted (2021: £26,132). Nearly all amounts in restricted funds will be spent on projects in the year ahead (see note 19 for further details).

It is the policy of the trustees to maintain free reserves at three months running costs plus the costs of an orderly wind-down of the organisation. At the time of writing this amounts to approximately £226,895.

Total group free reserves as at 31 July 2022 were £215,877 (2021: £176,425). Trustees are pleased to see that the level of free reserves has increased this year. The Trustees understand that further work must be done to improve our free reserves position and ensure that our financial model continues to be sustainable.

Investment Policy

Monies are currently held in an interest-bearing deposit account.

Membership numbers as at July 2022:

- Individual: 3,155 (2021: 3,949)
- Organisations: 907 (2021: 815)
- Total Members: 4,062 (2021: 4,764)

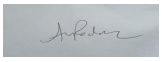
Disclosure of information to auditor

Each of the Trustees has confirmed that there is no information of which they are aware which is relevant to the audit, but of which the auditor is unaware. They have further confirmed that they have taken appropriate steps to identify such relevant information and to establish that the auditor is aware of such information.

Auditor

HW Fisher LLP were appointed auditor to the charity and the group and a resolution proposing that they be re-appointed will be put to the next Annual General Meeting.

On behalf of the Trustee Body

Alison Redmore 

Trustee

Dated: 20 Mar 2023

Statement of Trustees' Responsibilities

The Trustees are responsible for preparing the report of the Trustees and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The charity's Royal Charter and law applicable to charities in England & Wales and in Scotland requires the Trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charity and the group and of the incoming resources and application of resources of the group and charity for that period.

In preparing these financial statements, the Trustees are required to:

- Select suitable accounting policies and then apply them consistently;

- Observe the methods and principles in the Charities Statement of Recommended Practice (SORP);

- Make judgments and estimates that are reasonable and prudent;

- State whether applicable United Kingdom accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;

- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity and group will continue in operation.

The Trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charity and the group and enable them to ensure that the financial statements comply with the Charities Act 2011, the Charity (Accounts and Reports) Regulations 2008, the Charities and Trustee Investment (Scotland) Act 2005, the Charities Accounts (Scotland) Regulations 2006 and the provisions of the charity's Royal Charter. They are also responsible for safeguarding the assets of the charity and group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Independent Auditors' Report to the Trustees of the Association for Science Education

Opinion

We have audited the financial statements of The Association for Science Education (the 'parent charity') and its subsidiary ('the group') for the year ended 31 July 2022 which comprise the Consolidated Statement of Financial Activities, the Charity Statement of Financial Activities, the Consolidated and Charity Balance Sheets, the Consolidated Statement of Cash flows, and the notes to the financial statements, including significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

In our opinion the financial statements:

- give a true and fair view of the state of the group and parent charity's affairs as at 31 July 2022 and of the group's and charity's incoming resources and application of resources, for the year then ended;

- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and

- have been prepared in accordance with the requirements of the charity's Royal Charter, the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005 and regulation 8 of the Charities Accounts (Scotland) Regulations 2006 (as amended).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditors' responsibilities for the audit of the group and parent charity financial statements section.

We are independent of the group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the trustees' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the group and parent charity's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the trustees with respect to going concern are described in the relevant sections of this report.

Other information

The other information comprises the information included in the annual report other than the financial statements and our auditor's report thereon. The Trustees are responsible for the other information contained within the annual report. Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon. Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements, or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material

misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters in relation to which the Charities (Accounts and Reports) Regulations 2008 and the Charities Accounts (Scotland) Regulations 2006 (as amended) require us to report to you if, in our opinion:

- The information given in the Trustees' Report is inconsistent in any material respect with the financial statements; or

- sufficient and proper accounting records have not been kept; or

- the financial statements are not in agreement with the accounting records; or

- we have not received all the information and explanations we require for our audit.

Responsibilities of trustees

As explained more fully in the Statement of Trustees' Responsibilities, the trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the trustees determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error. In preparing the financial statements, the trustees are responsible for assessing the group and parent charity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

We have been appointed as auditors under section 144 of The Charities Act 2011 and section 44(1)(c) of the Charities and Trustee Investment (Scotland) Act 2005 and report in accordance with the Acts and relevant regulations made or having effect thereunder.

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below.

As part of our planning process:

- We enquired of management the systems and controls the Charity has in place, the areas of the financial statements that are most susceptible to the risk of irregularities and fraud, and whether there was any known, suspected or alleged fraud. The Charity did not inform us of any known, suspected or alleged fraud.

- We obtained an understanding of the legal and regulatory frameworks applicable to the Charity. We determined that the following were most relevant: the Charity's Royal Charter, the Charity SORP, FRS 102, Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005 and the Charities Accounts (Scotland) Regulations 2006.

- We considered the incentives and opportunities that exist in the group and parent charity, including the extent of management bias, which present a potential for irregularities and fraud to be perpetuated, and tailored our risk assessment accordingly.

- Using our knowledge of the group and parent charity, together with the discussions held with the charity at the planning stage, we formed a conclusion on the risk of misstatement due to irregularities including fraud and tailored our procedures according to this risk assessment.

The key procedures we undertook to detect irregularities including fraud during the course of the audit included:

- Identifying and testing journal entries and the overall accounting records, in particular those that were significant and unusual.

- Reviewing the financial statement disclosures and determining whether accounting policies have been appropriately applied.

- Assessing the extent of compliance, or lack of, with the relevant laws and regulations.

- Assessing the validity of the classification of income, expenditure, assets and liabilities between unrestricted and restricted funds.

- Documenting and verifying all significant related party balances and transactions.

- Attendance at stocktake.

- Obtaining third-party confirmation of material bank balances.

- Testing key revenue lines, in particular deferred income, for evidence of management bias.

- Reviewing documentation such as board minutes for discussions of irregularities including fraud.

Owing to the inherent limitations of an audit, there is an unavoidable risk that we may not have detected some material misstatements in the financial statements even though we have properly planned and performed our audit in accordance with auditing standards. The primary responsibility for the prevention and detection of irregularities and fraud rests with the trustees of the Charity.

A further description of our responsibilities is available on the Financial Reporting Council's website at: frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of our report

This report is made solely to the charity's trustees, as a body, in accordance with the charity's Royal Charter, part 4 of the Charities (Accounts and Reports) Regulations 2008 and regulation 10 of the Charities Accounts (Scotland) Regulations 2006. Our audit work has been undertaken so that we might state to the charity's trustees those matters we are required to state to them in an auditors' report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charity and the charity's trustees as a body, for our audit work, for this report, or for the opinions we have formed.

HW Fisher LLP

HW Fisher LLP
Chartered Accountants
Statutory Auditor
Acre House
11-15 William Road
London
NW1 3ER

20 Mar 2023
Date……..

HW Fisher LLP is eligible for appointment as auditors of the charity by virtue of its eligibility for appointment as auditors of a company under of section 1212 of the Companies Act 2006.

Consolidated Statement of Financial Activities

(incorporating an income and expenditure account)

For the year ended 31 July 2022

	Note	Unrestricted	Restricted	2022 Total	2021 Total see Note 2a
		£	£	£	£
Income from:					
Donations and legacies	**3**	39,740	-	**39,740**	215,029
Charitable activities	**4**	726,495	975,232	**1,701,727**	795,320
Other income					
Government Grants	**5**	5,080	-	**5,080**	32,275
Other trading activities					
Sponsorship and advertising	**6**	75,381	-	**75,381**	52,509
Investments	**7**	150	-	**150**	20
Total income		**846,846**	**975,232**	**1,822,078**	1,095,153
Expenditure on:					
Raising funds:					
Sale of educational materials	**8a/b**	105,316	-	**105,316**	82,519
Charitable activities	**8a/b**	732,078	868,967	**1,601,045**	920,638
Total expenditure		**837,394**	**868,967**	**1,706,361**	1,003,157
Net income / (expenditure) for the year and net movement in funds	**9**	**9,452**	**106,265**	**115,717**	91,996
Reconciliation of funds:					
Total funds brought forward at 1 August 2021		206,425	26,132	**232,557**	140,561
Total funds carried forward at 31 July 2022		**215,877**	**132,397**	**348,274**	**232,557**

All of the above results are derived from continuing activities.

There were no other recognised gains or losses other than those stated above.

The attached notes form part of these financial statements.

Charity Statement of Financial Activities

(incorporating an income and expenditure account)

For the year ended 31 July 2022

	Note	Unrestricted	Restricted	2022 Total	2021 Total see Note 2b
		£	£	£	£
Income from:					
Donations and legacies	**3**	39,740	-	**39,740**	215,029
Charitable activities	**4**	638,457	975,232	**1,613,689**	729,481
Other income					
Government Grants	**5**	5,080	-	**5,080**	32,275
Other trading activities					
Sponsorship and advertising	**6**	75,381	-	**75,381**	52,509
Investments	**7**	150	-	**150**	20
Total income		**758,808**	**975,232**	**1,734,040**	1,029,314
Expenditure on:					
Raising funds:					
Sale of educational materials	**8**	105,316	-	**105,316**	82,519
Charitable activities	**8**	680,822	868,967	**1,549,789**	843,321
Total expenditure		**786,138**	**868,967**	**1,655,105**	925,840
Net income / (expenditure) for the year and net movement in funds	**9**	**(27,330)**	**106,265**	**78,935**	103,474
Reconciliation of funds:					
Total funds brought forward at 1 August 2021		260,591	26,132	**286,723**	183,249
Total funds carried forward at 31 July 2022		**233,261**	**132,397**	**365,658**	**286,723**

All of the above results are derived from continuing activities.

There were no other recognised gains or losses other than those stated above.

The attached notes form part of these financial statements.

Consolidated and Charity Balance Sheets

	Note	**Group 2022** £	Group 2021 £	**Charity 2022** £	Charity 2021 £
Fixed assets:					
Intangible Assets	**12**	**-**	30,000	**-**	30,000
Investment in Subsidiary	**13**	**-**	-	**-**	-
		-	30,000	**-**	30,000
Current assets:					
Stock	**14**	**26,145**	31,933	**-**	26,057
Debtors	**15**	**307,666**	163,685	**430,735**	292,506
Cash at bank and in hand		**387,694**	389,455	**304,909**	318,176
		721,505	585,073	**735,644**	636,739
Liabilities:					
Creditors: amounts falling due within one year	**16**	**(373,231)**	(382,516)	**(369,986)**	(380,016)
Net current assets		**348,274**	202,557	**365,658**	256,723
Total net assets		**348,274**	232,557	**365,658**	286,723
Funds	**17, 18, 19**				
Restricted funds		**132,397**	26,132	**132,397**	26,132
Unrestricted funds:					
General funds		**215,877**	206,425	**233,261**	260,591
Total funds		**348,274**	232,557	**365,658**	286,723

Approved by the trustees on 20 Mar 2023



Alison Redmore
Trustee

The attached notes form part of the financial statements.

Consolidated statement of cash flows

For the year ended 31 July 2022

	Note	2022	2022	2021	2021
		£	£	£	£
Cash flows from operating activities:					
Net cash provided by / (used in) operating activities	**20**		(1,611)		169,140
Cash flows from investing activities:					
Interest receivable		(150)		(20)	
Cash provided by / (used in) investing activities			(150)		(20)
Change in cash and cash equivalents in the year			(1,761)		169,120
Cash and cash equivalents at the beginning of the year			389,455		220,335
Cash and cash equivalents at the end of the year			387,694		389,455

Notes to the financial statements for the year ended 31 July 2022

1 Accounting policies

a) Basis of preparation

The financial statements have been prepared in accordance with the Rules of the Association made under the charity's Royal Charter, the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005, the Charities Accounts (Scotland) Regulations 2006 (as amended) and "Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2019)".

The financial statements have departed from the Charities (Accounts and Reports) Regulations 2008 only to the extent required to provide a true and fair view. This departure has involved following the Statement of Recommended Practice for charities applying FRS 102 rather than the version of the Statement of Recommended Practice which is referred to in the Regulations but which has since been withdrawn.

The charity meets the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy or note.

b) Going concern

We have set out in the Trustees' Report a review of financial performance and the charity's reserves position. Unrestricted reserves at 31 July 2022 are closer to our target reserves position and further work is being done to improve the position.

In common with other membership organisations, the Association for Science Education relies upon membership subscriptions, publishing income and events for a substantial part of its annual income. Taking a prudent view of this income, the trustees have prepared cash flow projections for the period to March 2024, which show that the charity would be able to continue in operation for that period. Accordingly, the trustees consider that there are no material uncertainties about the charity's or the group's ability to continue as a going concern for the foreseeable future. Thus the trustees continue to adopt the going concern basis of accounting in preparing the financial statements.

c) Basis of consolidation

These financial statements consolidate the results of the charity and its wholly-owned subsidiary Millgate House Education Limited on a line by line basis. Transactions and balances between the charity and its subsidiary have been eliminated from the consolidated financial statements. Balances between the companies are disclosed in the notes to the charity's balance sheet.

The charity has taken advantage of the provisions in the SORP for charities not to prepare a statement of cash flows.

d) Income

Incoming resources are recognised in the period in which the group is entitled to receive them and the amount can be measured with reasonable certainty and it is probable that income will be received. Income is deferred only when the group has to fulfil conditions before becoming entitled to it or where the donor or funder has specified that the income is to be expended in a future accounting period.

Grants from government and Trusts and Foundations have been included as income from activities in furtherance of the group's objectives where these amount to a contract for services, but as donations where the money is given in response to an appeal or with greater freedom of use, for example monies for core funding.

Investment income is accounted for on an accruals basis.

e) Expenditure

Expenditure is included in the statement of financial activities when incurred and includes attributable VAT which cannot be recovered.

Expenditure comprises the following:

a. Expenditure on charitable activities comprises monies spent on the charity's primary charitable purposes as described in the Trustees' report. It also includes appropriately apportioned salary costs and support costs (see note 8).
b. The costs of raising funds comprises the expenditure incurred in primary purpose trading activities by the charity and consists of salaries, direct costs and overheads.
c. Support costs represent indirect charitable expenditure. In order to carry out the primary purposes of the group it is necessary to provide support in the form of financial procedures, provision of office services and equipment and a suitable working environment. Salary costs have been allocated based on staff time.

Notes to the financial statements for the year ended 31 July 2022

1. Accounting policies (continued)

f) Fixed assets

Tangible

Assets costing in excess of £1,000 and with an expected useful life exceeding one year are capitalised.
Depreciation is charged on these assets at the following annual rates in order to write them off over their estimated useful lives:

Computer and other equipment/software	25% straight line

Intangible

Amortisation is calculated to write off the cost of the website and CRM system by equal instalments over four years.

g) Investments

Investment in the subsidiary company is stated in the charity at cost.

h) Stocks

Stocks are valued at lower of cost and net realisable value after making due allowance for obsolete and slow-moving items. Cost includes all expenditure in bringing stock to their present location and condition.
Net realisable value is based on estimated selling price less the anticipated costs to sell.

i) Leased assets

Rentals applicable to operating leases where substantially all of the benefits and risks of ownership remain with the lessor are charged to the statement of financial activities on a straight line basis over the life of the lease.

j) Fund accounting

The unrestricted fund comprises those monies which may be used towards meeting the charitable objectives of the group and which may be applied at the discretion of the Trustees.

