

cesses made over the last year through working with colleges and Energy, Engineering and Construction industry bodies

The STEM Strategy has been significant for 2017/18 and ESP has been actively engaged in the work to establish Regional STEM Hub Partnerships, and have developed a number of strategic partnerships undertaking a huge amount of delivery with the Big Bang Scotland Fair and 12 Regional Big Bang events run throughout the year.

The recognition by government and its agencies of the role ESP carries out, has also resulted in ESP extending its remit to focus on Advanced and Wider Manufacturing sectors.

2017:2018

Overall this year's activity clearly demonstrates how ESP supports its members to develop and deliver 'demand led' provision and much,

The 2017-18 ESP Annual Report can be viewed and downloaded by clicking <u>here</u>.

#### AUGMENTED REALITY COLLEGE TRAINING WORKSHOP



On the 5th October 2018 ESP held a train the trainer course on Augmented Reality training in Stirling.

Augmented reality (AR) bridges the gap between the virtual and physical worlds, changes the way we see, imagine, and learn about the world around us.

The event was a great opportunity for college staff to learm how AR can enhance learning material and demonstrate how students will be able to access the cutting edge of technology. John Walden from Marine Technical Limits who developed the software as part of the Erasmus+ ELITE project took staff through a step by step guide and by the end of the day staff were able to build and deploy a working AR application.



- 9 year olds was held at Dumfries & Galloway College on 11 October.

8 Teams of school children attended the expo and explored the topic of water use in their communitity learning how to improve its journey, by creating and testing a Lego model to show their ideas and present their learning in a 'show me'





Aiming for Awesome celebrates the centenary of the RAF and explores the engineering achievements of the RAF over the last 100 years.

The programme consists of 10 resources, each covering a different decade of RAF history. Each resource allows primary pupils to explore, through hands on activities, the applications of the knowledge they learn in science, design and technology, mathematics and computing.

ESP, Education Scotland and RAF100 hosted an event on 26 October to share the Aiming for Awesome resources.



Boyd Tunnock, the head of famous confectioners Tunnock's, visited Lanarkshire to launch the three-day Big Bang event kicking off at South Lanarkshire College.

Day two was held at the New College Lanarkshire College Motherwell Campus and involved more than 140 pupils taking part in science and technology-related tasks and meeting with local em-

Day three was hosted in the College's Coatbridge Campus and saw almost 160 pupils attend the event. Companies and employers attending the events included the Royal Air Force, CITB, University of the West of Scotland, Di Maggio's, ICE, Dawnfresh and NHS Lanarkshire.



peacock On Friday 16 November ESP and a number of college representatives visited Peacock Technology in Stirling.

**Aqualife** Peacock Technology design and use innovative camera technologies to allow automation of complex product handling and inspection tasks. They have engaged in a wide variety of projects and sectors such as Wind Turbine control systems, Laboratory Instrumentation and Abattoir Robotics.

Following this one of their customers Agualife, a leading fish vaccination company providing efficient, hygienic and cost effective vaccination for all farmed fish visited and provided an overview and demonstration of their work.

#### **Marine and Maritime** SKILLS WORKSHOP

On 28 November ESP and Highlands and Islands Enterprise (HIE) will be hosting a joint Marine and Maritime Skills in the Highlands and Islands workshop.

The purpose of this workshop is to raise awareness of the marine and maritime sectors in the Highlands and Islands and the related skills challenges and opportunities, including current and future provision and to discuss a joined up strategic approach for Scotland

This workshop will be followed by a short ESP Marine and Maritime Training Network Meeting.

## WIND AND MARINE TRAINING NETWORK

With the increased activity of offshore wind developer projects on the North and East coasts of Scotland the time is now right to consider expanding and enhancing the ESP Wind & Marine Training Network (WMTN).

On 5 December ESP will be holding a training network development meeting in Stirling to discuss colleges future involvement in the network and the potential commercial opportunities

Discussions on teaching materials, shared resources and Global Wind Organisation accreditation/requirements will also be on the agenda.



On 25 October ESP in partnership with SDS held a 'Taste of Ayrshire' Business Improvement Techniques Networking Dinner at Ayrshire College. The aim of the dinner was to promote business improvement techniques and stimulate conversation around BIT in the food and drink sector and strengthen links between the college and local industry. The dinner showcased local products and also featured guest speaker Alastair Dobson from 'Taste of Arran.'

The event was funded by SDS as part of a food and drink business improvement techniques project.

#### **ADVANCED MANUFACTURE** CONFERENCE

On 31st January and 1st February 2019, ESP will be a hosting a two day conference focusing on Advanced Manufacture to highlight developments and provide an insight into the impact of digitalisation of manufacture to colleges and the future curriculum. The event will feature key Manufacturing Industry speakers discussing Industry 4.0 as well as collaboration opportunities for colleges and SME. Further details will be announced shortly.

### **ESP INTERACTIVE MAP**

ESP are progressing well with completion of phase 2 of the Interactive College Courses map and have now asked colleges to forward content including videos of engineering, construction and science facilities along with some photographs for uploading to the map website in order to give a more visual overview of the sectors highlighted. A beta testing period of the map will commence shortly.

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# Efficiency

ESP are currrently in the process of recruting a new staff member to support on the development and delivery of a Scottish Government/ Energy Savings Trust project in support of the Energy Efficient Scotland programme. This role will have a particular focus on Construction and Energy Efficiency and will:



- Produce a sector analysis report and skills matrix
- Develop energy skills pathways and staff CPD programmes
- Development of our Interactive Map for Energy Efficiency measures

#### OFFSHORE WIND SECTOR DEAL

ESP are currently working with Scottish Renewables and Scottish Government to ensure Scotland's position is represented in the UK wide Sector Deal for Offshore Wind.

A number of projects in Scotland's waters have made significant progress and we continue to engage with developers to understand the skills challenges.



Through funding from Scottish Government ESP have now purchased an additional four Immersive Hybrid Reality (iHR) mobile units. These four kits will be allocated to specific colleges of key significance to the wind industry throughout Scotland where the kits will be available for all colleges to hire providing a more accessible and greatly improved geographic spread. Details on how to book the kits will be announced shortly.



ESP staff recently visited the Digitalising Manufacturing 2018 conference at the Manufacturing Technology Centre (MTC) in Coventry.

The two day conference was attended by companies and international authorities on digital manufacturing from German, France, Italy, Japan, Mexico and the UK, as well as other countries.

Manufacturing companies shared experiences with delegates on the potential opportunities the digital world could provide to UK manufacturers and highlighted the possibilities if they are prepared to invest in skills and technology to move forward in their sectors.

EVENTS AND CONFERENCES	
Wednesday 28 November 2018	Highlands and Islands Enterprise and ESP Marine and Maritime seminar, An Lochran, Inverness
Saturday 1 December 2018	First Lego League Inverness Tournament, Inverness College
Thursday 6 December 2018	First Lego League Dundee Tournament, Dundee & Angus College
Monday 10 December 2018	First Lego League Clydebank Tournament, West College Scotland
Wednesday 12 December 2018	First Lego League Edinburgh Tournament, Edinburgh College
Friday 14 December 2018	First Lego League Kilmarnock Tournament, Ayrshire College
Wednesday 30 January 2019	First Lego League Outer Hebrides Tournament, Lews Castle College

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