

National Forum of Engineering Centres

North West Spring 2011 Seminar – Friday 1st April 2011

Riverside College

1. Present

Please refer to attached Attendance List.

2. Acknowledgements

2.1 The Chair (Dawn Pierce) thanked members for giving of time from their busy
Chris Fanning – Programme Team Manager welcomed all to Riverside College

2.2 BM outlined the changes that had taken place within NFEC and how it had reverted to focussing purely on the identified issues members felt important to them. Quotes from around then country included that NFEC was thought to be “back on track”. The strong links each region now had to the National Council were highlighted, that will help address identified issues.

3. Current Key Issues Identified by Members

- BM to email DP list of conference actions – DP to send to members. Members then to feed comments to DP to be raised at National conference in May.
- Members raised concerns of issues relating to the revised programmes of training and education for the Building Services Industry / PEO to be implemented by Summit Skills. Key points included:
 - BM explained the process and identification of concerns reference fundamental knowledge – skills required and achieved prior to “hitting the shop floor” – under SASE these requirements not required! However now we have an agreed option – Extended diploma in Engineering L3 will be built into the NVQ Level 3; Semta has assured contents will be the same. Currently still to be delivered off the Job and delivered out of the industrial applications framework.
- Semta has granted an extension on current frameworks until June 2012 in order to give centres time to prepare **further clarification will be sought at National Conference in May.**
 - Member raised issue with regards to FT 16-18 learners and the fact that GLH currently drives funding. The issue is how do FE providers ensure quality delivery with regards to all additional qualifications required as part of the FLT
 - Broadly main L2 qualification has had a reduction in GLH to an average of 480
 - Members discussed the issues with regards to “twinning” of qualifications as a short term solution. GLH to be used to top up main qualification if twin qualification can be obtained with an embedded approach
 - Fundamental changes are required- One member suggested the thought that a reduction in GLH is possibly the outcome due to the fact that some YA (young apprentices) achieving quickly with delivery being “on the job”?

- BM explained that there may be implications and the fact that it is important now to keep a close eye on outcomes of the Wolfe report- How will this impact? Could this be a possible window of opportunity?
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- There appears to be conflicting information regarding Summit skills and the “choking” of single skilled qualifications?
 - There seems to be concerns of removal of a raft of qualifications that will be replaced by an access award at L1. NFEC informs that we are at ease with this concept as skills can be delivered at L1 in order to build confidence, however at L2 the single skilled qualification needs to stay in place
 - BM proposed that we take the knowledge based part of an NVQ to be delivered prior to undertaking an advanced apprenticeship where the competence based elements to be delivered in the workplace; this is where they can be learned and also applied in work. The question is how do the fundamental skills fit in e.g. H&S – Science? This is still under discussion.

4. Awarding Body updates - Qualifications and Awarding Bodies – General Issues

- Some points discussed included:
 - A warm welcome to our new EAL representative, David Ainsworth who is replacing Bob Hassall – congratulations from the members go to Bob with regards to his new promotion within EAL.
 - David informed us of Framework extensions to December 2011
 - EAL Preparatory for Working qualification now available – 130 GLH
 - New environmental qualifications are available with free resources
 - EAL currently working on smarter touch online systems
 - A warm welcome to our new Edexcel representative, Amanda Murphy
 - Amanda informed members on the new developments within Edexcel- Rachel Beadley will be the new named Edexcel contact with regards to apprenticeship qualifications etc.
 - Functional Skills update- On screen/ on demand available from 4th April 2011- Practice tests now available on the Edexcel website
 - BTEC Higher Nationals – Proposal to launch a L6 HN ‘Graduate Diploma’ and the perusal of ‘Degree Awarding Powers’
 - BTEC L2 and L3 in Automotive to be accredited for Sept 2011 delivery- draft specification now available see update on accreditation link on the web
 - BTEC Developments post Wolf include forthcoming curriculum planning events and a National BTEC award ceremony- recognising vocational excellence
 - My Skills suite includes – BTEC work skills for apprenticeships- sustainability skills E3, L1 and L2
 - Again, slides of both presentations will be sent to Dawn Pierce for subsequent distribution to delegates. **ACTION: DA/AM/DP**
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- Christine James from Primary Engineer gave a very interesting presentation introducing the work of Primary Engineer. Primary Engineer is supported By the institute of Mechanical Engineers (IMechE) The Royal ACADEMY OF Engineers, Engineering UK, Lloyds Register Educational Trust
- Introduction to Primary and Secondary Engineer
- Primary, Secondary and Advanced Leaders and reporters award for STEM
- Special Award categories include Institution of Mechanical Engineers, Tomorrows Engineers, Practical Action, Bloodhound, Women into Engineering Society, and National Centres for the Excellence of Teaching Mathematics, Primary Engineer and School Science Data Harvest.

5.1 Delegates thanked Christine for the informative presentation and for leading the subsequent discussions and taking questions. For further information on how you can become involved please email Christine christine.james@proprimaryengineer.com

- **Michael Sheehan- Principal of Riverside College came to welcome NFEC Members to college, Michael stressed the importance of NFEC members working together to develop quality initiatives for future developments in the education of STEM subjects**
- **Anna Dawe - Vice Principal of Riverside College, gave an update of Functional Skills and how Riverside College are taking forward Riverside Colleges Functional Skills Strategy.**
- Anna discussed Pilots have were completed for Functional Skills in Maths and English and ICT – Learners themselves selected the Awarding Body after a small cohort completed examinations with different bodies and discussed paper preferences
- Learners tended to achieve better results when undertaking contextualised papers.
- Anna discussed the difficulties with only **eight** assessment opportunities per year for Functional Skills in Maths and English and **four** for ICT. Functional skills were to be timetabled at beginning of academic year due to volume of learners
- Anna informed for academic year FT learners will only undertake two functional skills in English and Maths.

