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## Learning for Sustainability Research into Action Briefings

### Briefing 1 Learning for Sustainability and attainment in schools

#### Context

One of the defining characteristics of the Scottish concept of 'Learning for Sustainability' (LFS) is that it brings together 'traditional' approaches (Sustainable Development Education, Global Citizenship) with Outdoor Learning (specifically immersive/sensitising experiences of the natural world), with the intention of helping young people to understand, envision and act positively towards securing a sustainable future. Further, sustainability is the epitome of a 'wicked' problem and engaging with it educationally requires learners to consider complex interdisciplinary issues that span a wide range of areas in the sciences and social sciences etc. These skills align closely with the higher order skills required for academic attainment. This briefing draws upon Scottish and international research to examine this proposition, specifically the Scottish 'Conversations about Sustainability' report (2014) and the UNESCO International Research Project on 'The Contributions of Education for Sustainable Development (ESD) to Quality Education<sup>2</sup>' (2015) of which the Scottish study was one of 18 national contributions.

The key issue explored in the Scottish study was 'does an orientation towards sustainable development make a difference at classroom level and has it improved outcomes for learners, their families and school communities?' The study, led by Education Scotland, was of 20 schools/centres (early years, primary, secondary and ASN, across differing geographical and socio-economic contexts) which were selected as having 'interesting approaches or a long-standing commitment to learning for sustainability'. The UNESCO study of which this was part was of comparable schools in 18 selected nations which were 'Programme for International Student Assessment' (PISA) high-scoring countries on four continents<sup>3</sup>. Various approaches to methodology were taken in the individual nations, but all were qualitative, primarily narrative enquiry.

#### Findings from Scotland

The conversations with learners, parents, staff and head-teachers were almost universally positive and enthusiastic, and there were no negative comments. In summary the findings suggest:

1 **Enhanced learning and motivation and readiness to learn.** 'All establishments reported that learners were more motivated and open to learning and that the use of outdoor learning and real-life contexts within their community had helped engage learners

in their learning' with young people reporting that 'learning was more fun and real to them'. Further, 'many establishments pointed to improvements in behaviour as a result of higher levels of learner engagement which had helped create a climate for learning' with some reporting that high levels of motivation might be 'having an impact on attendance of learners'. Similarly 'parents, learners and teachers stated that learning was more effective as a result of learning for sustainability and some reported increases in the quality and detail of learners' work'.

**2 Increase in development of skills for life, learning and work.** Respondents reported that 'learners were able to learn more independently and had further developed their thinking, problem solving and creativity skills' and that 'learners were able to take responsibility for their own welfare and manage risks' with some stating that they 'felt better prepared for life beyond school as a result of learning for sustainability'. Some establishments, particularly early years and ASN, reported that 'a focus on sustainability had improved skills relating to resilience, forming relationships, communicating and interacting socially'.

**3 Increases in confidence.** 'Every establishment reported an increase in confidence of their learners as a result of the enriched experiences they'd been provided with'.

**4 Improved reputation and standing of the establishments in their communities.** This was reported by a number of establishments, evidenced by 'increases in the number of placing requests from outwith their catchment area'. Further, a number of parents reported that the learning for sustainability approach of the school, 'had been a deciding factor for them when deciding where to send their child'. 'A number of schools had received awards and national recognition for their achievements'.

**5 Improved staff morale, wellbeing and motivation.** Learning for sustainability activities were reported as influential on staff wellbeing, motivation, satisfaction and even attendance in some establishments. Factors included the 'richness and variety of learning experiences', more engaged learners and consequently 'lower levels of stress and disruption due to bad behaviour'.

**6 Enriched ethos of school and improvements to the community spirit.** 'Many establishments reported greater levels of engagement with parents and the wider community' and extensive 'connections and community partnerships. A number reported that 'learners were more caring, thoughtful, respectful and empathetic'.

### **The UNESCO study**

This international study revealed similar results, with some variations between the 18 nations. The specific findings include:

- 1 Academic performance increased in ESD schools in many high-scoring PISA<sup>4</sup> countries. ESD promotes acquisition of additional relevant knowledge and skills, as well as perspectives and values.
- 2 ESD gives more meaning to curricula, which leads students to be more engaged, committed, and self-confident.
- 3 ESD helps prepare students for an uncertain future by instilling flexible competencies, empathy and creativity.

- 4 ESD schools engage with local communities by opening opportunities for students, parents, and others, to be involved in meaningful ways.
- 5 ESD has prompted innovative approaches to teaching, learning and assessment. Teachers keep learning throughout their careers.

The UNESCO study summary demonstrates the consistency between the Scottish findings and the other nations:

‘... education is more effective when global and local sustainability issues are integrated throughout the curriculum. Results also show that when curricula is delivered in local social, economic, and environmental contexts, traditional learning outcomes are maintained or even heightened while additional, enhanced, and transformational learning occurs to both primary and secondary students. All of these attributes coincide with higher order skill levels in the PISA tests. Thus, ESD and PISA are synergistic in many ways.’

### **Concluding Comments**

Whilst these studies show a strong relationship between commitment to LfS/ESD and the metrics of academic success and indicators of a thriving academic community, it is important to stress that in none of these studies were there direct comparator schools which did not commit to LfS/ESD. Hence, despite the consistency in these findings, it must be emphasised that this is an associative rather than causative effect, and to demonstrate the latter would require extensive further research.

Whilst these studies call for academically robust investigation, they also indicate a pragmatic approach; partly because the case for schools to deliver LfS in Scotland has already been made and agreed by Scottish Ministers, their educational advisory bodies (e.g. Education Scotland) and the General Teaching Council for Scotland (through its Professional Standards). Hence there is no case for delay, or indeed anything other than enthusiastically embracing LfS in school curricula, teaching, policies and practices at all levels. In turn this means that the Scottish Qualifications Authority, the Scottish Council for Education Leaders, and education managers in schools and Local Authorities should orient these crucial aspects of the school system to support this practise.

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Report completed: March 2016

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<sup>1</sup> Education Scotland (2014). *Conversations about learning for sustainability: A series of case studies of schools and early years centres to mark the conclusion of the United Nations Decade of Education for Sustainable Development*. Glasgow: Education Scotland.

<sup>2</sup> Laurie, R., Nonoyama-Tarumi, Y., McKeown, R. & Hopkins, C. (2015). *Contributions of Education for Sustainable Development (ESD) to Quality Education: A Synthesis of research*. An occasional report for UNESCO.

<sup>3</sup> Australia, Belgium, Canada, China, England, Estonia, Finland, Germany, Japan, Korea, Latvia, Mongolia, Netherlands, Peru, Scotland, Sweden, Taiwan, and United States of America.

<sup>4</sup> Programme for International Student Assessment – <https://www.oecd.org/pisa/>