

Tellus SW

**Data and opportunities
for education and
outreach**

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Stakeholder Liaison

Education and Outreach



Education and outreach

- Primary School – Cross curricular (observation, sorting, questioning, gathering evidence
 - Science: rocks, soils, landscapes, local environment, how things work, materials
 - Geography: maps and photographs, local landscapes, environment, people and places
 - History: industrial revolution, inventions (beam engine, steam engine, rail)
- Secondary School – 2014 curriculum - geology, science, history, creative arts etc.
 - Science: chemistry (elements, minerals, ores and extraction of metals, rock cycle, radon) physics (engineering, ore mineral separation and processing, energy, geophysics)
 - Geography: contrasting locations, landscapes, changing coastlines
 - Geology: resources, regional geology and mapping, renewable energy and links to industry, professional geoscientists , mining/mineral prospecting, quarrying, engineering, contamination, waste, pollution and the environment, rocks and minerals
- College and university (FE/HE age 16+)
 - Foundation degrees, undergrad, post-grad, staff teaching and research
 - How Science Works (HSW), professional geoscientists – industry/academia links

Education and outreach

Using survey data to gain a better understanding of the fundamental geology of the South West and its influence on the historical development, its heritage and its future:

- High resolution airborne geophysical survey of the subsurface environment
 - Magnetometer which measures minute variations in the Earth's magnetic field
 - Gamma ray detector which measures the very low levels of natural background radioactivity present in all soils and rocks:
- High precision LiDAR survey of topography and vegetation cover
- Geochemical sampling of stream sediments and trace elements
- Habitat quality and biodiversity surveys

Summary: Supporting formal learning, enhancing curriculum with real life case studies. Providing schools and colleges with hands-on activities using data sets, field trips and site visits, mapping exercises, understanding HSW and the surveying methods and rationale for scientific research and its relevance for local communities, industry and others in the South West. Potential for future exploration, sustainable development, habitat quality and the health and well-being of all involved