The restricted funds are monies granted for, and their use restricted to, a specific purpose, or donations subject to donor-imposed conditions.

k) Pensions

The Association operates a defined contribution group personal pension for employees. The funds are managed by Scottish Widows and contributions are paid monthly by direct debit and charged to the Statement of Financial Activities (SOFA) as incurred.

l) Financial Instruments

The Charity has elected to apply the provisions of Section 11 'Basic Financial Instruments' and Section 12 'Other Financial Instruments Issues' of FRS 102 to all of its financial instruments. The Charity only has financial assets and financial liabilities of a kind that qualify as basic financial instruments. These financial instruments are recognised as the amount payable or receivable when the instrument is first recognised together with any subsequent transaction costs but modified in respect of trade debtors for an assessment of potential bad debt.

m) Critical Accounting estimates and judgements

In the application of the Charity's accounting policies, the Trustees are required to make judgements, estimates and assumptions about the carrying amount of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised where the revision affects only that period, or the period of the revision and future periods where the revision affects both current and future periods. The Trustees believe there are no critical estimates or judgements relevant to the financial statements.

Notes to the financial statements for the year ended 31 July 2022

2a Detailed comparatives for the consolidated statement of financial activities

	2021 Unrestricted £	2021 Restricted £	2021 Total £
Income from:			
Donations and legacies	215,029	-	**215,029**
Charitable activities	738,222	57,098	**795,320**
Other income			
Government Grants	32,275	-	**32,275**
Other trading activities			
Sponsorship and advertising	52,509	-	**52,509**
Investments	20	-	**20**
Total income	**1,038,055**	**57,098**	**1,095,153**
Expenditure on:			
Raising funds:			
Sales of educational materials	82,519	-	**82,519**
Charitable activities	809,946	110,692	**920,638**
Total expenditure	**892,465**	**110,692**	**1,003,157**
Net income / (expenditure) for the year and net movement in funds	145,590	(53,594)	**91,996**
Reconciliation of funds:			
Total funds brought forward at 1 August 2020	60,835	79,726	**140,561**
Total funds carried forward at 31 July 2021	**206,425**	**26,132**	**232,557**

Notes to the financial statements for the year ended 31 July 2022

2b Detailed comparatives for the Charity statement of financial activities

	2021 Unrestricted £	2021 Restricted £	2021 Total £
Income from:			
Donations and legacies	215,029	-	**215,029**
Charitable activities	672,383	57,098	**729,481**
Other income			
Government Grants	32,275	-	**32,275**
Other trading activities			
Sponsorship and advertising	52,509	-	**52,509**
Investments	20	-	**20**
Total income	**972,216**	**57,098**	**1,029,314**
Expenditure on:			
Raising funds:			
Sales of educational materials	82,519	-	**82,519**
Charitable activities	732,629	110,692	**843,321**
Total expenditure	**815,148**	**110,692**	**925,840**
Net income / (expenditure) for the year and net movement in funds	157,068	(53,594)	**103,474**
Reconciliation of funds:			
Total funds brought forward at 1 August 2020	103,523	79,726	**183,249**
Total funds carried forward at 31 July 2021	**260,591**	**26,132**	**286,723**

Notes to the financial statements for the year ended 31 July 2022

3 Income from donations and legacies

	2022 Unrestricted £	2021 Unrestricted £
Individual donations	**7,824**	1,696
Legacies	**31,916**	213,333
	39,740	215,029

4 Income from charitable activities

	2022 Total £	2021 Total £
Unrestricted income		
Member subscriptions	**456,181**	418,728
Sales of publications and journals	**161,241**	177,303
Conference and workshop income	**89,376**	97,049
Income from sponsored projects	**19,697**	45,142
	726,495	738,222
Restricted Income		
Income from sponsored projects	**975,232**	57,098
Total income from charitable activities	**1,701,727**	795,320

Included above is £88,038 sales of publications and journals (2021: £65,839) relating to the subsidiary company. The charity only total is £1,613,689 (2021: £729,481).

5 Government grants

The group received £5,080 (2021: £32,275) from the government's Coronavirus Job Retention Scheme in the year. Included in the £5,080 is £nil (2021: £nil) relating to the subsidiary company.

6 Income from other trading activities

	2022 Unrestricted £	2021 Unrestricted £
Advertising and sponsorship	**75,381**	52,509
	75,381	52,509

Income is from journal and conference advertising and sponsorship and is all primary purpose trading.

7 Investments

	2022 Unrestricted £	2021 Unrestricted £
Bank Interest	**150**	20
	150	20

Notes to the financial statements for the year ended 31 July 2022

8a Analysis of expenditure year ended 31 July 2022

	Staff costs	Other costs	2022 Total
	£	£	£
Raising funds			
Sale of educational materials	83,626	21,690	**105,316**
Charitable Activities:			
the promotion and improvement of the teaching of science:			
Members registration and services	43,002	24,222	**67,224**
Book sales	42,656	58,601	**101,257**
Journal expenditure	45,709	103,453	**149,162**
Conferences and other CPD	54,817	53,530	**108,347**
Regional expenses	75,800	405	**76,205**
Advocacy & other projects	15,843	15,868	**31,711**
Support costs	59,177	99,938	**159,115**
Governance costs	24,712	14,345	**39,057**
Restricted project expenditure (see note 19 and 19b)	397,848	471,119	**868,967**
Total expenditure 2022	843,190	863,171	**1,706,361**
Restricted expenditure	397,848	471,119	**868,967**
Unrestricted expenditure	445,342	392,052	**837,394**
Total expenditure 2022	843,190	863,171	**1,706,361**

Included above is £101,256 book sales expenditure related to the subsidiary company. The charity only expenditure on raising funds is £105,316 and charitable activities is £1,549,789.

8b Analysis of expenditure year ended 31 July 2021

	Staff costs	Other costs	2021 Total
	£	£	£
Raising funds			
Sale of educational materials	82,519	-	**82,519**
Charitable Activities:			
the promotion and improvement of the teaching of science:			
Members registration and services	36,262	26,096	**62,358**
Book sales	61,893	27,089	**88,982**
Journal expenditure	44,377	126,268	**170,645**
Conferences and other CPD	64,695	25,122	**89,817**
Regional expenses	80,981	399	**81,380**
Advocacy & other projects	42,241	6,215	**48,456**
Support costs	67,400	163,144	**230,544**
Governance costs	25,027	12,737	**37,764**
Restricted project expenditure (see note 19 and 19b)	69,431	41,261	**110,692**
Total expenditure 2021	574,826	428,331	**1,003,157**
Restricted expenditure	69,431	41,261	**110,692**
Unrestricted expenditure	505,395	387,070	**892,465**
Total expenditure 2021	574,826	428,331	**1,003,157**

Included above is £77,317 book sales expenditure related to the subsidiary company. The charity only expenditure on raising funds is £82,519 and charitable activities is £843,321.

Notes to the financial statements for the year ended 31 July 2022

9 Net income / (expenditure) for the year

This is stated after charging / (crediting):	2022	2021
	£	£
Amortisation	**30,000**	30,000
Payments under operating leases	**2,096**	2,096
Auditor's remuneration:		
Audit fees	**9,750**	12,737
Non audit fees	**666**	0

10 Analysis of staff costs, trustee remuneration and expenses, and the cost of key management personnel

Staff costs were as follows:	2022	2021
	£	£
Salaries and wages	**740,551**	510,774
Social security costs	**48,817**	32,428
Employer's contribution to defined contribution pension schemes	**53,822**	31,624
	843,190	574,826

The following number of employees received employee benefits (excluding employer pension) during the year between:

	2022	2021
	No.	No.
£60,001 -£70,000	**1**	1

The total employee benefits including pension contributions of the key management personnel were £65,154 (2021: £61,816).

Seven trustees were reimbursed expenses during the year for travel, accommodation and subsistence costs totalling £2,154 (2021: £nil).

No Trustee received remuneration or benefits as a trustee however the following trustees received remuneration for the following services provided to the charity: Simon Quinnell £6,300 (2021: £4,000) for CPD delivery, Jane Turner £1,500 (2021: £1,000) for journal editing and Helen Harden £2,138 (2021: £nil) for journal editing and resource evaluation. Leigh Hoath received payments totalling £1,210 (2021: £5,000) for editing the Primary Science Journal.

Remuneration to trustees for services provided to the charity were paid under the provisions in Section 5 of the Association's Royal Charter.

Staff numbers

The average number of employees (head count based on number of staff employed) during the year was as follows:

	2022	2021
	No.	No.
Millgate House Education employees	**2**	2
The Association for Science Education employees	**33**	25
	35	27

11 Taxation

The charitable company is exempt from corporation tax as its non-primary purpose trading income is below the small trading limit allowable for charities.

Notes to the financial statements for the year ended 31 July 2022

12 Group and Charity Fixed assets

	Tangible equipment	Intangible Website and CRM
	£	£
Cost		
At the start of the year	33,938	120,000
At the end of the year	33,938	120,000
Depreciation		
At the start of the year	33,938	90,000
Charge for the year	-	30,000
At the end of the year	33,938	120,000
Net book value		
At the start of the year	-	30,000
At the end of the year	-	-

13 Investments

Millgate House Education Limited

On 1 September 2017 the Association for Science Education acquired Millgate House Education Limited, a company incorporated in the United Kingdom and limited by guarantee. Its results have been consolidated in these financial statements. Millgate House Education is considered by the Trustees of the charity to be undertaking primary purpose trading, namely selling science publications.

The registered office of Millgate House Education Limited is College Lane, Hatfield, Hertfordshire, AL10 9AA. Its company registration number is 10875129. It had income for the year of £88,037 (2021:£71,804), expenditure of £51,258 (2021: £83,284), a surplus for the year of £36,779 (2021: deficit of £11,480) and at the end of the year its assets were £118,529 (2021: £85,460), liabilities £135,918 (2021: £139,628) and net liabilities were £17,389 (2021: £54,168).

14 Stock

	Group 2022	Group 2021	**Charity 2022**	Charity 2021
	£	£	**£**	£
Publications for sale	**26,145**	31,933	**-**	26,057
	26,145	31,933	**-**	26,057

Publications stock owned by the charity was transferred at cost to the trading subsidiary, Millgate House Education, on 1 August 2021 in order to consolidate our bookselling into one entity with a recognised name in science booksales.

Notes to the financial statements for the year ended 31 July 2022

15 Debtors	Group 2022	Group 2021	Charity 2022	Charity 2021
Due within one year	**£**	£	**£**	£
Trade debtors	**198,528**	37,278	**188,924**	28,973
Amount due from subsidiary	**-**	-	**132,673**	137,126
Other debtors	**483**	5,384	**483**	5,384
Prepayments and accrued income	**108,655**	121,023	**108,655**	121,023
	307,666	163,685	**430,735**	292,506

16 Creditors: amounts falling due within one year	Group 2022	Group 2021	Charity 2022	Charity 2021
	£	£	**£**	£
Trade creditors	**35,786**	56,283	**32,541**	53,783
Taxation and social security	**55,026**	19,410	**55,026**	19,410
Accruals	**101,102**	100,690	**101,102**	100,690
Member subscriptions in advance	**160,200**	185,312	**160,200**	185,312
Journal subscriptions in advance	**21,117**	20,821	**21,117**	20,821
Finance lease repayments	**-**	-	**-**	-
	373,231	382,516	**369,986**	380,016

Member subscriptions are generally paid in advance for a period of one year or three years and therefore a proportion of this payment is deferred into the following financial year(s). Library subscriptions are paid one year in advance.

17 Analysis of net assets between funds - Group	Group Unrestricted	Group Restricted	**Group Total funds**
	£	£	**£**
Fixed assets	-	-	**-**
Current assets	589,108	132,397	**721,505**
Creditors due within one year	(373,231)	-	**(373,231)**
Net assets at the end of the year	**215,877**	**132,397**	**348,274**

Analysis of net assets between funds - Charity	Charity Unrestricted	Charity Restricted	**Charity Total funds**
	£	£	**£**
Fixed assets	-	-	**-**
Current assets	603,247	132,397	**735,644**
Creditors due within one year	(369,986)	-	**(369,986)**
Net assets at the end of the year	**233,261**	**132,397**	**365,658**

Notes to the financial statements for the year ended 31 July 2022

18	**Analysis of net assets between funds - prior year - Group**	Group Unrestricted	Group Restricted	**Group Total funds**
		£	£	**£**
	Fixed assets	30,000	-	**30,000**
	Current assets	558,941	26,132	**585,073**
	Creditors due within one year	(382,516)	-	**(382,516)**
	Net assets at the end of the year	**206,425**	**26,132**	**232,557**

	Analysis of net assets between funds - prior year - Charity	Charity Unrestricted	Charity Restricted	**Charity Total funds**
		£	£	**£**
	Fixed assets	30,000	-	**30,000**
	Current assets	610,607	26,132	**636,739**
	Creditors due within one year	(380,016)	-	**(380,016)**
	Net assets at the end of the year	**260,591**	**26,132**	**286,723**

19a Movements in restricted funds - Group and Charity

	At the start of the year	Incoming resources	Outgoing resources	**At the end of the year**
	£	£	£	**£**
Restricted funds:				
Alexander Memorial	9,819	-	-	**9,819**
Science Teacher SOS	1,387	-	(1,387)	**-**
Gatsby Rise (Retention Initiative for Science Education)	-	24,800	(24,800)	**-**
Gatsby post 16 resources	-	22,900	(21,000)	**1,900**
Wolfson Keeping Science Practical	-	66,374	(36,182)	**30,192**
Wellcome - Topic Level micro accredited CPD	-	69,475	(69,475)	**-**
Key Moments in history: a fossil hunter's story	11,398	40,564	(43,362)	**8,600**
Science Education for Action and Engagement towards Sustainability (SEAS)	4,222	3,093	(4,874)	**2,441**
Science on stage UK	1,281	-	-	**1,281**
IoP Inclusion in Schools	(1,975)	550,350	(508,397)	**39,978**
SLI Inclusion in Schools	-	197,676	(159,490)	**38,186**
Total restricted funds	26,132	975,232	(868,967)	**132,397**

Notes to the financial statements for the year ended 31 July 2022

19b Movements in restricted funds - prior year - Group and Charity

	At the start of the year £	Incoming resources & gains £	Outgoing resources & losses £	**At the end of the year £**
Restricted funds:				
Alexander Memorial	9,819	-	-	**9,819**
Science Teacher SOS	8,916	23,500	(31,029)	**1,387**
Good practical science benchmarks 1 & 2	681	26,843	(27,524)	**-**
Key Moments in history: a fossil hunter's story	47,755	1,755	(38,112)	**11,398**
Teaching and Leadership Innovation Fund Round 2 (TLIF 2)	2,120	-	(2,120)	**-**
Science Education for Action and Engagement towards Sustainability (SEAS)	9,154	-	(4,932)	**4,222**
Science on stage UK	1,281	-	-	**1,281**
Best Steps	-	5,000	(5,000)	**-**
IoP Inclusion in Schools	-	-	(1,975)	**(1,975)**
Total restricted funds	79,726	57,098	(110,692)	**26,132**

Purposes of restricted funds

Alexander Memorial

The Alexander Memorial Fund represents a legacy of £10,000 from the late Professor and Mrs Alexander which the ASE has been requested to administer for a memorial award until the funds expire. No prizes were awarded in 2021/22.

Science Teacher SOS

Funding to pilot an end-use and effectiveness study of the Science Teacher SOS framework, more information is provided in the Trustees' Report.

Gatsby Rise (Retention Initiative for Science Education)

A programme to expand the reach and impact of the Science Teacher SOS Framework and survey by developing an accompanying package of support that can be used proactively by science leaders to support the wellbeing, career development and ultimately retention of their team throughout the year.

Gatsby post 16 resources

Funding to enable the ASE to support implementation of Benchmarks 1 and 2 of the Gatsby Charitable Foundation's Good Practical Science Report, which provides a framework for good practical science in schools and colleges. Further information is available on both the ASE and the Gatsby Charitable Foundation's websites and in the Trustees' Report.

