

Blackpool Skills Academy – Science Policy

Context

Blackpool Skills Academy offers a bespoke educational environment for learners with diverse needs, focusing on personal development, employability, and practical skills. Science at the Academy plays a vital role in developing learners' curiosity, understanding of the world, and their ability to apply knowledge in real-world and vocational contexts.

Given the vocational nature of our curriculum and the emphasis on preparing for adulthood and work, science is delivered through a combination of classroom-based theory and **practical vocational experiences** in **workshops and workrooms**, rather than traditional laboratory settings. This approach allows learners to connect scientific principles with everyday applications, especially within areas such as construction, health and social care, cookery, Hair and Beauty.

Curriculum Intent

Our science curriculum aims to:

- Provide learners with a functional understanding of key scientific concepts, especially those relevant to their vocational interests.
- Develop confidence in applying scientific knowledge to everyday and workplace scenarios.
- Build essential skills in observation, problem-solving, recording, and analysis.
- Promote curiosity, independence, and critical thinking.
- Support progression into vocational qualifications and employment pathways.

The curriculum is designed to be flexible, relevant, and accessible—ensuring that all learners can engage with science in a way that is meaningful to them and their future aspirations.

Implementation

Science at Blackpool Skills Academy is taught through a blend of:

- **Classroom-based lessons** focusing on biology, chemistry, and physics in real-world contexts.
- **Vocational workshops and workrooms** (e.g. construction bays, kitchens, beauty rooms) where scientific knowledge is embedded into practical activities.
- **Thematic projects** that connect science to vocational areas such as cookery (food chemistry), carpentry (material properties), and hair & beauty (chemical reactions, hygiene, anatomy).
- **Workplace scenarios and demonstrations** that reflect how science operates in specific careers (e.g. plumbing systems, nutrition, environmental health, etc.).

By embedding science within vocational subjects, learners are more likely to see its value, remember what they've learned, and apply it meaningfully.

Assessment and Monitoring

Assessment in science includes:

- Observation during practical tasks and workshop sessions
- Verbal and written responses to questions
- Practical workbooks and reflective journals
- End-of-topic reviews or short assessments
- Evidence portfolios for those working towards Open Awards or Entry Level Science

Learners may be working toward:

- **Open Awards Science Units** linked to vocational study
- **Entry Level Certificate (ELC)** in Science
- **Functional Science Skills**
- **GCSE Combined Science** where appropriate

Progress is recorded using the Academy's internal systems and reviewed regularly to ensure learners are on track and supported.

Cross-Curricular Links and Literacy/Numeracy

Science links closely with:

- **Maths** – measuring, data recording, interpreting graphs in vocational settings
- **English** – understanding instructions, writing observations, using technical vocabulary
- **PSHE and Employability** – personal health, workplace safety, ethical awareness
- **Vocational Pathways** – Construction, Cookery, Hair & Beauty, Health & Social Care

Scientific vocabulary is introduced in context and reinforced during vocational tasks. Learners are encouraged to use scientific language appropriately in both written and spoken forms.

Resources and Environment

Blackpool Skills Academy does not operate a traditional science lab. Instead:

- **Practical science is delivered in vocational workrooms**, such as kitchens, workshops, and salons, allowing learners to investigate concepts in safe, familiar, and relevant environments.

- Mobile science resources and kits are used to support demonstrations and basic experiments.
- Staff use risk assessments and structured lesson planning to ensure safety and consistency in all practical sessions.

Wider Development and Enrichment

Science contributes to learners' wider development through:

- Understanding personal and public health (e.g. hygiene, nutrition, infection control)
- Environmental responsibility and sustainability (e.g. recycling, energy use)
- Career relevance (e.g. workplace chemical safety, biological systems in care settings)
- Ethical and moral discussions (e.g. climate change, genetic engineering)

British values and social development are embedded by encouraging respectful discussion, responsible citizenship, and an appreciation of science in everyday life.

Impact

The impact of the science curriculum is measured through:

- Learners' ability to **apply scientific knowledge in real-life and work-based contexts**
- Confidence in using scientific language and concepts during practical and theory sessions
- Progress through science-based vocational qualifications
- Development of skills that support employability, such as following instructions, analysing outcomes, and maintaining health and safety

Ultimately, our aim is for learners to leave Blackpool Skills Academy with the confidence, understanding, and practical skills to use science in their personal and professional lives.

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