D2N2 LEP: Skills for a Productive Workforce Sector Seminar – Life Sciences

Overview

During July 2015 D2N2 Local Enterprise Partnership invested in running a series of 'Skills for a Productive Workforce' Sector Seminars, for businesses and those providing skills training, across its area and covering some the D2N2 LEP's sectors of key economic focus. .

Building on the work undertaken to develop the D2N2 Sector Skills Action Plans, the Seminars provided key sector businesses with the opportunity to put their 'asks' to Employment and Skills providers, as well as providing the opportunity to share emerging opportunities and challenges relating to their sector.

Employment and Skills providers had the opportunity to share their experiences of working with the key economic sectors, highlighting examples of where they have successfully responded to needs, whilst also providing the opportunity to share best practice and future thinking.

The output from the Sector Seminars will continue to build insight relating to emerging challenges, opportunities and responses from the Employment and Skills market to the needs of the key economic sectors, and through this, will help to inform future policy and programme responses.

Purpose

This document provides a summary of the key discussion and action points taken from the Skills for a Productive Workshop Sector Seminars. The document should be viewed alongside the presentation used at the event and the previously developed Sector Skills Action Plans, which can be found at….

It is intended that the actions and progress arising from this activity will be overseen by the relevant Sector and Skills Advisory Group.

Emerging Priorities, Key Issues and Challenges

The following provides a summary of emerging priorities, key issues and key challenges relating to the sector that were discussed during the Sector Seminar.

- The sector is made up of many SMEs, often with specialist focus - 47% of companies who classed themselves as innovators. Aggregation of demand seen as important, but often not easily achievable due to diverse nature of training needs.
- Sector Skills Shortages - Normally discussions focus on higher level skills, however skills shortages are experienced at all levels. Many businesses don't even realise that addressing lower level skills needs could help drive business growth.

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- Niche equipment and vendor specific training often required, and not publicly funded through nationally recognised qualifications. Employer Ownership Funding (Science Industry Partnership funding) can however often be used to address these needs.
- There is a recognised need for more career and vocational routeways to be developed, in order to support the sector's own future workforce development in specialist areas
- UKCES report Strategic Skills Needs in the Bio-medical Sector, 2010, states that not only is skills support needed in 'hard skills' but also very much in market knowledge; "Critical skills sets employers identified in relation to constraints on business development: Biotechnology knowledge 20%, Design skills 36%, R&D skills 29%, knowledge of medical issues 31%, knowledge of the NHS 28%." Marketing and Sales skills were also mentioned as an area of particular need for many SMEs.

Topics of discussion that followed are captured below:

Business Engagement

- A significant concern of the Employer representative organisations and Employers present was that most of the businesses in the sector were not engaged in the Skills discussion at all, and are not considering how they will recruit or develop their future workforce. The lack of business attendance at the event reinforced this point.

Skills shortages

- There continues to be evidence that the sector is facing increasing levels of skills shortages across a wide range of roles within the sector. Examples were given of a shortage of entrants into roles with lower or technical skills levels, such as Laboratory Technicians however many of the businesses in the sector continue to focus on the recruitment of Masters or PhD Graduates with very high skill levels.
- It was suggested that there is a need for further employer engagement and some hard hitting evidence to alert business leaders that there is a problem looming.

Skills Gaps

- Whilst technical and Life Science Skills Gaps are generally not considered an issue in the sector locally, other topics were raised as being a concern. These included use of digital marketing techniques, social media and online sales support.
- Recruitment techniques and how to access recruitment support and grants was also raised by some employers in the run up to the workshop. Being recruitment ready was identified as a need for those in management roles currently.

Recruitment

- There was agreement that locally, historical recruitment methods have relied on the bigger businesses training up their workforces, and the smaller businesses have then head hunted or recruited through known local networks (both formal and informal).
- Whilst attendees agreed that this cannot continue, as the large companies in the sector no longer routinely develop large R&D teams and increasingly outsource their R&D to small specialist businesses. The supply of experienced and skilled workers, previously trained up in the larger organisations is starting to do dry up however many businesses do not yet recognise the issue.
- There was agreement that more needs to be done to engage the sector in accessing accredited vocational training to support recruitment, especially considering how many University Chemistry Departments closed over the last 20 years.

