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Linlithgow Academy

Science Faculty

Standards and Quality Report

2024-2025

About Our Faculty

The Science Faculty at Linlithgow Academy comprises a committed and highly skilled team of fourteen teachers: five in Biology, six in Chemistry, and three in Physics. Our staff bring a diverse range of experience and expertise, enabling a collaborative culture where professional dialogue and innovation are central to improvement.

We take pride in leading curriculum innovation across the school, with a particular focus on our “Big Ideas in Science” framework and the continued development of a new STEM course that has now been fully embedded within the Broad General Education. This course has been strengthened through staff collaboration and feedback, offering learners greater opportunities to apply scientific and engineering principles to real-world contexts. The revised structure has improved progression pathways into Senior Phase sciences while fostering curiosity, creativity, and problem-solving skills in younger learners.

Our faculty remains strongly committed to inclusion and equity, ensuring that every learner experiences a sense of belonging and support in our classrooms. Partnership working continues to be a key strength, with ongoing collaboration across departments, the wider school community, and external partners to enhance learning opportunities and outcomes for all young people.

Faculty team

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Our Current Self Evaluation of HGIOS Quality Indicators

1.3	2.3	3.1	3.2
Leadership of Change	Learning, teaching and assessment	Ensuring wellbeing, equality and inclusion	Raising attainment and achievement

Schools will use their own self-evaluation / VSE / HMIe evidence depending on which is most recent.

Priorities from Session 2024-2025

Improve:

1. Our CORE approaches are used by all staff to engage young people in their learning

Consolidate:

1. Teachers demonstrate increased confidence in applying strategies to promote inclusion and wellbeing

Understand:

1. Staff apply understanding of progression in the BGE to meet ALL learners needs in the classroom

The following definitions are used in this report:

All	Almost all	Most	Majority	Minority / less than half	A few
100%	91-99%	75-90%	50-74%	15-49%	Less than 15%

The Standards and Quality Report should include description of activities that aim to reduce inequalities due to socio-economic disadvantage and / or achieve the strategic priorities of the NIF.

Priority 1	
Desired outcomes	Our core approaches are used by all staff to engage young people in their learning.
What did we do?	• All science staff engaged with the whole-school CORE Learning and Teaching Framework through departmental CLPL sessions and faculty discussions. • All science staff reflected and created a 'purpose of science' CLPL in which we measured how fit for purpose our current curriculum was, establishing the changes required to better implement CORE. • A majority of teachers trialled one or more CORE strategies within their own classes (e.g. clear learning intentions and success criteria, purposeful questioning, or structured reflection activities). • A minority of staff completed peer observations and learning rounds were arranged within the department(s) to focus on specific CORE elements such as engagement, curiosity and quality of feedback. • A majority of staff led meetings in effective CORE strategies implemented in class.

	• Faculty meetings included short professional dialogues on how the CORE principles were being evidenced in practical lessons, investigations, and scientific literacy tasks. • As part of our implementation of CORE, All staff engaged in professional reading re ‘Big ideas’ in Science and spent DM/FM time discussing benefits of adopting this model • All staff involved in creating our own internal ‘Big ideas’ in science based on our ‘purpose of science’ task. These will be used to develop a new unit in S1 in 25/26 session.
How did we measure?	• DM/ FM Minutes • Conducted short learner focus groups with young stem leaders to gather views on what helps them feel most engaged and challenged in Science lessons. • Consulted young stem leaders and pupil parliament on our ‘Big ideas in Science. • Used departmental learning visits with feedback focused on CORE indicators (clarity of purpose, questioning, engagement, learner dialogue). • Feedback from both learning visits and learning rounds. • Collected staff reflections at FMs re course development/ adaptations to pedagogy. • WLC Network events
Impact on learners and / or staff	• Learning visits and learning rounds showed pupils had a clearer understanding of lesson aims and success criteria, improving their confidence in describing what and why they are learning. • More consistent lesson structure across Science in line with CORE approaches. • Following learner visits there was a greater emphasis on cold calling ‘questioning’ improved students readiness and engagement in lessons. • Teachers noted improved familiarity with CORE, however there is still work to do here.
Next steps	• Create ‘standing items’ at DM/ FMs which help embed culture of self reflection, specifically peer observations and CORE approaches being used weekly. • Continue to embed CORE in lesson planning, particularly in the development of our new unit which incorporates self-generated ‘Big ideas’ in Science. • Develop a shared bank of CORE-aligned learning sequences to give a panoramic view of lessons. • Build in pupil-voice feedback more systematically, using CORE-framed questions (reflection) • Link faculty moderation and peer observation cycles directly to CORE indicators to ensure sustained impact. • Share practice with other faculties through whole-school learning rounds, focusing on how practical subjects bring CORE approaches to life through curiosity, inquiry and feedback.
Priority 2	