Wolfson Keeping Science Practical

A programme to provide extended support for disadvanted secondary schools across the UK, focused particularly on practical science, delivered through a targeted and tailored programme of online and face to face CPD for heads of science, early careers teachers and school science technicians.

Wellcome - Topic Level Micro-accredited CPD in Science

A project to test the impact and value of delivering subject-specific CPD in upper primary and lower secondary science through 'bite-sized' online courses linked to micro-accreditation.

Key Moments in history: a fossil hunter's story

This project is producing teaching resources and professional learning strategies for primary teachers of children aged 9-11 years to support their knowledge and understanding of the big ideas of evolution, the nature of scientific enquiry and the strengths and limitations of scientific knowledge. The project is supported by the Templeton World Charity Foundation and more information is given in the Trustees' Report.

Science Education for Action and Engagement towards Sustainability (SEAS)

ASE is a partner organisation for this EU Horizon 2020 funded project which is led by the University of Oslo.
More information is provided in the Trustees' Report.

Notes to the financial statements for the year ended 31 July 2022

Purposes of restricted funds (continued)

Science on stage UK

Funding was received from the Reece Foundation and an individual donor to support UK involvement in Science on Stage.

IoP Inclusion in Schools

ASE was subcontracted by the Institute of Physics to deliver the Inclusion in Schools project on behalf of the DfE from 1 August 2021 to March 2022. The primary purpose of this project was to significantly increase the number of students from under-represented groups progressing to physics-based routes (A-level physics, vocational or technical) post the age of 16.

SLI Inclusion in Schools

From April 2022, the ASE was subcontracted by STEM Learning to continue to deliver the Inclusion in Schools project on behalf of the DfE.

20 Reconciliation of net income / (expenditure) to net cash flow from operating activities

	2022	2021
	£	£
Net income / (expenditure) for the reporting period	**115,717**	91,996
(as per the consolidated statement of financial activities)		
Interest received	**150**	20
Depreciation and amortisation	**30,000**	30,000
(Increase) / decrease in stock	**5,788**	(13,310)
(Increase) / decrease in debtors	**(143,981)**	(24,173)
Increase / (decrease) in creditors	**(9,285)**	84,607
Net cash provided by / (used in) operating activities	**(1,611)**	169,140

21 Analysis of changes in net debt

The charity had no debt during the year.

22 Operating lease commitments

Total future minimum lease payments under non-cancellable operating leases are as follows:

	Group		**Charity**	
	Property		Property	
	2022	2021	**2022**	2021
	£	£	**£**	£
1 year	**2,096**	2,096	**2,096**	2,096
2 - 5 years	**4,932**	7,028	**4,932**	7,028
After more than 5 years	**-**	-	**-**	-
	7,028	9,124	**7,028**	9,124

23 Legal status of the charity

The charity is a company established by Royal Charter and has no share capital.

The registered address of the charity is College Lane, Hatfield, AL10 9AA.

24 Related party transactions

The charity paid Physics Partners, of which Bryan Berry is Chief Executive, £6,293 (2021: £3,046) for CPD delivery.

THE ASSOCIATION FOR SCIENCE EDUCATION

England & Wales - Charity number 313123

Accounts



Charity Registration England and Wales No. 313123

OSCR No. SC042473

Company Incorporated by Royal Charter RC000805 (England and Wales)

The Association for Science Education

Trustees' Annual Report and Group Financial Statements

For the Year Ended 31 July 2021

The Association for Science Education

Trustees' Annual Report and Group Financial Statements

CONTENTS

	Page
Legal and administrative information	3
Trustees' Annual Report	4-33
Statement of Trustees' Responsibilities	34
Independent auditors' report	35-37
Consolidated Statement of financial activities	38
Charity Statement of financial activities	39
Consolidated and Charity Balance sheets	40
Consolidated Statement of cashflows	41
Notes to the financial statements	42-53

The Association for Science Education

Trustees' Annual Report for the year ended 31 July 2021

LEGAL AND ADMINISTRATIVE INFORMATION

Trustees who served during the year and up to the date of approval of the financial statements:	Richard Needham - Elected by Membership and Chair of Trustees (resigned 31 December 2020) Ali Redmore - Elected by Membership and Chair of Trustees (appointed 31 December 2020) Roger McCune MBE - Appointed Member, Association Treasurer Bryan Berry - Appointed Member Maggie Hannon – Appointed Member (Trustee rep on Q&A Committee) Daniel Sandford Smith – Elected by Membership Susan Burr – Elected by Membership Simon Quinnell – representing Education Group and immediate past Chair Leigh Hoath – representing Education Group Manoj Chitnavis – co-opted Trustee Cerian Ayres – representing Education Group (appointed 1 August 2021) Jane Turner – Chair of the Association and Trustee (appointed 1 August 2021) Geoff Mackey – elected by Membership (appointed 1 August 2021)
Patron	HRH The Prince Philip, Duke of Edinburgh, KG,PC, KT, GMBE, FRS (until 9 April 2021)
President	Prof Sir John Holman KBE
Chair of the Association	Simon Quinnell (1 August 2020 – 31 July 2021) Jane Turner (1 August 2021 – 31 July 2022)
Chief Executive Officer	Hannah Russell
Charity number:	313123
OSCR number:	SC042473
Royal Charter incorporation number:	RC000805 (England and Wales)
Principal address	College Lane Hatfield AL10 9AA
Auditors	HW Fisher LLP Acre House 11-15 William Road London NW1 3ER
Bankers	NatWest Plc 35, Town centre Hatfield AL10 0JU

Chair's introduction

The last academic year has been our first full year of a world experiencing Covid-19 and during this time the organisation has faced and survived many challenges. As we look forward, it's a good chance to reflect on the hard work of the ASE, including its staff, volunteers and members, in ensuring that the Association is at the leading edge of science education. A huge thank you needs to be given to all those involved in making everything we have done so far a success! #wearetheASE

The 2020-21 academic year will go down in history as the first full year of ASE being totally online for most of us. With no face-to-face courses or meetings, it has been a steep learning curve, but has brought many benefits. Attendance at most committees, both regional and national, has been higher and more consistent, the time taken to travel and the associated costs have been greatly reduced and, more importantly, our organisation's environmental impact has been heavily lessened . As we move forward, these important points have been taken on board; as much as we want our face-to-face meetings back, where those social interactions, networking and conversations allowing new ideas to spring up are so important, we need to take note of what we have learnt. As we move forward, we are recommending one face-to-face meeting for all committees at least once a year, while continuing online for the rest, so that we get a good balance. As part of this move back to some physical meetings, the national committees and groups are meeting for a Committee Day in Spring 2022. The Institute of Physics has kindly agreed to host us at their Head Office and the day will include the chance to come together to discuss the ASE's plans for the future and the continuation of our ongoing strategies. Alongside the hard work of committees, we have also been exploring how to support and share information across the Association's teams of volunteers. The Chair Trio have continued to bring together the Chairs of national committees and groups through the Education Group, through which they discuss how committees can share good practice and identify the issues they face as Chairs. This has also led to the ASE team developing a shared online space so that all committees can communicate in a more effective way, sharing expertise, events and information.

The Chair Trio and occasionally Quattro (also including the incoming Chair-Elect) have continued to work effectively as a group, with the incoming Chair benefiting from the experience of the Immediate-past Chair and allowing the Chair-Elect to transition smoothly

into the role. The Chair of the Association leads the Education Group and the Region Officer's Group, and ensures engagement with all the national committees to help support them in their work and with their thinking around the ASE strategy. Along with the Education Group, the Chair Trio have been able to inform ASE HQ staff about the current situation on the chalkface and provide a voice for our members during these difficult times.

During this online year, the ASE has become a beacon of good online practice, and we have developed and delivered an outstanding array of online CPD and events. The most important was the 2021 Annual Conference, our first online, which was an event that was a resounding success. The Conference was a mammoth undertaking by our Honorary Conference Secretary, Professor Christine Harrison, and our ASE staff team. Spread over four days, with countless sessions and strands, the Conference allowed our members and the wider science education profession the chance to catch up and engage with a range of outstanding sessions, workshops and keynote lectures, with many commenting that the use of chats, breakout rooms and other online tools made the experience more engaging rather than less. A huge thank you to all the attendees and volunteers who made it so successful.

The Annual Conference was just one of our online strands. There have been other successful online conferences throughout the year, including ASE Futures, Technicians, autumn, summer and Scotland conferences, with each providing a learning and reflection process that helped us all to hone our online skills. We have also developed online CPD courses, including a series of physics for non-specialists and our technician leadership programme, which have all been well-received by attendees. Regional and national TeachMeets and TechMeets have been happening, keeping people in touch, and our well-regarded series of webinars on a range of subjects have helped and supported countless participants. The organisation has shown how flexible it can be to respond to the needs of the community and the feedback we have received has been extremely positive.

Throughout the last year we have had a focus on CPD from many of our committees and we are developing a strategy to take CPD further as an organisation whilst working closely with partners on wider policies for and improvements in science education CPD across the country.

NSTA

Unfortunately we were unable to host this year's NSTA President in person at our Annual Conference and this of course was the same situation for our usual return visits to the NSTA Conference. We were fortunate to attend some online sessions at NSTA and were able to offer the same service to our US colleagues. As we move forward, we hope that physical visits will support our work with NSTA and our current Chair looks forward to visiting the national NTSA Conference in Houston in the spring of 2022.

As an organisation, we are always trying to spread the word about the benefits of being a member of the ASE and what it has meant to us all as individuals. Our strong presence during the Covid-19 pandemic, our new departmental membership, our reworked early career membership and our joint primary and secondary membership has helped us to continue to reach those in the community

who need our support. Of course, there is still work to be done, so please shout out to everyone about the benefits and your own #wearetheASE story.

One of the other main highlights throughout the year has been the ASE's continued advocacy for science education, with consultation responses highlighting the thoughts of the membership. We have also continued to support practical work with guidance and surveys, as schools emerge from the pandemic, to gauge the state of practical work in schools.

As an organisation, we continue to grow and raise the profile of what we all do. As part of this, the ASE has taken an active part in securing science education projects from various funders, to provide support for members and the wider community, and using the expertise from our membership and volunteers to do so. These have been hard won and thanks go to all those who have been involved in these bids and projects. These projects include ASE RISE, the retention initiative for science education, which has come from the successful Teacher SOS project and has been funded by the Gatsby Foundation. We have the Keeping Science Practical project, funded by the Wolfson Foundation, to help support schools in disadvantaged areas to make the most of effective practical work. We are also working with the Institute of Physics and Department for Education on a funded project exploring and supporting Inclusion in Schools, working with underrepresented groups in science. The ASE is a great platform for all these projects and they ensure that we are at the heart of science education.

Throughout a difficult year, our CEO, President, Chair Trio, ASE staff, committee members, volunteers and members have raised the bar time and time again for what we can do together as the ASE. Although we are all looking forward to normality again, we have come a long way and there are key aspects to take forward and reflect upon from the global crisis that we have all experienced. It has been a pleasure being the ASE Chair during this strange time, during which we have shown that the ASE is more than an organisation, it is a community that's there to help and support each other, and this has been needed more this year than ever before. Well done, everyone.

Simon Quinnell

Chair of the Association 2020/21



Left to right: Hannah Russell (Chief Executive), Jane Turner (Chair-Elect), Simon Quinnell (Chair of the Association), Janice Griffiths (Immediate-past Chair) and Helen Harden (incoming Chair-Elect)

Tribute to HRH Prince Philip, the Duke of Edinburgh

In 2020-2021 we were saddened by the passing of our patron, His Royal Highness Prince Philip, the Duke of Edinburgh.

The progress of science and technology – and their importance to the health, security and prosperity of the nation – were a lifelong passion of Prince Philip, who generously undertook to be patron and supporter of many charities and organisations in this field, including the ASE. His Royal Highness had been an ardent supporter of the Association for Science Education for more than 50 years and played a valued role in the growth and success of the organisation since the inception of our current incarnation in 1963, when the Science Masters' Association and the Association of Women Science Teachers merged to create the Association as it is today.

In an address given at the inaugural ASE Conference in that year, when his patronage began, His Royal Highness said: "The structure of a modern industrial society consists of a series of overlapping interdependent functional groups. Each member of these groups needs a certain amount of scientific education. For some, a highly specialised scientific knowledge is essential for their work; others only need background understanding of the scientific method and the present state of scientific knowledge. Whatever may be the arguments about the relative merits of science and the humanities, it seems quite clear that, in this day and age, no-one can do valuable work in any academic subject, in research, or in industry and commerce without at least some basic knowledge of science."

The Prince's commitment to the cause of excellence in science education endured, and he was kind enough to join us as guest of honour at the opening of our current Headquarters in 2008. His humour and passion were remembered by all present, as was his pride in his ASE tie – and his admonition of those gentlemen present who were not similarly attired!

In a letter to the Association to mark our 50th anniversary in 2013, he wrote: "Times have changed, but our national prosperity remains in the hands of our scientists and engineers. Their potential can only be discovered and nurtured within an inspiring and challenging system of science education."

We could not agree more as we mourn the loss of a true friend of the Association.

Honorary Treasurer's Annual Report 2020/21

On behalf of Trustees, I am delighted to report that our finances have improved significantly over the past year. The impact of COVID-19 has been significant on the ASE as has been the case with many charities. We benefited during the year from a generous bequest and this has assisted us to build up our unrestricted reserves to the target figure agreed by Trustees.

The Association has adapted extremely well to new ways of remote working and service provision, many of which have proved popular and have had the benefit of enabling us to save costs at a difficult time. A tight oversight of the finances has been maintained, with a detailed quarterly reporting system in place. The budget and cash flow are monitored on a monthly basis by the Chief Executive and Director of Finance and Operations. Trustees have confidence in the current financial health of the ASE and, as such, have been able to focus on the wide range of Association activities that support science education across the UK and beyond.

It is recognised that there is still a need for vigilance in relation to financial management.

Membership fees and our core activities, which include conferences, projects and publications, continue to be the main ongoing sources of income. The pandemic impacted on our events income; in particular as we were unable to hold any face-to-face conferences during 2021. However, other income streams held up well and we were able to reduce our expenditure significantly to compensate for income shortfalls.

Trustees are committed to ensuring the provision of improved services for our members, while continuing to monitor operational costs. We want to ensure that we meet fully the needs of members and the wider science education community. While we look to the future with confidence, there remains a need to act with prudence. The Association continues to look at ways to expand its membership and develop new income streams so that we are able to maintain our robust reserves position into 2021-22 and beyond.

Thanks, as always, are due to the staff at Headquarters and in particular our Chief Executive. The commitment and hard work of the staff is recognised by Trustees. On a personal note, I wish to thank the Director of Finance and Operations for the support received as Treasurer over the past year.

Roger McCune MBE *(Honorary Treasurer)*

The Association for Science Education

Trustees' Annual Report for the year ended 31 July 2021

The Trustees present their annual report and consolidated financial statements for the year ended 31 July 2021.

The financial statements have been prepared in accordance with the accounting policies set out in note 1 to the financial statements and comply with the Charity's constitution, the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005, regulation 8 of the Charities Accounts (Scotland) Regulations 2006 and Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS102) (effective 1 January 2019).

Objectives and activities

Objects

The objects of the Association are to promote education by the following means:
(a) improving the teaching of science; and
(b) providing an authoritative medium through which opinions of teachers of science may be expressed on educational matters; and
(c) affording means of communication among all persons and bodies of persons concerned with the teaching of science in particular and education in general.

Activities

The Rules of the Association provide for the promotion of its objects by:-
(a) holding general and other meetings; and
(b) publishing journals and other literature including literature in electronic formats concerned with the teaching of science and ancillary matters; and
(c) establishing and maintaining of a centre or centres of administration and of information on any aspect of science education; and
(d)-(h) the administration of the Chartered Science Teacher award, CSciTeach including the register thereof and associated standards, admissions, removals disciplinary matters and appeals, and
(i) such other means as the Association may from time to time determine and as may be consistent with the charitable objects of the Association.