Employability

- There continues to be a perception from employers that those leaving education and training programmes, including; full time Further and Higher Education, do not always have an adequate level of 'employability skills' and demonstrate the attributes most sought by SMEs in the sector. Further conversation within this area demonstrated that this issue relates to 'attitudes and behaviours', as well as specific employability skills.

Careers Advice

- The general view was that current careers advice is not best supporting the needs of the sector. Some attendees felt that the sector is losing out on talented individuals to either other areas of study in HE, or to HE rather than vocational routeways. The conversation relating to this broke down into 3 discrete areas:
    - Young people's lack of understanding of the Life Sciences sector and the opportunities available within it
    - The Life Science sector's lack of understanding of the need to develop their own talent for the future.
    - The importance of engaging the key influencers in young people's lives, i.e. parents/those with parental responsibility, teachers, careers advisors and informing them that the sector is full of great opportunities and can offer great progression routeways.

Update on 'The Asks'

As part of the **D2N2 Skills Prospectus for the Key Priority Sectors**, each sector provided its 'Top 10 Asks' of the Employment and Skills system. Within the Sector Seminar we conducted an exercise which asked the following questions:

- Are the 'Asks' still current/relevant?
- What progress has been made?
- Are there any other 'Asks' that have not been captured?
- Which of the 'Asks' cannot be addressed and why?

The output of this exercise is intended to provide an up to date view, as well as underpinning actions that will be taken forward to improve how the Employment and Skills system responds to the needs of the construction sector.

Original List of Life Science Asks

1) **Accredited technician training of relevance to medical technology businesses**

   This was not considered to be a major priority. The major issue is to get businesses to realise that the future recruitment of skilled staff will become harder unless they start to engage in more staff development and training programmes. Business engagement was seen to be a bigger issue. This could then follow.

2) **A programme of activity to support scientists to return to employment after a period away from the workplace due to caring responsibilities**

   This was still considered to be relevant, but is a wider issue than those returning after caring for someone. It should also include people coming back to the sector after time in other sectors or job roles. Refreshing technical skills was thought to be a key

issue due to advances in technology and equipment, especially software controlled equipment.

3) **A programme of activity to raise awareness amongst school children and parents of the career opportunities within the sector including the fact that a degree is not the only route into the sector**

Information Advice and Guidance was thought to be the major issue still for young people, with vocational pathways still seen by many as the route for lower achievers. Discussion was held around Higher Apprenticeship pathways such as those introduced in Unilever, were they court and recruit the high a-level achievers, and offer them an alternative route to a degree than the traditional University route. It was felt that this sort of example was not understood by many in the sector and bringing it to life through a case study would be helpful for local employers.

4) **A programme of activity to encourage and enable employers in the sector to take school age placement students**

It was agreed that whilst much activity takes place such as support courses organised through Medilink, the development of further quality placements needs further employer support. It was felt that more could also be done on both of the previous points through those with links to schools, such as parents or Governors from the Life Sciences sector. The Employability framework recently launched by the D2N2 LEP will also help to tackle the issue as it will require schools to engage better with local businesses and identify potential partnerships.

5) **Aggregation of niche training needs for existing firms and provision of specialised training**

It was felt that this already happens to an extent, and due to the very diverse nature of the businesses and the technical training they are often looking for, this is quite a logistical challenge. Much of the skills development work needed is commercially funded rather than utilising public funds.

6) **Access to funding to subsidise employers' costs related to apprenticeships**

Several Apprenticeship incentives already exist locally that cover the Life Science sector, however the incentives is not the biggest issue. The incentives were considered helpful, however concerns were raised that the biggest issue is still one of engagement with SMEs and the need for them to recognise the fact that they need to start thinking about recruiting and developing their own scientists, rather than rely on large companies to do it for the sector.

7) **Awareness raising of the benefits to companies and availability of relevant Apprenticeships and Traineeships**

It was agreed that the ROI is not fully understood, probably in part due to the lack of engagement by business with the agenda. The other issue was felt to be the perception of many SMEs that the only places they can recruit new scientists from is Universities or other Life Science companies.