6.1 Delegates thanked Anna for the informative presentation and for leading the subsequent discussions and taking questions

- **Ken Gellion _ programme Team Manager, Applied science, engineering and Maths, from Wirral Metropolitan College presented “the E in STEM”**

7.2 The learning Skills Improvement Service (LSIS) has been supporting STEM related subject areas in the North West with funding for CPD and Action Research projects, Since September 2010 there has been 9 CPD events(at least one in every sub region) and 15 LSIS STEM action research projects, also 16 provider led CPD activities have been funded in the region

7.3 examples include

- Improving Teaching and Learning in Engineering – West Cheshire College
- Improving the Teaching and Learning Resources & Strategies of part time Engineering Staff – Preston College

- Improving T&L through Collaborative CPD – Liverpool Community College
- Video Conferencing in WBL reviews – Liverpool Community college
- A Pilot Project to engage Level 1 and 2 students more actively in their learning through technology – Carlisle College
- Improving Teaching and learning using interactive white boards – Knowsley College
- Improving STEM careers information and guidance through partnership associate schools – West Cheshire College
- Using video to support the teaching of kinetics – The Manchester College.
- For resources visit. <http://tlp.excellencegateway.org.uk/tlp/stem/cpd/>

7.4 There is still some funding available until July 2011 for further projects- for further information please contact c.cavanagh@slcs.ac.uk or heather.aspinwall@wmc.ac.uk

7.5 Delegates thanked Ken for the informative presentation and for leading the subsequent discussions and taking questions

- **Dr Sarah Peers from The New Engineering Foundation (NEF) gave a presentation titled “Assuring and ensuring training for appropriate technical skills”**

8.1 Dr Peers introduced the background to NEF and talked about NEF strategies to support empowering change in teachers, trainers, tutors, providers, colleges and industry.

- Instigating research, supporting policy and Advocacy has been at the heart of the NEF strategy.

The New Engineering Foundation (NEF) is an independent and strategically focused charity (registered in England number 1112354) that works with key partners and stakeholders to support the advancement of education for the benefit of the public. It was established in 2004 as a grant awarding charity and a think-tank that focuses on developing vocational education through:

- Instigating Research
- Supporting Professional Development
- Enabling Knowledge Transfer and Innovation

Our mission is to achieve measurable and visible improvement in vocational STEM education through partnerships by:

- Enriching teaching and learning professionalism
- Enhancing the capabilities of providers and industry
- Empowering individuals to embrace contemporary practice

- Consultations have been undertaken and many documents are available E.G. Low Carbon Task Force – Project Energise

visit <http://www.neweng.org.uk/resources/NEFLowCarbonTaskforce.pdf>

- NEF also supports Professional Development with an Industrial Fellowship Scheme. Based on the theme of Emerging Technologies, grants are available for FE lecturers to spend up to 15 days in industry & Research
- Other CPD events are taking place in the form of Master classes and Briefings
- Dr Peers explained that a 2010 survey showed that up till now the majority of lecturers received no specialised CPD.

- 42% said that master classes were among the best CPD attended and of the rest over half said that master classes were better CPD than most. 75% stated they would use information learned in their classes
- Dr Peers informed the members on Quality Assurance agenda- NEF Assured, STEM assured and NEF Diamond
- For further information visit
- www.neweng.org.uk
- www.nef.co.uk
- www.nefassured.org

8.2 Delegates thanked Dr Peers for the informative presentation and for leading the subsequent discussions and taking questions

- **Dominic Nolan representing the Royal Academy of Engineering gave a presentation on Sustainability in Engineering Curricular: Ideas for teaching and learning.**

The Royal Academy of Engineering

As Britain's **national academy for engineering**, we bring together the country's most eminent engineers from all disciplines to promote excellence in the science, art and practice of engineering. Our strategic priorities are **to enhance the UK's engineering capabilities; to celebrate excellence and inspire the next generation; and to lead debate** by guiding informed thinking and influencing public policy.

9.1 Dominic explained the potential opportunities for the FE sector in the 'green economy'. Dominic explained why sustainability matters to the FE skills sector Dominic explained about the 'one –shop- stop' for information about the green skills industry

- Dominic shared a learning activity called "Where's the Impact?"
- Information shared on various practical activities- e.g steps for making a solar buggy and TEP resources – wind turbine kits.
- Resources can be obtained from <http://www.tomorrowseengineers.org.uk/>
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9.2 Delegates thanked Dominic for the informative presentation and for leading the subsequent discussions and taking questions

NB If any member would like a CD copy of Dominic's presentation please email Dominic.Nolan@raeng.org.uk

10 Bob Mc Gill from Liverpool Community College gave a presentation on his STEM funded project titled "social networking to record PLTS"

- 10.1 - Bob informed members of the EMODO programme used in the project
- Outlined advantages of engaging learners using social networking learning tools
 - Bob informed members of value of completing the STEM funded project and benefit to innovative delivery appreciated by the learners.

10.2 Delegates thanked Bob for the informative presentation and for leading the subsequent discussions and taking questions

11. Plenary Session

11.1 Apart from issues relating to Summit Skills, other issues NFEC need to keep a watching brief on include:

- a) The vast number of changes in funding and curriculum and their effects on centres and learners.
- b) Monitoring “priority” provision.
- c) Remember reduced price early Bird Spring Conference bookings for members now available on the NFEC website. **Date 26th and 27th May 2011.** Visit <http://www.nfec.org.uk/>
- d)

9. Date and Time of Next Meeting

9.1 This will take place **Friday 16th October 2011** at 10.15 – at **Preston College**

Bob Millington