Public Benefit

The trustees have complied with the duty in section 17 of the Charities Act 2011 to have due regard to public benefit guidance issued by the Charity Commission.

Risk assessment

The Trustees have assessed the risks to which the Charity may be exposed. A risk register is produced quarterly by the Chief Executive and Director of Finance and Operations which sets out the main operational, finance and compliance risks facing the Association. Key risks are currently identified as the loss of income in the key areas of membership, events, projects and publications along with the risk of losing key staff. Appropriate further actions are taken after discussions with the Board of Trustees.

Highlights of 2020/21

- In January 2021 we launched our new strategic plan, setting out our goals and commitments over the next three years.
- Also in January we held our first online Annual Conference, with an impressive 1,121 registered delegates, providing 1,634 delegate days of continuing professional development (CPD) to our community.
- Thanks to the energy and commitment of the staff team, our committees and wider volunteer network, we continued to provide a wide range of other online support. Our summer conference trio (Summer, Futures and Technicians Conferences) attracted 328 delegates, while our webinars benefited over 1,200 registrants and our online courses continued to grow in popularity, with over 1,500 registrations. With support from the Wellcome Trust, we provided 68 Explorify workshops for primary schools and teachers. New online resources included videos to accompany our popular BEST STEPS resources (with thanks to the support of the Horners' Livery Company).
- From a regional perspective, we had over 3,300 registrations for online events across the UK, including regional conferences, smaller events, TeachMeets and TechMeets. In addition to these events, the Field Officer team ran a further seven online professional registration workshops, attracting 189 delegates.
- We continued to work hard to represent the science education community, partnering with key stakeholders across the sector. With support from the Gatsby Foundation, we published both the results of our summer 2020 practical science survey and a review of the Gatsby Good Practical Science benchmarks through a Covid-19 lens, as well as contributing to other reports and responding to consultations.
- Although individual membership numbers were down, we introduced two new organisational membership categories (science department and hybrid) to complement our well-received primary school membership. These are already proving popular. We also amalgamated International Associate membership into our other categories, recognising that our members are science educators first and foremost, rather than necessarily wanting to be defined by where they are based.
- As part of our commitment to environmental sustainability, we made the decision to move to a 'digital first' model for our three paper journals, *Education in Science, Primary Science* and *School Science Review*. This means that individual members can still opt in to receive hard copies, but the default is to access copies digitally. From September 2021, all ASE journals will follow this new model.
- Despite the Covid-19 pandemic, the Association had an incredibly successful year of bidding for innovative projects. This included funding from the Gatsby Foundation to support our ongoing work around science teacher retention and wellbeing, as well as funding from the Wolfson Foundation, Wellcome Trust, Department for Education and Institute of Physics, providing vital support to our work on practical science, primary science, subject-specific CPD, science and maths, and diversity and inclusion.

Achievements and performance

With the ongoing Covid-19 pandemic, 2020-2021 was undoubtedly a challenging year for the science education community and for schools and colleges more broadly. Our staff, Trustees, committee members and wider volunteer network have continued to work tirelessly to support science educators through this difficult time.

The Association is structured as a charity, registered with the Charity Commission in England and with the Office of the Scottish Charity Regulator in Scotland and incorporated by Royal Charter. As such, the ASE is obliged in law to confer public benefit – it does this through its aims, which are wholly concerned with education. The aims express a commitment to improving science education for all young people, primarily but not exclusively across the UK. This is achieved by supporting science educators across the sector, including trainees, teachers, technicians, initial teacher educators, consultants, researchers and others concerned with the provision of science education in schools and colleges, and by influencing components of society, including government, such that science education can flourish. The ASE has its focus solely on science education and, as such, we are uniquely placed among professional bodies in supporting everyone working in education across the sciences.

Our current Strategic Plan 2021-2024 was first presented to members at the January 2021 Annual General Meeting (AGM). Trustees seek evidence that progress is being made with the Strategic Plan and the Chief Executive provides a report to Trustees at their quarterly meetings.

Challenges facing our community

Global crises such as the Covid-19 pandemic and climate change have underlined the need for a strong future pipeline of scientists and engineers, as well as scientific literacy for all. In order to achieve our mission of promoting excellence in science education, we have committed to focusing on the following challenges over the next three years, embedding them across our activities:

1. **Recruitment & retention** of specialist science teachers and technicians;
2. **Access to subject- and context-specific continuing professional**

development (CPD) for all teachers of science and technicians;

3. **Student access to frequent, varied and purposeful practical science,** led by expert teachers, with strong technical support and suitable facilities and equipment; and
4. **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;
5. 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
6. **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.

We have also committed to **embedding equality, diversity and inclusion** across our activities, systems and processes.

Strategic themes and objectives

To meet these challenges, we have identified four strategic themes, together with key deliverables that will help us to measure our impact:

- Organisational sustainability
- Community
- Professionalism
- Advocacy

We recognise that working in partnership is and will continue to be vital in delivering our strategy. We value our work with key partners and will continue to engage with stakeholders in the UK and internationally to support our community and achieve our mission.

Theme 1: Organisational Sustainability

Objectives:

- **Ensure operational excellence across the Association through effective use of governance, information technology (IT), marketing & communications, finance and human resources.**
- **Continue to build our reputation as a welcoming and inclusive organisation, both as a workplace and for our community.**
- **Continue to review our IT to make best use of systems and infrastructure.**
- **Continue to develop and embed a culture of evidence-based decision-making across our activities.**
- **Continue to review the Association's portfolio of activities to ensure that**

we are maximising return on investment and delivery of our mission.

- **Consider new commercial opportunities that align with the ASE's mission, vision and expertise.**

During 2020-2021, the ASE continued to deliver its mission and charitable objectives through its staff and members, who were represented on the Trustee Body and across the Association's committee structure.

The governance structure of the Association has continued to follow charity sector best practice. Trustees meet four times per year and are updated on a regular basis on their responsibilities, so that they are clear about their roles and able to deliver against the six key duties as set out in the '*The Essential Trustee*' (CC3) of the Charity Commission. A Trustee skills audit is completed and updated each September.

The Trustees have delegated the authority to manage the Association to the Chief Executive, who reports on the performance of the Association against the strategic plan approved by the Trustees. The Chief Executive is supported by the staff team, including our new Director of Finance and Operations, Laura Rafferty, who joined the Association in January 2021. The major control documentations of the Association are kept up-to-date as appropriate.

There has been a continued emphasis on prudent, managed monitoring of finances. This has been particularly important given the ongoing impact of Covid-19 on our activities. Cash flow has continued to be keenly monitored by the Chief Executive, Finance team and Honorary Treasurer and reported to Trustees on a quarterly basis.

In response to the Covid-19 pandemic, all committee meetings have been held by video conference since March 2020. This has worked well and has enabled us to engage committee members who previously struggled to attend meetings at ASE Headquarters, as well as resulting in a financial saving to the ASE. Going forward, we are aiming to move to a blended model, with a mixture of face-to-face and online meetings.

The Association is keen to encourage as wide a representation of its community as possible on its committees. Members are invited to apply for committee vacancies through announcements in the *Education in Science* magazine and on the website.

In order to support the smooth running of the ASE over the Covid-19 pandemic, the Chief Executive, Chair of Trustees, Chair of the Association and Treasurer have continued to meet by monthly video conference as a Management Support Group to discuss progress and issues. Notes have been kept of these meetings and made available to all Trustees, with the wider Trustee body consulted on key decisions.

From an IT perspective, in spring 2020, the long-awaited move to a cloud-based software and server-based platform was completed – enhancing both data security and working practices. This has been particularly useful given the Covid-19 situation and concomitant increase in the need for remote-working solutions. The move necessitated the replacement of a greater number of obsolete machines than previously anticipated, but this should see a reduction in the spend on IT

hardware going forward. On the platform front, thanks to the work of the team and external developers, our systems were considerably more stable than in the previous year. This has meant that, as we enter negotiations to extend our external supplier contract we are able to look beyond simple support and maintenance towards further development and enhancement options.

Over 2020/21 we were able to benefit financially from the Government Job Retention Scheme, allowing us to furlough a number of staff members over the year. We were also enormously grateful for the support provided to the Association by the late Dr John Barker, who left the ASE a significant donation in his Will, which has been recognised in the 2020/21 accounts.

The Association is committed to embedding equality, diversity and inclusion across our activities, systems and processes. In addition to completing the 2021 Science Council and Royal Academy of Engineering Diversity & Inclusion benchmarking framework, in 2020-21 we set up a new Diversity & Inclusion working group to guide and inform our work in this area.

Trustees and the ASE staff wish to thank our members and partner organisations for their continuing support, and particularly our volunteers for their generosity with the time they commit to the Association.

Theme 2: Community

Objectives

- **Ensure our membership offerings are fit for purpose, with a membership structure that supports and attracts those involved with science education across all sectors and career stages, in the UK and internationally.**
- **Expand our support for early career teachers in primary and secondary education, building engagement with these audiences to understand their needs.**
- **Increase our engagement with heads of science departments and science co-ordinators, highlighting our value for these audiences, particularly for those new, or aspiring, to these roles.**
- **Explore opportunities to improve primary-secondary collaboration.**
- **Continue to increase our international links and networks, supporting members to network and share best practice on a global scale as well as increasing access to and awareness of our events, activities, publications and resources.**
- **Increase the profile of our teacher educator and consultant (Futures) membership category, ensuring a clear offering for this target audience.**
- **Introduce a retired membership category, recognising the significant**

expertise and support that this group brings to our community.

- **Continue to expand the Association's offering for our community of technicians.**
- **Work with further education stakeholders to better understand this audience and ensure that we are meeting their needs.**
- **Increase our engagement with school and college Senior Leadership Teams, recognising the significant influence that these groups have on teacher and technician recruitment and retention.**
- **Explore new ways to engage with Multi Academy Trusts (MATs) and ensure that we are responding to different models of initial teacher education to support those coming to teaching through both school-based and university routes.**

Recruitment, retention and support for members remain key priorities. In 2020/21, the work of the ASE staff team, national and regional committees and other volunteer support enabled us to deliver a wide variety of online activities at which ASE membership was promoted. Many of these are outlined on the following pages.

Responding to feedback from our community, we introduced two new membership categories: science department membership for secondary schools and colleges and hybrid membership for primary + secondary. Both categories have been well received and are already allowing us to broaden our reach and support for teachers and technicians across the UK and internationally. These two institutional membership categories sit alongside our existing popular primary school membership.

Our new trainee and early career membership plan, launched in 2019/20, has also continued to grow and we have been pleased to support the Primary Science Enhancement Award for Initial Teacher Education being piloted by the Primary Science Teaching Trust (PSTT), with discounted membership fees for trainees taking part in this scheme.

Recognising that our members are science educators first and foremost, rather than necessarily wanting to be defined by where they are based, in 2020/21 we amalgamated International Associate membership into our other categories.

From a university perspective, library subscriptions remained strong, with 272 active libraries for 2020/21. Further Education (FE) membership remains an area for further development in 2021/22.

As anticipated, the 2020/21 school year brought with it significant levels of stress for many teachers and technicians in balancing the logistical challenges resulting from Covid-19 alongside delivering high quality education, both face-to-face and remotely, and for many of those working with older students, leading on the teacher-assessed grades that took place instead of exams. Having paused our Science Teacher SOS pilot during the early stages of the pandemic, we were grateful for the support of the Gatsby Foundation in allowing us to complete the pilot in 2020/21. We look forward to expanding this important work in 2021/22.

The ASE remains concerned about the situation with its technician members, particularly in light of Covid-19, which has led

to many technicians leaving their roles or being fearful of redundancy. Technicians play a key role in enabling students to access safe and effective practical science as well as providing vital support to science teachers. We will continue to advocate for greater support and recognition of those working in these roles.

Theme 3: Professionalism

Objectives:

- **Offer a professional learning journey for everyone working to support science education in the UK and internationally, through conferences and events, interactions with our journals, books and resources and participation in Association projects and initiatives.**
- **Continue to expand our continuing professional development activities to allow us to reach and support our members across the UK and internationally, including both face-to-face events and online CPD.**
- **Increase the visibility and prestige of our publications, ensuring that our publishing and booksales operations remain relevant and beneficial to our membership and to the Association.**
- **Continue to offer professional registration and increase the profile and recognition of professionally registered members, providing opportunities to contribute through committees and groups, projects, events, mentoring opportunities and publications.**
- **Continue to develop and expand our accreditation activities, for example through our *Green Tick* evaluation scheme.**
- **Continue to bid for innovative projects and initiatives that support the key challenges facing our community.**

Committees and groups

The importance of peer-to-peer support has been particularly clear through the Covid-19 pandemic; although we have missed the conversations and mutual support gained from face-to-face meetings, members have continued to network online through local and regional groups and national committees, conferences and events, as well as through social media. These activities have provided vital opportunities to support each other as well as for continuing professional development, both for ASE members and the wider science education community.

National Committees

During the year, the Association's committees continued to be active in furthering support and professional practice in science education.

The **Education Group** was ably led by the Chair of the Association, who, as part of the Chair Trio (Immediate-past Chair, current Chair and Chair-Elect) was also active in supporting other committees and events throughout the year. One of the main new Chair Trio activities for 2020/21 was the establishment of a CPD working group, providing valuable guidance as our CPD provision continues to grow. The Education Group has also continued to support the Chairs of committees and groups to network

and share good practice with each other as a formalised part of the Group activities and has been working with the staff team to provide an online format for sharing news and events. The Education Group has been instrumental in providing a voice for members during these difficult times and has fed back to the ASE and others on key science education issues, giving an insight into schools during the pandemic and the issues being faced by members and the wider community. As part of the relaunch of the resources section on the ASE website (see below), work also began on reviewing and refreshing our Best Practice Guidance documents. These bring together important advice on key aspects of science teaching.

The 11-19 Committee continued to provide vital advice and support across our activities, including guiding the development of our new science department membership. In addition to the work of Helen Harden and Neil Wade, together with Elizabeth Lupton, in leading on our new BEST STEPS videos, and of Andy Chandler-Grevatt, Rob Butler and Sarah Longshaw on our Science Teacher SOS project (see Resources and Projects sections below), the Committee also supported the development and updating of a number of other resources that will be published in 2021/22. This included the first modules of the updated *Science Leaders' Survival Guide* as well as a new Curriculum Evolution Document, led by Caroline Greer. From an events perspective, Committee members generously gave their time to support Conference sessions, webinars and the new ASE Podcast, which aired its first three programmes in 2020/21, hosted by Andy Chandler-Grevatt.

As with the 11-19 Committee, the **Primary Committee** includes representatives from all four countries of the UK, with a good blend of practising teachers, consultants and ITE providers. In 2020/21 members were actively involved in creating a full and varied programme for the online Annual Conference, as well as supporting the Summer Conference. The Committee also provided valuable advice and support in the development of the Explorify workshop programme funded by the Wellcome Trust, with 68 free workshops delivered between January – July 2021. In addition to this support, led by the Committee, we were delighted to publish the updated version of our *Primary Science Leaders' Survival Guide*, covering everything from assessment guidance to starting a STEM club.

One of the silver linings of the Covid-19 pandemic has been the ability of science educators to join our activities from across the world. The International Day, led by the **International Group** as part of our online Annual Conference in January 2021, proved to be a particular success. The International Group was also pivotal in informing the Association's move to amalgamate International Associate membership with other categories. Some of the Group's wider plans to increase the ASE's international activity remain on hold due to the Covid-19 pandemic. However, the *ASE International* journal has continued to go from strength to strength and, with the change in membership structure, has now been opened up to all ASE members.