Whilst awareness raising might be helpful in some cases it was also recognised that many SMEs in the sector cannot afford the finances to carry any development posts. Many start-ups or young companies don't have the capacity to develop younger or less experienced members of staff. There was some interest in ATA or GTA models, however engagement barriers need to be overcome before these could be explored further.

8) **Specific training linked to understanding the needs of the NHS and how to engage with and work with the NHS**

This was considered to be a niche 'Ask', and one probably not relevant to many of the SMEs based locally.

9) **Further relevant courses (to degree and above) which meet the demands of the sector**

Many people in the room were not aware of what Apprenticeships were currently available and who delivered them.

Most people in the room were not aware of the new Degree Apprenticeships, or the fact that several local Employers and Universities were already involved. Specifically in the development of the '**Life and Industrial Sciences – Laboratory Scientist Degree Apprenticeship',** the following organisations are already involved:

Actavis, Aesica Pharmaceuticals, Astra Zeneca, BCM, Essar, Fujifilm Diosynth, Biotechnologies, GSK, Ineos, Lotte Chemical UK, Lucite, Medimmune, Pfizer Inc, SABIC UK Petrochemicals, Sellafield, Sembcorp, Seralab, Synergy Outsourcing, Victrex, Broughton Laboratories, Centre for Process Innovation, Royal Society of Chemistry, Society of Biology, JayTee, Centre for Process Innovation, Greenwich University, Kent University, Manchester Metropolitan University

10) **Investment readiness training**

Whilst this was considered an issue, attendees were not aware of what is already being provided locally by organisations such as Nottingham Business Ventures Ltd or Nottingham City Council. It was felt that more awareness raising might be more beneficial rather than re-inventing the wheel.

Summary of Key Actions

1. Develop a set of hard hitting data capturing where local Life Science SMEs currently recruit from, and who trained their workforce. This should provide hard hitting data that will highlight the growing Skills Shortages locally, and the risk to their businesses if they do not start to develop their own staff. Ultimately this needs to persuade more employers to take ownership of the agenda locally.

   Medilink and the Colleges and Training Providers present were generally willing to capture the information and share it to a named point of contact once the questions are developed. The questions need careful consideration and need to be written in a way that will provide statistical data that highlights the key points. It was suggested that these are multiple choice questions. Likely topics include:

   - Where were their existing staff trained or qualified? (UK Universities, Apprenticeships, Overseas etc.)
   - Where did they develop their vocational science skills (University research facility, large company, small company, in current company etc)
   - How did they recruit their workforce? (informal networking, headhunting previous colleagues)

2. Identify further channels to engage businesses in the sector locally. Derby College volunteered to set up an Employer engagement group (Life Sciences Academy).

3. Life Science Apprenticeships – Greater clarity on who provides which qualifications locally, and what names the course run under would be helpful for intermediaries.

4. Engagement with Schools. Further work needed to engage schools better with the Life Sciences businesses locally, especially with the SMEs. The D2N2 LEP Employability framework will help to engage schools generally, but more needs to be done to engage schools with the Life Sciences businesses locally.

5. Identify Employer Champions willing to share their experience through Case Studies including ROI information.

Reference Documents

D2N2 Skills for Growth Strategy
http://www.d2n2lep.org/write/Audio/D2N2_Strategy_for_Growth_2013-23_LR_05.07.13.pdf

Sector Consultative Task Group Information
http://www.d2n2lep.org/Skills-Consultative-Task-Groups

Life Sciences Skills Action Plan
http://www.d2n2lep.org/write/Documents/Skills/D2N2_Medicine_and_Bioscience_1.10.14.pdf

D2N2 Skills Prospectus
http://www.d2n2lep.org/write/Documents/Skills/D2N2_Skills_and_Employment_LR_1.10.14.pdf

D2N2 Employability Framework
http://www.d2n2lep.org/write/D2N2_Employability_Framework_v14_JA_July_FINAL_(2).pdf

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Action Plan

The following Action Plan template will be populated by the 'Sector Skills Lead' reflecting the actions and activities identified within this document. The Action Plan will be a 'living document' and will provide a consistent approach across all key economic sectors in terms of driving and monitoring progress.

Action	Targets (Qualitative and Quantitative over next 12 months)	Milestones & timescales	Progress update	Resources	Lead

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