Status Update - Shropshire Highways Alliance STEM Pilot

The Shropshire Highways Alliance (SHA) has chosen to partner with selected education establishments in the region to improve perceptions of engineering and the wide range of career opportunities it presents. This aligns with the SHA commitment to enhance the quality of life in its communities, and to leaving a positive legacy to enable Shropshire and its people to grow and thrive through broadly shared economic prosperity which will in turn help the community to live longer healthier lives.

The priorities for the STEM Pilot are on awareness raising, education and career orientation of young people, and supporting teachers in delivering STEM through reference to the wide range of engineering practices that the SHA delivers as part of the Highways and allied areas of activity across Shropshire.

The overarching goal is to incubate the next generation of engineers, and expand the future STEM workforce, and where possible provide a platform for students interested in STEM subjects to learn more about access routes into STEM careers and identifying the work and study options available.

The first phase of the STEM pilot commenced in September 2016 with the SHA forming a partnership with Bishops Castle Community College. This involved a number of activities including:

- Hosting of a senior teachers visit to raise awareness on the range of activities undertaken by the SHA;
- Recruitment and training of 13 volunteer staff members drawn from across the SHA to become STEM Ambassadors;
- Presentations to students from SHA staff on careers in engineering and the link with STEM subjects;
- Design and delivery of a Year 11 student project based on the Welshampton Scheme;
- Technical input and support for teachers in delivery of Year 9 student project on bridge building;
- STEM Ambassadors involved in Mock Interview practice at College;
- Hosting of work placements for College students interested in learning more about engineering careers.

We are in the process of reviewing the first phase which has involved seeking feedback from students and staff from the College and from the SHA STEM Ambassadors. Overall the students who participated in the SHA STEM activities reported it as a positive experience, with the majority stating they had a clearer understanding of what civil engineering is, along with ideas for different work and study routes in STEM subjects. The senior teachers involved

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felt it was a 'wonderful opportunity' to partner with the SHA and that they wish to include it in the future College curriculum plan. SHA staff reported their involvement as a rewarding experience and enjoyed having the opportunity to inspire students to consider how studying STEM subjects can lead to a diverse range of careers in engineering.

The first phase has provided an excellent foundation for us to further develop the SHA STEM involvement and we will commence the second phase of the SHA STEM Pilot in October 2016. This will involve continuing to work in partnership with Bishops Castle Community College and forming a new partnership with a school in North Shropshire. We will monitor progress and work with our partner schools to track student experiences of the SHA STEM activities and longer term, track study and career destinations of the student participants.