The **Health and Safety Group** comprises an experienced set of members, including co-opted representatives from CLEAPSS and SSERC. The Group continues to provide vital support in reviewing and contributing to

publications, as well as leading on articles for *Education in Science*. In 2020-21, the Committee also supported the Association in reviewing materials for Green Tick Awards and contributed to the online Annual Conference with a series of video presentations, made by the Group, of practicals thought by many to be banned, restricted or too dangerous.

2020-21 was another busy year for the **Laboratory Technicians Committee**, providing valuable support with the technicians strand of the online Annual Conference and the online Technicians Conference in summer 2021. As well as including lunchtime drop-in/TechMeet sessions at both of these conferences, further lunchtime TechMeets, hosted by Simon Quinnell, continued to be held regularly throughout 2020/21, with good attendance. Based on the work of the 11-19 Committee, Liz Shaw and Jane Oldham led on work to create a Technician SOS document, while Sue Smith continued to compile the Prep Room page for *Education in Science*. As always, one of the key roles of the Committee has been helping to inform ASE's advocacy work, as well as providing support to RSciTech applicants and to the wider technicians community via the School Science Technicians Facebook group (membership is currently around 4,000). As active users of this group, the Committee is able to spot any hot topics and recurring issues as well as to promote the benefits of the ASE.

The **Research Group** once again provided valuable support to the Annual Conference, including a keynote on "Misunderstandings in Science" (led by Research Group Chair, Alastair Gittner, in conversation with Niki Kaiser) ,and a ResearchMeet provided an opportunity to hear from a range of researchers about their ongoing projects. The Group continued to support Headquarters staff with consultation responses and in 2021/22 will be working alongside the staff team on our planned activities around the Ofsted Science Research Review.

The **ASE Futures Committee** includes representation from primary and secondary university ITE, consultants/advisers, practitioners and other organisations, including exam boards and PSQM. As with our other national committees, Futures provides important support in informing our advocacy and other activities. In 2020/21 Alex Sinclair (Chair of the Committee) and Jane Turner (Chair-Elect of the Association) supported discussions with both internal and external stakeholders around our growing CPD provision and both were also appointed as Editors of *Science Teacher Education*, with other Futures members contributing articles. The Committee, in conjunction with ASE staff, helped to create a new "Futures Directory", which will be launched externally in 2021/22. The Committee also led their second online Futures Conference in summer 2021, which attracted 73 delegates. Going forward, we will continue to work with the Group to develop the ASE's plans for CPD, as well as raising the profile of Futures membership.

The **Registration Board** has met to award or reconfirm members for Chartered Science Teacher (CSciTeach), the Registered Scientist (RSci) and Registered Science Technician (RSciTech) awards. Applications have been supported by online professional registration workshops delivered by the Field Officer team, as well as support from committee members. As of July 2021, 345 CSciTeach, 249 RSciTech and 127 RSci awards have now been made by the ASE.

The **Publications Special Interest Group** has met virtually for a few focused mini-meetings throughout the year, covering topics including the new digital-first arrangement for the journals, the new Millgate Bookshop, the ASE Book of the Year Award, and how to manage the rising number of publishing proposals being submitted. The Group has been very active between meetings, responding quickly to regular email updates sent from the supporting staff.

The following new groups were also established in 2020-21:

- **Industry Advisory Group** – this group has been established to explore new ways to increase our links with industry, for example through our projects and events. The group has representation from a range of science employers, including BASF, GSK, Thomas Swan, the British Compressed Gases Association, Eastman Chemical Company and British Coatings Federation.
- **Inclusive Science Group** – Led by Rob Butler and Dr Jane Essex from the University of Strathclyde, this Group has been established in response to feedback from members and others that science teachers are struggling with the increasing numbers of learners with special educational needs and disabilities (SEND)/additional support needs.
- The Group has been very successful and now sits at around 130 members (both ASE members and non-members). The notes for the meetings are also used as a basis for regular articles in *Education in Science* to help reach as wide an audience as possible.

Publications

During 2020/21, we made the decision to move to a 'digital first' model for our three paper journals, *Education in Science, Primary Science* and *School Science Review*. This means that individual members can opt in to still receive their journals on paper if they prefer, but the default is to access copies digitally. The aim has been to reduce our environmental footprint and move alongside other organisations that have done the same. From September 2021, all journals have now followed this new model.

Education in Science features for the year included 'Back to School: curriculum and practical science post-lockdown'; Online learning; Annual Conference 2021; and Technician Support and SEND.

School Science Review themes covered 'Epistemic insight'; 'Science in health care' and 'Science Education and nature'. The proposed new format changes will be reviewed during 2021/22, in the light of the new 'digital first' model mentioned above.

Primary Science featured themes including 'Critical thinking in science'; 'Gender in science'; 'Raising the profile'; 'Science in the Humanities' and 'Healthy science', with a special extra issue sponsored by the Great Science Share for Schools.

The ***Journal of Emergent Science*** has gone from strength to strength under the editorship of Sarah Earle, with issues coming out in January and June.

As mentioned above, in the summer term, we appointed Jane Turner and Alex Sinclair as permanent editors of ***Science Teacher Education***, and three issues were produced,

including a special issue retrospective of the 2021 Futures Conference.

ASE International has also had a bumper year, with three issues including a wide range of pre-published articles from other ASE journals and a growing number of original submissions, all ably looked after by the ASE International Committee and sponsored by Gratnells, to whom we are grateful for their constant support. At the end of the 2021 academic year, we said goodbye to Marc Neesam as Editor, and welcome Ade Magaji as the new Editor for 2021 onwards.

As always, we say a huge thank you to all our Editors and editorial teams, who work so hard to keep the flow and quality of the ASE journal provision moving onwards and upwards.

In terms of book publishing, both the ASE and Millgate House continue to work hard to publish new and exciting texts for the world of science education. Although sales figures continued to suffer from not being able to hold face-to-face events, a record number of book proposals were received during the year, which will lead to a wide range of new titles over the coming months. Towards the end of 2020/21, Trustees agreed to bring together the ASE's two online bookshops (the ASE and Millgate House Education) into a single online bookstore. This was launched in August 2021 and can be found at www.millgatehouse.co.uk, where ASE members can continue to access discounts off both ASE and Millgate House products.

From an **ASE publications** perspective, *Be Safe* remained our best-selling publication, selling 411 copies, followed by the *ASE Secondary Guide to Science Education* (119 copies) and *Safeguards in the School Laboratory, 12th Edition* (114 copies). We have continued to sell some of our books as digital products through our website and Ebsco, which we hope will enable us to boost sales and reach wider audiences going forward. In addition to the publication of the new ASE/Hodder subject guides (biology and physics are already available and chemistry will be published shortly), we are also looking forward to the publication of our new books on science investigations through stories

The best-selling publication for **Millgate House Education (MHE)** in 2020/21 was *Science Concept Cartoons set* 1, which sold 661 copies. This was followed by It's *not fair* (393 copies), *Science Concept Cartoons 2* (299 copies) and *Superhero Scientists* (258 copies). The new *Teaching Primary Science Outdoors* book by Helen Spring has also had a good start and is selling steadily.

In other publications news, the 2021 Book of the Year award went to ***Wildhood: the epic journey from adolescence to adulthood in humans and other animals*** by Barbara Natterson-Horowitz and Kathryn Bowers.

The ASE's **Green Tick** programme continues to provide a valuable benefit for both teachers and publishers by evaluating external publications and resources. A number of Green Ticks were awarded in 2020/21, including to Tassomai, the Society for Endocrinology, the Ogden Trust, the National Farmer's Union Farmvention resources, Collins' *Understanding Covid-19* resource collection and *DNA Detectives – The Stone Age Mystery*.

Resources

As already highlighted in this report, we launched a number of new teaching resources in 2020/21, including the ***Primary Science***

Leaders' Survival Guide and new **BEST STEPS supporting videos**, led by the Primary and 11-19 Committees respectively (with support for the videos from the Horners' Livery Company).

We also took the opportunity to refresh and relaunch the resources pages on our website, helping to showcase key resources for primary, 11-19 and technician audiences.

We are grateful for the continued support of the Pan London Assessment Network in enabling us to feature a number of PLAN resources on the ASE website.

Alongside the ASE website, in 2020/21 we took the opportunity to refresh the look and feel of our sister website, **schoolscience.co.uk**, which provides free learning resources, information and news.

Annual Conference, events and TeachMeets

With the expanded reach possible through online events, the Northern region generously opened up their annual conference in November 2020 to all regions, resulting in an Autumn Conference attracting 79 delegates.

January 2021 saw the ASE's largest professional development event, the four-day **Annual Conference**, held online for the first time. An astounding 1,122 tickets were sold, representing 1,634 delegate days of CPD. The core of the programme offered live interactive sessions, while live recording and pre-recordings were used for some sessions to allow more flexible engagement for delegates. The Conference included the usual excellent range of high-profile speakers, including the ASE's President, Professor Sir John Holman, Dr Jasper Green HMI, Ofsted subject lead for science, as well as an outstanding selection of Frontier Science sessions, with leading experts such as Professor Jim Al-Khalili, Professor Robin Lovell-Badge of the Crick Institute, Professor Andrew Pollard of the Oxford Vaccine Group and more. We were very grateful for the support of our Honorary Conference Secretary, Professor Christine Harrison (who supported both the Annual and Summer Conferences) as well as our sponsors and exhibitors, particularly our main Conference sponsor, AQA.

Summer 2021 saw a trio of online ASE conferences, offering valuable professional learning opportunities for teachers, technicians and our Futures Community, with a particular emphasis at the Summer Conference on early career teachers. The three conferences attracted 328 delegates. Thank you to our sponsors and exhibitors for these events, in particular to GCSEPod and AQA, our main conference sponsors for the Summer and Futures Conferences respectively.

In addition to our online conferences, we also ran a number of popular **online courses**, including our Physics for Non-Specialists courses in partnership with Physics Partners, which are proving a particular hit with trainees and early career teachers, as well as our technicians' courses led by Simon Quinnell, which have continued to be very well-received.

Thanks to the support of our region committees, Field Officers and other volunteers, we were also able to continue with regional events through 2020/21. 64 online regional events were held across the UK, including the Scotland Conference (attracting 73 delegates), smaller events, TeachMeets and TechMeets. Although the pressure on schools

and colleges due to Covid-19 – and the exhaustion levels of teachers and technicians – grew through the year, these events nonetheless reached over 3,300 delegates (compared to 2,250 in 2019/20). The Field Officer team also ran a further seven online professional registration workshops, attracting 189 delegates.

Examples of regional events through the year included *Science meets English* and *Standing on the Shoulders of Giants* for primary members, a talk from Dr Appolinaire Etoundi at the University of West England on robotics and working with para-athletes, sessions on outdoor science, teacher wellbeing and assessment (including a session with SQA for teachers in Scotland, attracting over 100 delegates), a termly cluster group for heads and aspiring heads of science in Northern Ireland and a Saturday STEM spectacular online event organised by Wolverhampton University in collaboration with West Midlands ASE, which had 264 registrations. Several regions produced newsletters and/or worked in partnership with other organisations. For example, Surrey and Sussex led events in partnership with the Sussex Science Learning Partnership, while the Welsh region worked closely with the Royal Society of Chemistry to host three very well-attended events on *Chemistry in the Welsh Curriculum,* as well as a summer event in partnership with the Great Science Share for Schools.

Recognising the particular challenges faced last year by trainee and newly qualified teachers, several regions ran targeted events for this audience. Regions also noted the importance of their events and committee meetings over the year in creating 'a wonderful sense of friendship and mutual support through what have been trying times professionally', highlighting the value to be gained from getting involved with the ASE.

Projects and initiatives

Despite the impact of the Covid-19 pandemic, the Association had an incredibly successful year of bidding for innovative projects. Project opportunities are evaluated against the science education challenges that they help us to address, their financial implications, and their likely impact on the reputation of the ASE. Where appropriate, bids are submitted.

International projects & initiatives

- **Science Education for Action and Engagement towards Sustainability (SEAS):** This Horizon 2020 programme – SwafS-2018-2020 (Science with and for Society) is establishing, co-ordinating and evaluating collaboration among six open schooling networks led by universities and science centres, with partners in Austria, Belgium, Estonia, Italy, Norway, Sweden and the UK. The lead organisation is the University of Oslo. The focus this year has been on developing guidelines for the project's digital tools, establishing and implementing open school networks and developing an assessment framework for evaluating the project's impact.
- The ASE has continued to provide the secretariat for **Science on Stage UK,** with planning now underway for the next Science on Stage (SonS) Festival to be held in Prague in Spring 2022. 2020/21 activities included webinars, online resources and a session at the online Annual Conference. Our thanks go to Stuart Farmer, David Featonby and all the members of the UK SonS Committee, who continue to support and encourage prospective applicants.

- The ASE administers the **Alexander Prize** funds (established in memory of Professor & Mrs Alexander for science education work in commonwealth countries). The prize is awarded to a female teacher of science, technology or mathematics who has made a significant contribution to the education of women or girls in situations of scarce resources. No prizes were awarded in 2020/21.

Other key projects and initiatives

- **Primary science** – The **'Key moments in history – a fossil hunter's story'** project is producing teaching resources and professional learning strategies for teachers of children aged 9-11 years, to support their knowledge and understanding of evolution, the nature of scientific enquiry and the strengths and limitations of scientific knowledge. This project is supported by the Big Questions in Classrooms initiative of the Templeton World Charity Foundation. The focus this year has been on the phase 2 pilot (which had been postponed from the spring and summer terms 2019-20 due to the Covid-19 pandemic) and took place during the autumn, spring and summer terms of this academic year. All evaluation feedback to date has been extremely positive regarding the teaching and learning resources (including the *Sea Dragon* film) from the perspectives of both teachers and their children.
- **Practical science – Good Practical Science (Covid-19)**: In response to the significant impact of Covid-19 on practical science, we published the results of our 2020 practical science survey and expert review of the Gatsby *Good Practical Science* benchmarks through a Covid-19 lens. We also ran a series of webinars in Autumn 2020 focused on providing practical science support in biology, chemistry and physics. The sessions were run in partnership with the Institute of Physics, Royal Society of Chemistry and Royal Society of Biology and were funded by the Gatsby Foundation.
- **Teacher retention – Science Teacher SOS:** In January 2018, the ASE launched a campaign to attempt to stem the flow of science teachers leaving the profession. Following a successful bid to the Gatsby Foundation and a generous funding extension to allow the project to re-start after having to be halted early in the pandemic, Dr Andy Chandler-Grevatt from the University of Sussex, together with Field Officers Rob Butler and Sarah Longshaw, completed the pilot of the framework in 2020/21. The report is now available on the ASE website.
- **BEST STEPS – Next Steps:** As mentioned earlier in the report, thanks to the work of Helen Harden, Neil Wade and Elizabeth Lupton we were able to secure funding from the Horners' Company Charity that enabled the writing of our new BEST STEPS-Next steps resources. The funding allowed for the production of two videos to promote the original BEST STEPS resources, as well as the production of an innovative interactive pdf resource that combined video CPD sessions and example classroom facing materials.
- **Advanced Mathematics Support Programme (AMSP)**: This Department for Education-funded project, in partnership with Mathematics in Education and Industry as part of the AMSP, aims to develop the capacities and confidence of

biology teachers in their use of mathematics within the post-16 context and to encourage more students to study Level 3 mathematics during the post-16 phase. Supported by a focus group of experienced school science leaders who teach post-16 biology and individuals with experience of curriculum and assessment design, the project delivered two popular and well-received online workshops, and ran a policy-focused seminar on the topic of 'Core Maths as an alternative to A level Mathematics for A level students studying science without mathematics'. This project continues until July 2022.

