## **NFEC REGIONAL SEMINAR – North West**

**Friday 9th March 2018**

 **Riverside College**

There is a separate attendance list available.

1. Welcome and Introduction to the seminar

Steve McAloone, as NFEC chair, welcomed everyone to the seminar on behalf of NFEC. Jo Hall, welcomed the seminar to Riverside College. Jane Smith gave an overview of the IDEAs Centre at Riverside. Introductions of attendees was made.

1. Current matters of concern

Steve highlighted the problems still with the funding cap for the Welding standard since the higher band appeal was unsuccessful and there are still no qualifications within the standard. Furness College and BAE Welding have been carrying out training for competence in skills only and coding will be completed in company afterwards. Students are building up a portfolio ready for EPA over a 3 year period which will be one year off the job, one in company and then a third year for recap of knowledge whilst working four days and one day a week at college. Test pieces will be submitted at the end and these will depend on the end role of the apprentice to what they are given. They will also need to complete an online test. The College will give them knowledge and their functional skills. Burnley are doing the C&G qualification in apprenticeship as that was what their employer wanted. The Maritime standard has 4 qualifications but all seem to be working well. Discussions were held about if a standard needs to become the qualification and the costing elements for running the training for this.

Underpinning issues seem to be:

* The Engineering Technician standard, as part of the Battersea Model, can be tweaked within the boxes, but no major changes.
* The Machinist and Toolmaker pathways are different courses at foundation level.
* Qualifications can fit the EPA and standard so can be used with Awarding bodies but must be knowledge based.
* Skills and range needs to be covered practically with flexibility to meet the changes in Industry which are going to occur.
* It looks like SMEs are preferring to take on slightly older people so there is a greater need to be able to map across full time learning programmes into apprenticeships.
* For Ofsted purposes, progress, with differentiation for students, needs to be shown.
1. Update on the Fabricator Trailblazer

Terry Weston gave the update. The Standard is still in development so cannot be shared fully, but it should be submitted in April. Initially, there were lots of issues for those individuals with no positives for a good career path. They wanted the standard to be able to show distance travelled as well. A knowledge qualification has been accepted but there is no NVQ, and competence only at EPA stage. Most SMEs want fabricator / welders so 3 trades are being absorbed into the standard - plate, sheet and fabricator / joiner are to be included. Core knowledge, skills and behaviour are all included. Awarding body requirements may lead to a little too much academic work for the traditional learner who has previously enrolled on this course. There is also a worry that some of the knowledge wording is actually skill based. All on programme training units need to be tracked to show progress over the 4 years before EPA can take place. The future of NVQ within the standard has been discussed as the EPA does the same thing.

1. Qualifications and Awarding Bodies

Pearson – Rachael Beasley

The BTEC level 2 has been extended to December 2019 but the technicals level 2 is now running alongside these which have mandatory and optional units included in them. Apprenticeship standards are being developed. The Institute for Apprenticeships website is very useful and can be filtered to help find information.

The Advanced Manufacturing and Rail Engineering qualifications are being amended. A HNC in Rail is being developed to meet standards at this higher level. T level consultation has closed and further information is due to be released in May. The Occupational map for Engineering shows that some standards seem to be missing.

Slides are available separately.

Any queries please contact Rachael on: rachael.beasley@pearson.com

OCR - Martin Webber

Martin sent a message to say sorry that he couldn’t attend afterall but OCR have a Spring combined and D&T forum taking place on Tuesday 24th April at the CCT Barbican in London. If anyone is interested in attending and there is help in paying travel expenses, please contact Martin on Martin.webber@ocr.org.uk

1. T level update

Bob Millington gave an overview from the slides released by Peter Winebloom, who is Chair Engineering and Manufacturing – Manufacturing and Process T Level Panel. Engineering is included in Wave 2 and due to start in 2021 which is still tight on timing. Bob has contacted Mike Haxell at DfE trying to get in onto a panel to represent NFEC so that NFEC members can feed into the development work. 1 T level is equivalent to 3 A levels and include a large chunk of work placement, 315 – 350 hours, minimum 7 hours per day, max 37.5 hours per week. But employers are saying this is too much and there is a lot of discussion on the practicality of this. Areas under discussion now are funding, programme design, work experience and occupational maps. 5 working groups have formed part of the recent briefing sessions by DfE, Steve McAloone attended one in Manchester.

1. Innovative Online Engineering Courses and Resources from Engineers Academy

Andy Smith gave details of his background and explained that he is now developing online material for delivery and assessment of BTEC level 3 Nationals and Level 3 bridging courses. He wishes to include HNC, HND and degrees. There are collaboration opportunities with colleges and companies. It uses Moodle as the platform. There are 180 short and instructional film clips, the longest being 15 minutes, all with supporting resources including graph paper. There is self assessment with practice questions and a coding will ensure unique questions. Questions are marked before moving forward so mistakes are corrected at that point. New values are then provided for further practise questions. The material will allow for differentiation in the classroom with students able to use different videos at different stages. A weekly report is sent at 5pm on a Friday afternoon to individuals or a group summary can be sent to a college/employers. An example of the online material for demonstrating a simply supported beam was shown with its accompanying questions. The website has some free sample materials uploaded.

Andy can be contacted on andy@engineers.academy

1. IDEA Centre and Women into STEM

Jo Hall started at Riverside College in June 2017 on the opening day of this centre at Cronton. Engineering, IT and Computing are based here but also a health and fitness studio with analysis software. It is mainly level 3 courses being carried out here but with some level 2 and 4 work, essentially professional type courses with facilities for materials, CAD and additive manufacturing, PLC and robots, pneumatics and robotics. Whilst the Riverside College centre at Haltom has other facilities for motor vehicle, welding and workshops. An architecture course is due to start at Cronton in September.

Jo has been working as part of a Women into STEM Programme Erasmus project looking at why there is variation in STEM industries across countries including The Netherlands, Spain, Estonia, Romania. Estonia and Romania are performing at the highest level with The Netherlands at the lowest. They have been looking at the schools systems and immigration. Research into literature has shown that wording makes a difference. Male students prefer wording such as “you are going to weld” based on direct actions whilst girls prefer to know what differences are going to be made by doing something. Girls like to join together the learning process rather than being taught as separate subjects. There is 40% female staff at Cronton now and this helps recruit females. The IDEA centre is also a clean professional site for biomedical and programming type side of Engineering. 12% applicants have been female this year at Cronton and have been offered places so far.

Plenary

Points for further meeting were discussed:

* Invite one of the T level chairs to other seminars to give updates and to discuss with them the importance of being part of the Trailblazer process as well.
* Experiences of EPA so far. Maybe Shane Parkes of NWTC could be invited to give an update.
* Behaviours recording and sharing different practices with each other.
* Work based working and 20% off the job.
* Guidance/criteria for placements for work based experiences with employers.

Peter Redfern, Tameside College, offered to host the next NW seminar. Friday 8th June was suggested as a date. Jill will work with Pete to confirm this.

Steve McAloone thanked everyone for attending, the exhibitors for bringing equipment to show delegates and to Jo and Riverside College for hosting this seminar. A tour of the IDEAs Centre took place.