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SUMMARY REPORT

This report summarises the findings of an evaluation of two pilots aimed at increasing skills utilisation in the oil and gas industry in north east Scotland. It is part of the final output of a 30 month project run by Robert Gordon University and Aberdeen College, funded by the Scottish Further and Higher Education Funding Council as part of the Scottish Government's 'Maximising the Impact of Skills' agenda.

The report sets out the rationale for the pilots, the methodology used to assess their impact, the results of the evaluation process and some conclusions on the basis of the findings. Further details are available in the full report, which is available on request.

1.0   BACKGROUND

1.1   The first stage of this 30 month project was a study looking at patterns of skills utilisation in the oil and gas industry in Aberdeen. The findings of this research directly influenced the formation of two pilot schemes. At the outset of the project in 2010, the initial focus was on linking the project's work to increased performance and/or productivity. However, the first stage of the project suggested that the industry does not appear to suffer from poor performance or productivity. Rather, the key issues identified were a shortage of skilled workers and a number of fundamental barriers to skills utilisation. Two of these issues were selected as subjects for the pilot studies.

1.2   Firstly, the research found that skills utilisation was dependent upon good quality leadership. However, the industry often struggles to develop new leaders due to a reliance on technical skills as an indicator of leadership potential, and the often short-term, project-based nature of work. Very often, leaders are promoted on the basis of technical competence and struggle to adapt to their new leadership role. As a result, skills utilisation of their team can be impaired.

1.3   Secondly, the research found evidence of a very clear demographic skewing in many companies. Many companies still employ a large proportion of workers from the early days of the industry. They also employ a large proportion of younger workers. These two groups tend to be distinct from each other in terms of experience. In most industries, this would not be problematic as there would typically be an intermediate group between the two ends of the age/experience spectrum. However, due to the industry downturn in the late 1990s, many of this 'middle generation' of workers left the industry. As a result, many companies tend to have a considerable skewing of their age/experience demographic towards the far ends of the scale. This is problematic as many of the older/more experienced employees are approaching retirement age. In order to avoid losing all of their skills, companies are keen to ensure that they are shared with their younger/less experienced counterparts using mentoring techniques.

However, where mentoring has been used in the industry, it has typically been used with little rigour, expertise or – ultimately – success.

2.0   THE PILOTS

2.1   On the basis of the foregoing findings, two pilot projects were designed in order to try to address these issues, in the hope that doing so would also result in better skills utilisation.

2.2   The first pilot was a project aiming to improve the quality of team leadership, to be achieved through the development and provision of an ILM Level 2 short course in team leadership, to be delivered remotely by Aberdeen College, for new/aspiring team leaders. Three companies participated: EnerMech, PSN (now Wood Group PSN) and Weatherford. Each company initially identified five volunteer participants. The course began in March 2011, and participants were initially given six months to complete the course.

2.3   The second pilot aimed to improve knowledge transfer through mentoring techniques, to be achieved through the development and delivery of a workshop with mentors/mentees in a small number of companies. A team from Robert Gordon University's Human Resource Management was commissioned to carry out this work. Two companies involved in the earlier research stage of the project expressed an interest in being involved in this pilot: Aker Solutions and Tritech. Whilst Aker Solutions had previous (mixed) experiences of mentoring, Tritech had no previous experience of formal mentoring, but nevertheless felt that the benefits of introducing a mentoring scheme would be of value to them. Aker Solutions had previously attempted (unsuccessfully) to implement a mentoring scheme. 30 Aker Solutions staff participated in their mentoring session in October 2011 (18 mentees and 12 mentors). The Tritech sessions in January 2012 attracted a total of 38 participants (18 in Ulverston and 20 in Westhill).

2.4   The mentoring proposed for the two companies was slightly different. In Aker Solutions, a clear distinction already existed between mentors and mentees. Tritech preferred a network mentoring approach with no clear separation between mentors and mentees. However, Tritech provided a workforce distinction of another sort; namely, the geographic split between employees in Westhill and Ulverston.

3.0   EVALUATION METHODOLOGY

3.1   For each pilot, a two-pronged approach was taken. Firstly, the *affective* dimension was evaluated. Secondly, the *strategic* dimension of each pilot was evaluated. Together,

these two aspects were intended to provide as comprehensive as possible an evaluation of individuals' responses to the pilots (the *affective* dimension) and the impact on organisational structures and performance (the *strategic* dimension).

3.2   These aspects were structured according to a four-level Kirkpatrick evaluation. This model covers the various different levels which must be considered in any rigorous evaluation: reaction, learning, behaviour and results. The *affective* dimension of the evaluation incorporated reaction, learning and behaviour, whilst the *strategic* dimension also incorporated behaviour, as well as results.