- **Great Bug Hunt:** Run annually since 2015 by the ASE in partnership with the Royal Entomological Society, the ever popular Great Bug Hunt competition was created to help encourage teachers to take science learning out of the primary classroom and bring it to life in the outdoors. As always, we were delighted to receive a fantastic range of entries in workbooks, posters and factsheets using graphs, photos, pictures and poems.

In addition to these projects and initiatives, Autumn 2021 will see the launch of the following four new projects:

- **ASE RISE (Retention Initiative for Science Education)** – with thanks to support from the Gatsby Foundation we will be developing our Science Teacher SOS framework into a new proactive set of tools for science departments
- **Keeping science practical** – thanks to support from the Wolfson Foundation, we are delighted to be launching a new practical science support programme for up to 120 schools in disadvantaged circumstances across the UK over the next three years.
- **ASE BEST BITES** – thanks to funding from the Wellcome Trust, we will be working in partnership with the University of York Science Education Group, supported by CIEC, to develop and pilot the impact of using topic level bite-sized online CPD in science to support teachers in upper primary and lower secondary.
- **Inclusion in Schools** – we are proud to have been subcontracted by the Institute of Physics as their delivery partner for the Inclusion in Schools aspects of their contract with the Department for Education. This work is very much in line with our strategic commitment to diversity and inclusion.

Theme 4: Advocacy

Objectives

- **Raise the profile of science teaching and learning and champion the needs of those working across science education through our marketing, communications, publishing and policy activities, projects and events.**
- **Work with policymakers and other key stakeholders as a critical friend, informing policymaking to help shape science education policy and practice.**

- **Emphasise the value of our expertise and independence.**
- **Give a voice to our community to help shape the future of science education, engaging our members with key policy issues and channelling their views into our policy activities.**
- **Continue to highlight the key challenges facing our community, drawing on research, and commissioning research where appropriate, to inform our policy activities.**
- **Continue to proactively scan the horizon for changes and initiatives affecting our community.**

Advocacy has long been a key role for the ASE, representing our members and wider community as the voice for science education professionals, helping to shape the science education landscape.

During 2020/21 our main advocacy activities included:

- Representation to the Government's Comprehensive Spending Review (September 2020);
- Contribution to the NFER, Royal Society of Chemistry and Gatsby Foundation report on *The Science Technician Workforce in English Secondary Schools (*published November 2020);
- Temperature Check survey to inform the ASE and our stakeholders of science educators' views on the challenges and opportunities for science education during the continuing Covid-19 crisis (approx. 300 responses) (November-December 2020);
- *Sunday Times* Letter to the Editor in response to the article 'Natural History GCSE to tempt pupils outdoors' (November 2020);
- Response to TIMSS results highlighting a marked decline in Year 9 science performance (December 2020) – this was followed by a webinar on the TIMSS report by Professor Michael J Reiss and Dr Mary Richardson (April 2021);
- Contribution to the Institute of Physics' *Subjects Matter* report (published December 2020) and ongoing representation on the roundtable established to look at the recommendations from this report;
- Response to the Royal Society consultation on their Mathematical Futures programme (January 2021);
- Response to the DfE and Ofqual consultation on the summer exams 2021, led by our 11-19 Committee (February 2021);
- Response to the Pearson Future of Qualifications and Assessment survey (March 2021);
- Contribution to the Ofsted Research Review on science (published April 2021);
- Learned Societies' Group on Scottish STEM Education Briefing Paper for those seeking election to the Scottish Parliament (April 2021);
- Contribution to the Campaign for Science and Engineering (CaSE) Report, *Inspiring Innovation* (published May 2021); and
- Learned Societies' Group on Scottish STEM Education article in the *Herald* on the OECD review of the Curriculum for Excellence.

The Chief Executive and Director, Curriculum Innovation continued to be active throughout the year in representing the Association at external events such as those run by the Centre for Industry and Education Collaboration (CIEC), the National Farmers' Union (NFU), LEGO® Education and CaSE, Inside Government and others.

In England, the ASE continues to be one of the five partner organisations of the Education Policy Alliance (also including the Institute of Physics, Royal Society, Royal Society of Biology and Royal Society of Chemistry) and to work with the other bodies to achieve stated joint strategic aims, particularly around the science curriculum.

In Wales, ASE Cymru was represented this year at Science and the Assembly.

In Scotland, the ASE is represented on the Royal Society of Edinburgh's Learned Societies' Group on Scottish STEM Education (LSG). In addition to the activities listed above, in 2020/21 we supported the LSG letter to Professor Mark Priestley on the Independent Rapid Review of National Qualifications Experience.

In Northern Ireland, our Field Officer is a member of the Learned Societies and Professional Bodies group and the All-Party Group on Science and Technology, and represented the ASE at Science in Stormont (October 2021). We were also represented at CCEA consultation events on the assessment arrangements for Summer 2021 and facilitated a meeting of primary and secondary teachers with the Lead Inspector of Science and Technology (John Murray) to discuss the impact of the lockdowns on science learning (June 2021).

The ASE also continues to be an active member of the Council for Subject Associations (CfSA) as well as a number of other steering and advisory groups, including the new Science Working Group convened by STEM Learning, with representation from the Learned Societies, Institute for Research in Schools, Primary Science Teaching Trust and Royal Society.

The *Best Practice Guidance* documents produced by the Education Group also continue to provide a valuable source of information on key issues.

The ASE has regular updates and briefings with DfE, Ofsted and Ofqual. In 2020/21 we also attended meetings with BEIS and the Government Office for Science.

The ASE has links with science associations from several other countries, for example with the National Science Teachers Association (NSTA) and sister associations across Europe. At the January 2021 online Annual Conference, we held a very well-received panel discussion on European Science Education post-Covid, with speakers from Italy, France, Belgium and the Netherlands. By continuing to develop these networks, the ASE can gain insights into professional practice that can be used to benefit our members and support science education in other parts of the world.

Plans for 2021/2022

Supporting our members and the wider science education community remains at the heart of the ASE and has rarely been more important.

The ASE launched its new three-year strategic plan at the January 2021 online Annual Conference. The new plan has been developed in partnership between ASE Trustees, committees, members and staff and covers both ASE activities and those of Millgate House Education. It includes the following strategic themes: Organisational sustainability, Community, Advocacy and Professionalism, as well as highlighting a number of key challenges facing our community, which will form the basis of our policy and project activities over this period. Key activities for 2021/22 are highlighted below.

Organisational sustainability:

- Continue to respond to the implications of the Covid-19 crisis, exploring new ways to deliver our activities, support our community and ensure financial sustainability.
- Continue the review of our national committees to clarify the roles and responsibilities of each, increase diversity, maximise impact and improve links, both with other committees and with ASE Headquarters.
- Help to ensure a strong future pipeline of committee members through better communication of what it means to be on a committee and increased recognition for committee members. Explore ways to increase early career representation on our committees.
- Build on the findings from the Science Council Diversity and Inclusion Benchmarking framework to embed equality, diversity and inclusion (E,D&I) across our systems and processes.
- Continue to develop consistent branding and engaging messaging across our activities, ensuring that we have a clear value proposition, increasing our profile and visibility and exploring new ways to engage teachers.
- Building on the continued success of our online activities, further develop our digital activity, including social media, webinars and podcasts, to ensure that we are maximising our reach.
- Continue to manage the Association's finances prudently, to grow our reserves and ensure sufficient buffer against adverse risks.
- Continue to review and refine the Association's systems, infrastructure, processes and operating procedures.
- Continue to evaluate all project opportunities against their financial implications, educational benefits and likely impact on the reputation of the Association.

- Launch and embed our new online bookshop, bringing together the current ASE bookshop with Millgate House Education.

Community:

- Strive to increase membership recruitment and retention, with particular focus on institutional membership (primary, secondary and FE) to maximise the reach of our support.
- Continue to increase our support for early career members through targeted online and face to face events.
- Launch a new hybrid (primary + secondary) membership option, providing an opportunity to increase our engagement with all-through schools, MATs and initial teacher education departments.
- Introduce post-16, technician and industry strands at our 2022 Annual Conference.
- Explore opportunities to introduce a mentoring scheme, linking early career members to CSciTeach members in their region.
- Explore new activities to engage Senior Leadership teams, particularly through our projects.

Advocacy:

- Continue to increase our policy and public affairs activities, capturing the views of our members on key policy issues and working in partnership with key stakeholders, including policy-makers, regulators, funders and learned societies, to help shape the science education landscape.
- Continue to focus our advocacy activities around the key challenges facing our community, particularly those exacerbated by Covid-19, such as student access to frequent varied and purposeful practical science.
- Assess and respond to major consultations (in partnership with other organisations where appropriate).
- Draw on the expertise of our Research Group to promote evidence-based practice, support with horizon-scanning and ensure that our policy activities are research-informed.
- Draw on the expertise of our Education Group to keep the ASE's *Best Practice Guidance* current, relevant and useful to stakeholders and our community.
- Continue to advocate for further support for and recognition of those working in technical roles.

Professionalism:

- Continue to develop our CPD programme, providing a high-quality professional learning offering that meets the needs of our members across our community.
- Subject to Covid-19, return to a face-to-face Annual Conference at Sheffield Hallam University.
- Continue our popular webinar programme, ensuring a broad programme of sessions providing support across our community.
- After a quieter period over spring-summer 2021, resume and continue to expand our regional provision, including a blend of high-quality face-to-face and online conferences and workshops, TeachMeets and TechMeets.

- Consider opportunities to support our members in developing economies with accessing continuing professional development.
- Launch and promote our new register for teacher educator and consultant (ASE Futures) members.
- Continue to raise the profile of professionally registered members and increase opportunities for members with CSciTeach, RSci or RSciTech to get involved with our activities.
- Continue to enhance our digital journals offering.
- Explore ways to support authors looking to write for our journals for the first time.
- Continue to explore opportunities to collaborate and partner with other like-minded organisations to increase our Open Access journals offering.
- Continue to innovate with formats and outputs across our booksales portfolio.
- Increase the number of books published each year, while continuing to ensure a high-quality offering.
- Continue to grow the number of entries to the ASE Book of the Year Award.
- Explore new opportunities to link to and promote ASE and Millgate books and resources.
- Increase capacity for delivery of projects and initiatives, focusing particularly on the key challenges facing our community and continuing to draw on the expertise of our professionally registered members.
- Continue to develop our reputation as leaders in practical science.
- Explore opportunities to place the ASE at the forefront of embedding environmental sustainability into science education and continue to grow our expertise and reputation around diversity and inclusion.
- Continue to develop and expand our accreditation activities through our Green Tick evaluation programme.
- Build on our reputation as a gateway to high quality science education resources.
- Continue to explore other opportunities for revenue generation that align with the ASE's mission, vision and ethos.

Structure, governance and management

The Association is governed by the Rules of the Association as adopted at the Annual General Meeting in January 2006 and amended most recently in January 2021. At the January 2016 meeting it was agreed that subject to formal changes to documentation and rules as necessary Council would now be known as the Trustee Body and Assembly as the Education Group.At the Annual General Meeting in January 2011, members voted to change the governance structure of ASE to create a smaller body, which is the Trustee Body of the Association, (Council), responsible for all governance issues, and a larger Education Group, (Assembly), which concerns itself largely with issues related to ASE's work in science education and with communication.

The Trustees have responsibility for ensuring that ASE complies with relevant charity laws and regulations, that the finances are properly regulated and monitored and that appropriate policies are in place. The Trustees ensure that the activities of the Association fit with the Strategic Plan and take a long term view of the health of the Association.

The Trustee body consists of:
- three members elected from the Education Group of the Association
- three members elected from the membership by direct vote
- four further members appointed by Council
- the Chair of the Association (may be delegated to the past-Chair of the Association)

One of the Trustees will be identified to represent Trustees on the Quality and Audit Committee.

A Chair of Trustees and a vice Chair shall be elected from and by the Trustee members.

The Chair-Elect and Immediate Past Chair of the Association may be in attendance at meetings of the Trustee Body and may participate in Trustee discussions both at and between meetings.

New Trustees take part in training on the management of the finances of the Association and on the responsibilities of trustees. They are given associated literature. On-going training consists of the circulation of Charity Commission updates and training on aspects of the Trustee's role.

The Trustees are responsible for the direction and management of the Association through its Strategic Plan.

Key responsibilities include ensuring a clear vision, the corporate behaviour of the charity, legal and regulatory governance, compliance, guardianship of assets and ensuring high standards of governance.

The Trustee body normally meets on three/four occasions during the year.

Trustees who served during the year and up to the date of approval of these financial statements are listed below:-

Richard Needham - Elected by Membership and Chair of Trustees (until 31 December 2020)
Ali Redmore - Elected by Membership and Chair of Trustees (from 31 December 2020)
Roger McCune MBE - Appointed Member, Association Treasurer
Bryan Berry - Appointed Member
Maggie Hannon – Appointed Member (Trustee rep on Q&A Committee)
Daniel Sandford Smith – Elected by Membership
Susan Burr – Elected by Membership
Simon Quinnell – representing Education Group and immediate past Chair
Leigh Hoath – representing Education Group

Trustees (continued)

Cerian Ayres – representing Education Group (from 1 August 2021)
Jane Turner – Chair of the Association (from 1 August 2021)
Geoff Mackey – elected by Membership (from 1 August 2021)
Manoj Chitnavis – co-opted Trustee

Key Management Personnel

The Trustee Body and the Chief Executive are the key management personnel.

The Chair and the Chief Executive are in regular contact to discuss ongoing matters and full reports from the Chief Executive are discussed at meetings of the Trustee Body including all matters relating to activities, finance, budgeting, strategy and future planning.

The Chief Executive is subject to an annual development review by the ASE Chair and Treasurer who advise the remuneration committee of proposed awards which are then ratified by the Trustee Body.

Financial review

The financial position of the charity and the group is set out in the financial statements, including principal sources of funding and resources expended. The financial statements have been prepared in accordance with the accounting policies set out in the notes, the requirements of the Trust Deed and the Charities SORP (FRS 102) and comply with current statutory requirements. More detail on the ASE's financial performance for the year is given in the Honorary Tresurer's annual report on page 9.

Going concern and Covid-19

As stated in note 1b the Trustees have considered going concern and the ongoing effect of the Covid-19 outbreak. The Trustees consider that the outbreak will continue to cause disruption to the Charity's day to day business for some time. As detailed in note 1b, the Trustees have a reasonable expectation that the Charity has adequate resources to continue in operation for the foreseeable future.

Priorities in this regard continue to be maintaining the safety of staff, the financial sustainability of the organisation and the support of our members.

Reserves Policy

It is the policy of the trustees to aim to maintain unrestricted reserves at three months running costs which amounts to approximately £203,000.

Total consolidated unrestricted reserves at 31 July 2021 were £206,425 (2020: £60,835). Trustees are pleased to see that the level of consolidated unrestricted reserves has increased this year and has been brought into line with the organisation's policy.

Investment Policy

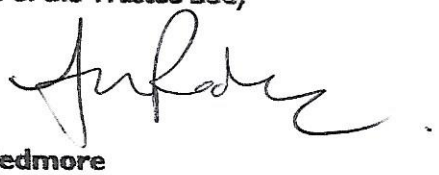
Monies are currently held in an interest bearing deposit account.

Membership numbers as at July 2021:
Individual: 3,949 (2020: 4,521)
Organisations: 815 (2020: 781)
Total Members: 4,764 (2020: 5,302)

Disclosure of information to auditor
Each of the Trustees has confirmed that there is no information of which they are aware which is relevant to the audit, but of which the auditor is unaware. They have further confirmed that they have taken appropriate steps to identify such relevant information and to establish that the auditor is aware of such information.

Auditor
HW Fisher LLP were appointed auditor to the charity and a resolution proposing that they be re-appointed will be put to the next Annual General Meeting.