Desired outcomes	Teachers demonstrate increased confidence in strategies to promote inclusion and wellbeing.
What did we do?	• All staff use ASN datafile to plan and prepare lessons. • All staff involved in school-wide Inclusive Charter to establish a shared understanding of what an inclusive learning environment looks like in practice. • Allocated time during departmental meetings to discuss inclusive classroom strategies, including differentiation, positive relationships, and trauma-informed practice. • Minority of staff showed examples at DM/FM of adaptive teaching and universal supports (e.g. task scaffolding, visual supports, structured group work, alternative assessment formats). • Identified key areas where additional support or CPD was needed, and staff engaged with CLPL sessions linked to inclusive pedagogy, ASN awareness, and wellbeing. • Collaborated with support to ensure strategies for individual learners were implemented consistently within Science classrooms.
How did we measure?	• DM/ FM minutes • Almost all staff involved in reflections/ Collaborative feedback following whole-school CLPL on inclusion and wellbeing to track changes in confidence and practice. • Conducted learning visits and peer observations focusing on inclusive classroom culture, differentiated support, and positive learning environments. • Reviewed course materials and seating plans to confirm inclusion strategies were embedded at the universal level. • WLC Network events •
Impact on learners and / or staff	• A majority of learners experience a more consistent and welcoming classroom culture, with routines and expectations aligned across the department. • All teachers demonstrate improved confidence in adapting learning materials and providing differentiated challenge, supporting a wider range of needs effectively. • During learning rounds there was evidence of almost all pupils feeling more comfortable asking for help, contributing to improved classroom relationships and engagement. • Staff have reported increased confidence in using CARE forms and accessing ASN spreadsheet.
Next steps	• Continue to embed the Inclusive Charter within all Science lessons and learning environments, ensuring the principles remain visible and central to planning and delivery. • Complete audit of learning materials/ resources used in class to ensure these are in line with principles of inclusive charter. • Increase opportunities for peer observation focused on inclusive practice and classroom climate.

	• Involve learners more directly in shaping how inclusion looks in Science (e.g. through pupil focus groups in class and using Science ambassadors). • Engage with future whole-school CLPL linked to neurodiversity, wellbeing conversations, and restorative approaches to sustain professional growth in this area.
Priority 3	
Desired outcomes	Staff apply understanding of progression in the BGE to meet all learners' needs in the classroom.
What did we do?	• Almost all staff involved in initial discussions around progression within the BGE Science curriculum, using Education Scotland benchmarks and departmental pathways as a reference point. • Began reviewing existing course overviews and assessment approaches to identify where progression in skills and knowledge could be made more explicit. • Staff participated in early cross-level moderation conversations within the faculty to build shared understanding of expectations between S1–S3. • Identified the need for further development of progression frameworks and exemplification to support consistent planning across the department.
How did we measure?	• Audit of information on Didbook • Used informal faculty discussions and planning reviews to capture staff understanding of progression. • Gathered initial feedback from staff on where greater clarity or resources were needed to support pupils ability to reflect or progress in their learning
Impact on learners and / or staff	• Early discussions have raised awareness among staff of the need for clearer and more consistent approaches to progression. • Some evidence of improved continuity in learning experiences across S1–S3, though this remains an area for development. • Learners benefited from increased attention to differentiation in a small number of classes where progression discussions informed planning.
Next steps	• Continue to develop a departmental progression framework for BGE Science that clearly outlines knowledge, skills, and assessment expectations. • Engage in collaborative moderation within and beyond the faculty to strengthen shared understanding of progression across levels. • Review existing learning, teaching, and assessment materials to ensure they reflect coherent progression and challenge for all learners. • Incorporate progression discussions into departmental improvement planning for next session, linking directly to the CORE and inclusion priorities.

Other actions of note during session 2024-2025

- Education Scotland have reached out to the faculty in an effort to get more insight to our innovative work on 'Big ideas in Science'
- Faculty engaged in CLPL/ structural changes to assignment in an effort to improve our overall scores