3.3   A maximum of around 4 months elapsed between the end of some of the interventions (the Aker Solutions mentoring workshop and some Team Leadership participants) and the evaluation interviews, whereas for others (the Tritech mentoring workshop and the remaining Team Leadership participants), the time elapsed was only around 1-2 months. As such, it is unlikely that the full impact of the pilots would have developed by the time the evaluation was conducted.

3.4   One of the key questions at the outset of undertaking these pilots was whether or not they would have a demonstrable impact upon skills utilisation, performance and productivity. Whilst it is tempting to try to rely on quantitative data for performance evaluations, recent research has highlighted that quantitative indicators alone are insufficient to demonstrate the impact of training interventions. Coupled with the short timescales and small participant numbers, a mixed methodological approach (in which qualitative participant testimony would be crucial) was deemed to be most appropriate.

3.5   A range of data collection tools was used. For the Team Leadership pilot, the evaluation was based around a Leadership Skills survey, qualitative interviews with the course participants, and evidence from participants' reflective coursework. Interviews took place approximately three months after the course ended, and included interviews with participants, representatives of the three companies involved and the pilot leads at Aberdeen College. The Leadership Skills survey was issued to participants at the start of the pilot and was designed to give an overview of participants' skills and current performance in the key dimensions of team leadership covered in the course. This survey was repeated after the pilot in order to give a 'pre-post' comparison. An element of 360° evaluation was also incorporated: participants were asked to have two line managers and two team members complete 'pre' and 'post' surveys on their behalf.

3.6   Of the 15 participants who originally enrolled, three subsequently withdrew from the course altogether. Of the twelve remaining participants, six completed the course. We interviewed all of these 'completers', and were also able to interview two of the six 'non-completers' in order to find out more about barriers to completion.

3.7   For the Mentoring pilot, similar tools were used. At each workshop, participants were asked to complete a 'pre' and 'post' survey of their knowledge and ability in relation to the different dimensions of mentoring skills covered by the pilot delivery team. For the Mentoring pilot, an extremely high survey completion rate was achieved, due to the fact that surveys were issued and completed as part of the workshops. A range of qualitative interviews was also conducted. In addition, qualitative interviews were undertaken with participants (seven from each company), representatives of the two companies involved, and the pilot lead from RGU. These interviews took place approximately four months after the Aker Solutions intervention, and approximately one month after the Tritech intervention.

4.0   FINDINGS

4.1   The report now considers the results of the evaluation of these two pilots in turn. Results are discussed according to the four levels of the Kirkpatrick evaluation model (reaction, learning, behaviour and results), before considering a number of other pertinent issues which emerged during the evaluation process.

4.2   TEAM LEADERSHIP

4.2.1   Level One – Reaction

4.2.1.1   There was a consistent level of enjoyment across the participants we interviewed (both completers and non-completers). The company representatives also praised the general concept behind the course and the energy at the outset of the pilot. Course content was said to be good quality. Participants generally agreed that the course had been fairly useful and relevant to their position.

4.2.1.2   However, most participants argued that the course did <u>not</u> contain much new knowledge. The contents felt to have been pitched at an introductory level, beneath the expectations of most participants/companies. However, interviewees from one company believed that the level had been ideal. Further exploration showed that the most positive participants were those who conformed most closely to the type of participant sought (i.e. new or aspiring team leaders). Virtually every participant proposed by the other two companies had already been leading a team for some time.

4.2.1.3   Although intended for new or aspiring team leaders, a majority of participants said that they could not have completed much of the coursework without their prior leadership experience. On this basis, we would suggest that the course may be better targeted at very <u>new</u> team leads (i.e. with at least some experience) rather than <u>aspiring</u> team leads.

4.2.2   Level Two – Learning

4.2.2.1   For all but one participant, overall levels of self-assessed capability in leadership and management increased over the duration of the course. However, this increase was of a very low magnitude.

4.2.2.2   The assessment of participants' leadership and management abilities by their line managers and team members was more mixed. Managers typically rated participants' abilities lower than the participants themselves did. However, all but one set of managers stated that their respective participants' leadership and management abilities had improved over the course of the pilot. The ratings provided by participants' team members matched reasonably closely the scores provided by participants themselves. However, in three cases, the team members stated that their respective participant's leadership and/or management abilities had worsened over the course of the pilot.

4.2.2.3   Interview testimony confirmed the quantitative findings of limited learning from the course. Participants and company representatives explained that the course was more of a useful refresher on common sense business practice or existing knowledge rather than an introduction to new skills, tools and techniques.

4.2.2.4   Some participants were concerned that the learning in the course was not sufficiently relevant, with too much of a focus on generic management skills rather than on team leadership as it is understood in industry.

4.2.3   Level Three – Behaviour

4.2.3.1   Very limited evidence was found of a positive impact upon behaviour. Such changes are dependent upon an intervention providing participants with new learning (i.e. knowledge, skills, techniques etc), so this finding was not entirely surprising.