On behalf of the Trustee Body



Alison Redmore
Trustee
Dated: 19th March 2022

STATEMENT OF TRUSTEES' RESPONSIBILITIES

The Trustees are responsible for preparing the report of the Trustees and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England & Wales and in Scotland requires the Trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charity and the group and of the incoming resources and application of resources of the group for that period.

In preparing these financial statements, the Trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities Statement of Recommended Practice (SORP);
- make judgments and estimates that are reasonable and prudent;
- state whether applicable United Kingdom accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity and group will continue in operation.

The Trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charity and the group and enable them to ensure that the financial statements comply with the Charities Act 2011, the Charity (Accounts and Reports) Regulations 2008, the Charities and Trustee Investment (Scotland) Act 2005, the Charities Accounts (Scotland) Regulations 2006 and the provisions of the charity's constitution. They are also responsible for safeguarding the assets of the charity and group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Association for Science Education

INDEPENDENT AUDITORS' REPORT TO THE TRUSTEES OF THE ASSOCIATION FOR SCIENCE EDUCATION

Opinion

We have audited the financial statements of The Association for Science Education (the 'parent charity') and its subsidiary ('the group') for the year ended 31 July 2021 which comprise the consolidated Statement of Financial Activities, Consolidated and Charity Balance Sheets, consolidated Statement of Cash flows, and the notes to the financial statements, including significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

In our opinion the financial statements:
- give a true and fair view of the state of the group and parent charity's affairs as at 31 July 2021 and of the group's incoming resources and application of resources, for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005 and regulation 8 of the Charities Accounts (Scotland) Regulations 2006 (as amended).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditors' responsibilities for the audit of the group and parent charity financial statements section of our report. We are independent of the group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the trustees' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Charity's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the trustees with respect to going concern are described in the relevant sections of this report.

Other information

The other information comprises the information included in the annual report other than the financial statements and our auditor's report thereon. The Trustees are responsible for the other information contained within the annual report. Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon. Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

INDEPENDENT AUDITORS' REPORT TO THE TRUSTEES OF THE ASSOCIATION FOR SCIENCE EDUCATION

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters in relation to which the Charities (Accounts and Reports) Regulations 2008 and the Charities Accounts (Scotland) Regulations 2006 (as amended) require us to report to you if, in our opinion:

- the information given in the Trustees' Report is inconsistent in any material respect with the financial statements; or
- sufficient and proper accounting records have not been kept; or
- the financial statements are not in agreement with the accounting records; or
- we have not received all the information and explanations we require for our audit.

Responsibilities of trustees

As explained more fully in the Statement of Trustees' Responsibilities, the trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the trustees determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error. In preparing the financial statements, the trustees are responsible for assessing the group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

We have been appointed as auditors under section 144 of The Charities Act 2011 and section 44(1)(c) of the Charities and Trustee Investment (Scotland) Act 2005 and report in accordance with the Acts and relevant regulations made or having effect thereunder.

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below.

As part of our planning process:

• We enquired of management the systems and controls the Charity has in place, the areas of the financial statements that are most susceptible to the risk of irregularities and fraud, and whether there was any known, suspected or alleged fraud. The Charity did not inform us of any known, suspected or alleged fraud.

• We obtained an understanding of the legal and regulatory frameworks applicable to the Charity. We determined that the following were most relevant: the Charity SORP, FRS 102, Charities Act 201, the Charities and Trustee Investment (Scotland) Act 2005 and the Charities Accounts (Scotland) Regulations 2006.

• We considered the incentives and opportunities that exist in the Charity, including the extent of management bias, which present a potential for irregularities and fraud to be perpetuated, and tailored our risk assessment accordingly.

• Using our knowledge of the Charity, together with the discussions held with the Charity at the planning stage, we formed a conclusion on the risk of misstatement due to irregularities including fraud and tailored our procedures according to this risk assessment.

The key procedures we undertook to detect irregularities including fraud during the course of the audit included:

- Identifying and testing journal entries and the overall accounting records, in particular those that were significant and unusual.
- Reviewing the financial statement disclosures and determining whether accounting policies have been appropriately applied.
- Assessing the extent of compliance, or lack of, with the relevant laws and regulations.
- Assessing the validity of the classification of income, expenditure, assets and liabilities between unrestricted and restricted funds.
- Documenting and verifying all significant related party balances and transactions.
- Reviewing documentation such as board minutes for discussions of irregularities including fraud.

Owing to the inherent limitations of an audit, there is an unavoidable risk that we may not have detected some material misstatements in the financial statements even though we have properly planned and performed our audit in accordance with auditing standards. The primary responsibility for the prevention and detection of irregularities and fraud rests with the trustees of the Charity.

A further description of our responsibilities is available on the Financial Reporting Council's website at: frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of our report

This report is made solely to the charity's trustees, as a body, in accordance with part 4 of the Charities (Accounts and Reports) Regulations 2008 and regulation 10 of the Charities Accounts (Scotland) Regulations 2006. Our audit work has been undertaken so that we might state to the charity's trustees those matters we are required to state to them in an auditors' report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charity and the charity's trustees as a body, for our audit work, for this report, or for the opinions we have formed.

H/W Fisher LLP

HW Fisher LLP
Chartered Accountants
Statutory Auditor
Acre House
11-15 William Road
London
NW1 3ER

Date 21 March 2022

HW Fisher LLP is eligible for appointment as auditors of the charity by virtue of its eligibility for appointment as auditors of a company under of section 1212 of the Companies Act 2006.

The Association for Science Education

Consolidated Statement of Financial Activities
(incorporating an income and expenditure account)
For the year ended 31 July 2021

	Note	Unrestricted	Restricted	2021 Total	2020 Total see Note 2a
		£	£	£	£
Income from:					
Donations and legacies	**3**	215,029	-	**215,029**	1,887
Charitable activities	**4**	738,222	57,098	**795,320**	1,017,681
Other income					
Government Grants	**5**	32,275	-	**32,275**	13,685
Other trading activities					
Sponsorship and advertising	**6**	52,509	-	**52,509**	55,925
Investments	**7**	20	-	**20**	472
Total income		**1,038,055**	**57,098**	**1,095,153**	1,089,650
Expenditure on:					
Raising funds:					
Voluntary income	**8a/b**	-	-	**-**	50,109
Primary purpose trading activities	**8a/b**	82,519	-	**82,519**	28,604
Charitable activities	**8a/b**	809,946	110,692	**920,638**	1,106,942
Total expenditure		**892,465**	**110,692**	**1,003,157**	1,185,655
Net income / (expenditure) for the year and net movement in funds	**9**	**145,590**	**(53,594)**	**91,996**	(96,005)
Reconciliation of funds:					
Total funds brought forward at 1 August		60,835	79,726	**140,561**	236,566
Total funds carried forward at 31 July		**206,425**	**26,132**	**232,557**	**140,561**

All of the above results are derived from continuing activities.

There were no other recognised gains or losses other than those stated above.

The attached notes form part of these financial statements.

The Association for Science Education

Charity Statement of Financial Activities
(incorporating an income and expenditure account)
For the year ended 31 July 2021

	Note	Unrestricted	Restricted	2021 Total	2020 Total see Note 2b
		£	£	£	£
Income from:					
Donations and legacies	**3**	215,029	-	**215,029**	1,887
Charitable activities	**4**	672,383	57,098	**729,481**	971,821
Other income					
Government Grants	**5**	32,275	-	**32,275**	3,685
Other trading activities					
Sponsorship and advertising	**6**	52,509	-	**52,509**	55,925
Investments	**7**	20	-	**20**	472
Total income		**972,216**	**57,098**	**1,029,314**	1,033,790
Expenditure on:					
Raising funds:					
Voluntary income	**8**	-	-	**-**	50,109
Primary purpose trading activities	**8**	82,519	-	**82,519**	28,604
Charitable activities	**8**	732,629	110,692	**843,321**	1,033,902
Total expenditure		**815,148**	**110,692**	**925,840**	1,112,615
Net income / (expenditure) for the year and net movement in funds	**9**	**157,068**	**(53,594)**	**103,474**	(78,825)
Reconciliation of funds:					
Total funds brought forward at 1 August		103,523	79,726	**183,249**	262,074
Total funds carried forward at 31 July		**260,591**	**26,132**	**286,723**	**183,249**

All of the above results are derived from continuing activities.

There were no other recognised gains or losses other than those stated above.

The attached notes form part of these financial statements.

The Association for Science Education

Consolidated and Charity Balance Sheets
As at 31 July 2021

	Note	Group 2021 £	Group 2020 £	Charity 2021 £	Charity 2020 £
Fixed assets:					
Tangible assets	12	-	-	-	-
Intangible Assets	12	30,000	60,000	30,000	60,000
Investment in Subsidiary	13	-	-	-	-
		30,000	60,000	30,000	60,000
Current assets:					
Stock	14	31,933	18,623	26,057	1,921
Debtors	15	163,685	139,512	292,506	212,341
Cash at bank and in hand		389,455	220,335	318,176	195,902
		585,073	378,470	636,739	410,164
Liabilities:					
Creditors: amounts falling due within one year	16	(382,516)	(297,909)	(380,016)	(286,915)
Net current assets		202,557	80,561	256,723	123,249
Total net assets		232,557	140,561	286,723	183,249
Funds	17, 18, 19				
Restricted funds		26,132	79,726	26,132	79,726
Unrestricted funds:					
General funds		206,424	60,835	260,591	103,523
Total funds		232,557	140,561	286,723	183,249

Approved by the trustees on 19th March 2022

Alison Redmore
Trustee

The attached notes form part of the financial statements.

The Association for Science Education

Consolidated statement of cash flows
For the year ended 31 July 2021

	Note	2021	2021	2020	2020
		£	£	£	£
Cash flows from operating activities:					
Net cash provided by / (used in) operating activities	**20**		169,140		(70,449)
Cash flows from investing activities:					
Interest receivable		(20)		(472)	
Cash provided by / (used in) investing activities			(20)		(472)
Change in cash and cash equivalents in the year			169,120		(70,921)
Cash and cash equivalents at the beginning of the year			220,335		291,256
Cash and cash equivalents at the end of the year	**20**		389,455		220,335

1 Accounting policies

a) Basis of preparation

The financial statements have been prepared in accordance with the charity's Rules of Association, the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005, the Charities Accounts (Scotland) Regulations 2006 (as amended) and "Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2019)".

The charitable company and group meet the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy or note.

b) Going concern

We have set out in the Trustees' Report a review of financial performance and the charity's reserves position. Unrestricted reserves at the end of July 2021 are closer to our target reserves position and further work is being done to improve the position.

In common with other membership organisations, the Association for Science Education relies upon membership subscriptions, publishing income and events for a substantial part of its annual income. Taking a prudent view of this income, the trustees have prepared cash flow projections for the period to February 2023, which show that, the charity would be able to continue in operation for that period. Accordingly, the trustees consider that there are no material uncertainties about the charity's or the group's ability to continue as a going concern for the foreseeable future. Thus the trustees continue to adopt the going concern basis of accounting in preparing the financial statements.

c) Basis of consolidation

These financial statements consolidate the results of the charity and its wholly-owned subsidiary Millgate House Education Limited on a line by line basis. Transactions and balances between the charity and its subsidiary have been eliminated from the consolidated financial statements. Balances between the companies are disclosed in the notes of the charity's balance sheet.

d) Income

Incoming resources are recognised in the period in which the group is entitled to receive them and the amount can be measured with reasonable certainty and it is probable that income will be received. Income is deferred only when the group has to fulfil conditions before becoming entitled to it or where the donor or funder has specified that the income is to be expended in a future accounting period.

Grants from government and Trusts and Foundations have been included as income from activities in furtherance of the group's objectives where these amount to a contract for services, but as donations where the money is given in response to an appeal or with greater freedom of use, for example monies for core funding.

Investment income is accounted for on an accruals basis.

e) Expenditure

Expenditure is included in the statement of financial activities when incurred and includes attributable VAT which cannot be recovered.

Expenditure comprises the following:

a. Expenditure on charitable activities comprises monies spent on the charity's primary charitable purposes as described in the Trustees' report. It also includes appropriately apportioned salary costs and support costs (see note 8).
b. The costs of raising funds comprises the expenditure incurred in primary purpose trading activities by the charity and consists of salaries, direct costs and overheads.
c. Support costs represent indirect charitable expenditure. In order to carry out the primary purposes of the group it is necessary to provide support in the form of financial procedures, provision of office services and equipment and a suitable working environment. Salary costs have been allocated based on staff time.

1. Accounting policies (continued)

f) Fixed assets

Tangible

Assets costing in excess of £1,000 and with an expected useful life exceeding one year are capitalised.
Depreciation is charged on these assets at the following annual rates in order to write them off over their estimated useful

Computer and other equipment/software	25% straight line

Intangible

Amortisation is calculated to write off the cost of the website and CRM system by equal instalments over four years.

g) Investments

Investment in the subsidiary company is stated in the charity at cost.

h) Stocks

Stocks are valued at lower of cost and net realisable value after making due allowance for obsolete and slow-moving items.
Cost includes all expenditure in bringing stock to their present location and condition.
Net realisable value is based on estimated selling price less the anticipated costs to sell.

i) Leased assets

Rentals applicable to operating leases where substantially all of the benefits and risks of ownership remain with the lessor are charged to the statement of financial activities on a straight line basis over the life of the lease.

Assets purchased under hire purchase agreements are capitalised as fixed assets. Obligations under such agreements are included in creditors. Charges are written off to the SOFA over the period of the agreement so as to produce a constant periodic rate of charge.

j) Fund accounting

The unrestricted fund comprises those monies which may be used towards meeting the charitable objectives of the group and which may be applied at the discretion of the Trustees.

The restricted funds are monies granted for, and their use restricted to, a specific purpose, or donations subject to donor-imposed conditions.

k) Pensions

The Association operates a defined contribution group personal pension for employees. The funds are managed by Scottish Widows and contributions are paid monthly by direct debit and charged to the Statement of Financial Activities (SOFA) as incurred.

l) Financial Instruments

The Charity has elected to apply the provisions of Section 11 'Basic Financial Instruments' and Section 12 'Other Financial Instruments Issues' of FRS 102 to all of its financial instruments. The Charity only has financial assets and financial liabilities of a kind that qualify as basic financial instruments. Basic financial instruments are recognised as the amount payable or receivable when the instrument is first recognised together with any subsequent transaction costs but modified in respect of trade debtors for an assessment of potential bad debt.

m) Critical Accounting estimates and judgements

In the application of the Charity's accounting policies, the Trustees are required to make judgements, estimates and assumptions about the carrying amount of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised where the revision affects only that period, or the period of the revision and future periods where the revision affects both current and future periods. The Trustees believe there are no critical estimates or judgements relevant to the financial statements.

2a Detailed comparatives for the consolidated statement of financial activities

	2020 Unrestricted £	2020 Restricted £	2020 Total £
Income from:			
Donations and legacies	1,887	-	**1,887**
Charitable activities	831,334	186,347	**1,017,681**
Other income			
Government Grants	13,685	-	**13,685**
Other trading activities			
Sponsorship and advertising	55,925	-	**55,925**
Investments	472	-	**472**
Total income	**903,303**	**186,347**	**1,089,650**
Expenditure on:			
Raising funds:			
Voluntary income	50,109	-	**50,109**
Trading activities	28,604	-	**28,604**
Charitable activities	964,621	142,321	**1,106,942**
Total expenditure	**1,043,334**	**142,321**	**1,185,655**
Net income / (expenditure) for the year	(140,031)	44,026	**(96,005)**
Transfers between funds	(25,881)	25,881	**-**
Net movement in funds	(165,912)	69,907	**(96,005)**
Reconciliation of funds:			
Total funds brought forward at 1 August	226,747	9,819	**236,566**
Total funds carried forward at 31 July	**60,835**	**79,726**	**140,561**

2b Detailed comparatives for the Charity statement of financial activities

	2020 Unrestricted £	2020 Restricted £	2020 Total £
Income from:			
Donations and legacies	1,887	-	**1,887**
Charitable activities	785,474	186,347	**971,821**
Other income			
Government Grants	3,685	-	**3,685**
Other trading activities			
Sponsorship and advertising	55,925	-	**55,925**
Investments	472	-	**472**
Total income	**847,443**	**186,347**	**1,033,790**
Expenditure on:			
Raising funds:			
Voluntary income	50,109	-	**50,109**
Trading activities	28,604	-	**28,604**
Charitable activities	891,581	142,321	**1,033,902**
Total expenditure	**970,294**	**142,321**	**1,112,615**
Net income / (expenditure) for the year	(122,851)	44,026	**(78,825)**
Transfers between funds	(25,881)	25,881	**-**
Net movement in funds	(148,732)	69,907	**(78,825)**
Reconciliation of funds:			
Total funds brought forward at 1 August	252,255	9,819	**262,074**
Total funds carried forward at 31 July	**103,523**	**79,726**	**183,249**

3 Income from donations and legacies

	2021 Unrestricted £	2020 Unrestricted £
Individual donations	**1,696**	1,887
Legacies	**213,333**	-
	215,029	1,887

4 Income from charitable activities

	2021 Total £	2020 Total £
Unrestricted income		
Member subscriptions	**418,728**	439,502
Sales of publications and journals	**177,303**	157,928
Conference and workshop income	**97,049**	198,982
Income from sponsored projects	**45,142**	34,922
	738,222	831,334
Restricted Income		
Income from sponsored projects	**57,098**	186,347
Total income from charitable activities	**795,320**	1,017,681

Included in £795,320 is £65,839 (2020: £45,860) relating to the subsidiary company. The charity only total is £729,481 (2020: £971,821).

5 Government grants

The group received £32,275 (2020: £13,685) from the government's Coronavirus Job Retention Scheme in the year. Included in the £32,275 is £nil (2020: £10,000) relating to the subsidiary company.

6 Income from other trading activities

	2021 Unrestricted £	2020 Unrestricted £
Advertising and sponsorship	**52,509**	55,925
	52,509	55,925

Income is from journal and conference advertising and sponsorship and is all primary purpose trading.

7 Investments

	2021 Unrestricted £	2020 Unrestricted £
Bank Interest	**20**	472
	20	472

8a Analysis of expenditure year ended 31 July 2021

	Staff costs	Other costs	**2021 Total**
	£	£	**£**
Raising funds			
Primary purpose trading activities	82,519	-	**82,519**
Charitable Activities:			
the promotion and improvement of the teaching of science:			
Members registration and services	36,262	26,096	**62,358**
Book sales	61,893	27,089	**88,982**
Journal expenditure	44,377	126,268	**170,645**
Conferences and other CPD	64,695	25,122	**89,817**
Regional expenses	80,981	399	**81,380**
Advocacy & other projects	42,241	6,215	**48,456**
Support costs	67,400	163,144	**230,544**
Governance costs	25,027	12,737	**37,764**
Restricted project expenditure (see note 19 and 19b)	69,431	41,261	**110,692**
Total expenditure 2021	574,826	428,331	**1,003,157**
Restricted expenditure	69,431	41,261	**110,692**
Unrestricted expenditure	505,395	387,070	**892,465**
Total expenditure 2021	574,826	428,331	**1,003,157**

8b Analysis of expenditure year ended 31 July 2020

	Staff costs	Other costs	**2020 Total**
	£	£	**£**
Raising funds			
Voluntary income	50,109	-	**50,109**
Primary purpose trading activities	28,604	-	**28,604**
Charitable Activities:			
the promotion and improvement of the teaching of science:			
Members registration and services	42,353	19,789	**62,142**
Book sales	62,887	47,687	**110,574**
Journal expenditure	45,384	152,861	**198,245**
Conferences and other CPD	79,767	109,539	**189,306**
Regional expenses	76,281	722	**77,003**
Advocacy & other projects	46,795	-	**46,795**
Support costs	60,318	172,868	**233,186**
Governance costs	21,219	26,150	**47,369**
Restricted project expenditure (see note 19 and 19b)	50,090	92,231	**142,321**
Total expenditure 2021	563,808	621,847	**1,185,655**
Restricted expenditure	50,090	92,231	**142,321**
Unrestricted expenditure	513,718	529,616	**1,043,334**
Total expenditure 2021	563,808	621,847	**1,185,655**

9 Net income / (expenditure) for the year

This is stated after charging / (crediting):	2021	2020
	£	£
Depreciation	-	644
Amortisation	30,000	30,000
Payments under operating leases	2,096	2,096
Auditor's remuneration:		
Audit fees	12,737	9,818

10 Analysis of staff costs, trustee remuneration and expenses, and the cost of key management personnel

Staff costs were as follows:	2021	2020
	£	£
Salaries and wages	510,774	499,532
Social security costs	32,428	33,307
Employer's contribution to defined contribution pension schemes	31,624	30,969
	574,826	563,808

The following number of employees received employee benefits (excluding employer pension) during the year between:

	2021	2020
	No.	No.
£60,001 -£70,000	1	-

The total employee benefits including pension contributions of the key management personnel were £61,816 (2020: £57,101).

Trustees were reimbursed expenses during the year for travel, accommodation and subsistence costs totalling £nil (2020: £4,496).

No Trustee received renumeration or benefits as a trustee however the following trustees received renumeration for the following services provided to the charity: Peter Robinson £2,300 (2020: £3,670) for editing the School Science website and Green Tick award consultancy, Bryan Berry £3,046 (2020: £nil) for CPD delivery, Richard Needham £1,600 (2020: £nil) for project consultancy, Margaret Fleming £600 (2020: £nil) for Green Tick award consultancy and Simon Quinnell £4,000 (2020: £1,700) for CPD delivery. In addition Leigh Hoath received payments totalling £5,000 (2020: £5,700) for editing the Primary Science Journal.

Renumeration to trustees for services provided to the charity were paid under the provisions in Section 5 of the Association's Royal Charter.

Staff numbers

The average number of employees (head count based on number of staff employed) during the year was as follows:

	2021	2020
	No.	No.
Millgate House Education employees	2	2
The Association for Science Education employees	25	24
	27	26

11 Taxation

The charitable company is exempt from corporation tax as any of its non-primary purpose trading income is below the small trading limit allowable for charities.

12 Group and Charity Fixed assets	Tangible equipment	Intangible Website and CRM
	£	£
Cost		
At the start of the year	33,938	120,000
At the end of the year	33,938	120,000
Depreciation		
At the start of the year	33,938	60,000
Charge for the year	-	30,000
At the end of the year	33,938	90,000
Net book value		
At the start of the year	-	60,000
At the end of the year	-	30,000

13 Investments

Millgate House Education Limited

On 1 September 2017 the Association for Science Education acquired Millgate House Education Limited, a company incorporated in the United Kingdom and limited by guarantee. Its results have been consolidated in these financial statements. Millgate House Education is considered by the Trustees of the charity to be undertaking primary purpose trading, namely selling science publications.

The registered office of Millgate House Education Limited is College Lane, Hatfield, Hertfordshire, AL10 9AA.

14 Stock	**Group 2021**	Group 2020	**Charity 2021**	Charity 2020
	£	£	**£**	£
Publications for resale	**31,933**	18,623	**26,057**	1,921
	31,933	18,623	**26,057**	1,921

15	**Debtors**	**Group**	Group	**Charity**	Charity
		2021	2020	**2021**	2020
	Due within one year	**£**	£	**£**	£
	Trade debtors	**37,278**	74,495	**28,973**	41,624
	Amount due from subsidiary	**-**	**-**	**137,126**	105,700
	Other debtors	**5,384**	21,332	**5,384**	21,332
	Prepayments and accrued income	**121,023**	43,685	**121,023**	43,685
		163,685	139,512	**292,506**	212,341

16	**Creditors: amounts falling due within one year**	**Group**	Group	**Charity**	Charity
		2021	2020	**2021**	2020
		£	£	**£**	£
	Trade creditors	**56,283**	43,209	**53,783**	32,215
	Taxation and social security	**19,410**	10,449	**19,410**	10,449
	Accruals	**100,690**	63,496	**100,690**	63,496
	Member subscriptions in advance	**185,312**	159,851	**185,312**	159,851
	Journal subscriptions in advance	**20,821**	20,904	**20,821**	20,904
	Finance lease repayments	**-**	-	**-**	-
		382,516	297,909	**380,016**	286,915

17	**Analysis of net assets between funds - Group**	Group	Group	**Group**
		Unrestricted	Restricted	**Total funds**
		£	£	**£**
	Fixed assets	30,000	-	**30,000**
	Current assets	558,941	26,132	**585,073**
	Creditors due within one year	(382,516)	-	**(382,516)**
	Net assets at the end of the year	**206,425**	**26,132**	**232,557**

	Analysis of net assets between funds - Charity	Charity	Charity	**Charity**
		Unrestricted	Restricted	**Total funds**
		£	£	**£**
	Fixed assets	30,000	-	**30,000**
	Current assets	610,607	26,132	**636,739**
	Creditors due within one year	(380,016)	-	**(380,016)**
	Net assets at the end of the year	**260,591**	**26,132**	**286,723**

18 Analysis of net assets between funds - prior year - Group	Group Unrestricted £	Group Restricted £	**Group Total funds £**
Fixed assets	60,000	-	**60,000**
Current assets	298,744	79,726	**378,470**
Creditors due within one year	(297,909)	-	**(297,909)**
Net assets at the end of the year	**60,835**	**79,726**	**140,561**

Analysis of net assets between funds - prior year - Charity	Charity Unrestricted £	Charity Restricted £	**Charity Total funds £**
Fixed assets	60,000	-	**60,000**
Current assets	330,438	79,726	**410,164**
Creditors due within one year	(286,915)	-	**(286,915)**
Net assets at the end of the year	**103,523**	**79,726**	**183,249**

19a Movements in restricted funds - Group and Charity

	At the start of the year £	Incoming resources £	Outgoing resources £	**At the end of the year £**
Restricted funds:				
Alexander Memorial	9,819	-	-	**9,819**
Science Teacher SOS	8,916	23,500	(31,029)	**1,387**
Good practical science benchmarks 1 & 2	681	26,843	(27,524)	**-**
Key Moments in history: a fossil hunter's story	47,755	1,755	(38,112)	**11,398**
Teaching and Leadership Innovation Fund Round 2 (TLIF 2)	2,120	-	(2,120)	**-**
Science Education for Action and Engagement towards Sustainability (SEAS)	9,154	-	(4,932)	**4,222**
Science on stage UK	1,281	-	-	**1,281**
Best Steps	-	5,000	(5,000)	**-**
Inclusion in Schools	-	-	(1,975)	**(1,975)**
Total restricted funds	79,726	57,098	(110,692)	**26,132**

19b **Movements in restricted funds - prior year - Group and Charity**

	At the start of the year £	Incoming resources & gains £	Outgoing resources & losses £	Transfers £	**At the end of the year (restated) £**
Restricted funds:					
Alexander Memorial	9,819	-	-	-	**9,819**
Science Teacher SOS	-	30,000	(21,084)	-	**8,916**
Good practical science benchmarks 1 & 2	-	32,800	(32,119)	-	**681**
Key Moments in history: a fossil hunter's story	-	84,450	(66,428)	29,733	**47,755**
Teaching and Leadership Innovation Fund Round 2 (TLIF 2)	-	5,510	(4,164)	774	**2,120**
I SEE (Inclusive STEM Education to Enhance the capacity to aspire and imagine future	-	6,622	(1,996)	(4,626)	**-**
Science Education for Action and Engagement towards Sustainability (SEAS)	-	23,015	(13,861)	-	**9,154**
Science on stage UK	-	3,950	(2,669)	-	**1,281**
Total restricted funds	9,819	186,347	(142,321)	25,881	**79,726**

The transfers between funds in the prior year are to adjust for income and expenditure now deemed to be allocated to restricted rat than unrestricted funds.

Purposes of restricted funds

Alexander Memorial

The Alexander Memorial Fund represents a legacy of £10,000 from the late Professor and Mrs Alexander which the ASE has been requested to administer for a memorial award until the funds expire. No prizes were awarded in 2020/21.

Science Teacher SOS

Funding to pilot an end-use and effectiveness study of the Science Teacher SOS framework, more information is provided in the Trustees' Report.

Good practical science benchmarks 1 & 2

Funding to enable the ASE to support implementation of Benchmarks 1 and 2 of the Gatsby Charitable Foundation's Good Practical Science Report, which provides a framework for good practical science in schools and colleges. Further information is available on both the ASE and the Gatsby Charitable Foundation's websites and in the Trustees' Report.

Key Moments in history: a fossil hunter's story

This project is producing teaching resources and professional learning strategies for primary teachers of children aged 9-11 years to support their knowledge and understanding of the big ideas of evolution, the nature of scientific enquiry and the strengths and limitations of scientific knowledge. The project is supported by the Templeton World Charity Foundation and more information is given in the Trustees' Report.

Teaching and Leadership Innovation Fund Round 2 (TLIF 2)

This project provides free CPD for primary and secondary teachers of geography and science, to strengthen their subject knowledge and build confidence and capability in curriculum planning and teaching. It is funded by the Department for Education TLIF and run by the ASE in partnership with the Geographical Association.

Science Education for Action and Engagement towards Sustainability (SEAS)

ASE is a partner organisation for this EU Horizon 2020 funded project which is led by the University of Oslo.
More information is provided in the Trustees' Report.

Purposes of restricted funds (continued)

Science on stage UK

Funding was received from the Reece Foundation and an individual donor to support UK involvement in Science on Stage.

Best Steps

Funding has been received from the Horners Company Charity to produce a brand new BEST STEPS module to accompany existing BEST resources. The resources include CPD videos and classroom resources aimed at identifying gaps in students' knowledge.

Inclusion in Schools

ASE is subcontracted by the Institute of Physics to deliver the Inclusion in Schools project on behalf of the DfE from 1 August 2021, although some costs were incurred in advance of the start date. The primary purpose of this project is to significantly increase the number of students from under-represented groups progressing to physics-based routes (A-level physics, vocational or technical) post

20 Reconciliation of net income / (expenditure) to net cash flow from operating activities

	2021	2020
	£	£
Net income / (expenditure) for the reporting period	**91,996**	(96,005)
(as per the consolidated statement of financial activities)		
Interest received	**20**	472
Depreciation and amortisation	**30,000**	30,644
(Increase) in stock	**(13,310)**	(16,702)
(Increase)/ decrease in debtors	**(24,173)**	48,366
Increase/ (decrease) in creditors	**84,607**	(37,224)
Net cash provided by / (used in) operating activities	**169,140**	(70,449)

21 Analysis of changes in net debt

The charity had no debt during the year.

22 Operating lease commitments

Total future minimum lease payments under non-cancellable operating leases are as follows:

	Group		**Charity**	
	Property		Property	
	2021	2020	**2021**	2020
	£	£	**£**	£
1 year	**2,096**	2,096	**2,096**	2,096
2 - 5 years	**7,028**	7,480	**7,028**	7,480
After more than 5 years	**-**	1,644	**-**	1,644
	9,124	11,220	**9,124**	11,220

23 Legal status of the charity

The charity is a company established by Royal Charter and has no share capital.

The registered address of the charity is College Lane, Hatfield, AL10 9AA.

24 Related party transactions

There were no related party transactions other than payments to Trustees for services as detailed in note 10.