4.2.3.2   Despite limited evidence of immediate behavioural change, there was clear evidence of a longer-term attitudinal change among most interviewees, particularly in terms of increased confidence in their leadership and team development abilities, with most interviewees stating that the course had reassured them that they were doing things correctly.

4.2.4   Level Four – Results

4.2.4.1   Due to the lack of new learning, there was virtually no evidence of improved business performance (both personal and collective) or organisational change (although the focus of this pilot was much more on individuals than on organisations).

4.2.4.2   Survey data from participants, line managers and team members showed that there was no notable increase in productivity over the course of the pilot. In many cases, productivity was reported to have decreased. There was some limited evidence from participants and their team members of a positive impact upon skills utilisation and team confidence, but around half of participants indicated that team motivation had declined over the course of the pilot. Interviewees provided limited anecdotal evidence of improvement, typically related to a sense of smoother running in their team(s).

4.2.5   Barriers

4.2.5.1   The evaluation also explored the factors which had acted as barriers or disincentives to participants completing the course.

4.2.5.2   The most prominent factor to emerge from our interviews was a lack of time for participants to complete the required work. Two main reasons were provided for this. Firstly, interviewees identified a lack of protected time at work for the completion of training courses. Secondly, a number of interviewees cited pressures of workload. The timing of the pilot – incorporating the busy period of summer platform shutdowns – was also seen as a key factor. Two of the three companies underwent significant growth and/or reorganisation during the pilot, which further compounded time issues.

4.2.5.3   Despite this, only one interviewee suggested that six months was not long enough for the course. Every other interviewee was of the opinion that six months was long enough, providing that protected time was made available or that participants sacrificed their own time.

4.2.5.4   Despite general praise for the distance learning format, most interviewees suggested that a more 'blended' approach would have been more appropriate. Suggestions ranged from having a communal induction to holding regular meetings for all participants.

4.2.5.5   Another prominent barrier was the issue of IT access. This was raised as a concern in every single interview we conducted with participants and company representatives. The most prominent concerns were the time taken to release module materials, and login problems.

4.2.5.6   Around half of the participants interviewed stated that the release timing of course materials was an issue for them and/or their colleagues. Two participants explained that after completing their mandatory modules, they had to wait over a month before gaining access to the optional module materials.

4.2.5.7   Interviewees also expressed concerns about the login system for Aberdeen College's online learning interface, with a number of participants experiencing login problems and e-mail issues.

4.2.5.8   There was widespread praise for the Aberdeen College staff. This was particularly true of the course tutor, and his speed of response, quality of feedback, and support and encouragement.

4.2.5.9   Interviewees also praised the other Aberdeen College employees involved in delivering the pilot. There was praise in relation to the general package of support provided, staff willingness to engage with participants and provide them with advice on how best to approach the pilot, and support with the IT issues described above.

4.2.5.10   The final group of barriers encountered were personal issues, such as family illness. Such barriers were identified by a very small number of participants.

4.2.5.11   The evaluation also asked 'completer' interviewees about the factors which pushed them to complete the course. Virtually every 'completer' we interviewed cited personal motivation, pride, stubbornness, dislike of failure or sense of obligation to their managers as being their biggest motivating factor.

4.2.6   Other Issues of Note

4.2.6.1   The funding arrangements for the pilot were also explored in the evaluation interviews. Two key issues were explored: firstly, whether companies would consider recommending the course as a paid option in future; and secondly, whether they would have treated the pilot differently if they had been paying for the intervention themselves.

4.2.6.2   There was mixed feedback from companies in relation to recommending the course as a paid option. One company was very positive about the course, arguing that the problems experienced were in no way insurmountable. One company took the opposite position, arguing that there was too little return on the time invested. In future, this company would rather pursue a bespoke approach to staff development. The final company fell between the other two. It recognised that the course provided was not a complete solution, particularly given the availability of 'free' management training through the ECITB. However, it recognised that the course could complement the existing offering.

4.2.6.3   In terms of the second issue, we asked the pilot delivery team and company representatives whether things would have been different if companies had been paying for the pilot. The pilot delivery team believed that things would have been very different, claiming that companies would feel more obliged to make the pilot work if

they had made a financial contribution. The response from the companies appeared to confirm this: company representatives suggested that they would have played a more prominent role if their company had been paying, particularly in terms of ensuring better completion rates.

4.3   *KNOWLEDGE TRANSFER PILOT*

4.3.1   *Level One – Reaction*

4.3.1.1   Participants were asked to rate how enjoyable, useful and relevant the sessions had been, as well as whether or not their expectations of the sessions had been met. In each case, the same pattern was found. Results were broadly similar across the two companies, but the responses from mentors within Aker Solutions were consistently more positive than those from mentees; whilst in Tritech, the responses from participants in Ulverston were consistently more positive than those from participants in Westhill.

4.3.1.2   The delivery format was praised in interviews. It was felt that conducting a face-to-face, group-based intervention was definitely the correct approach to take, rather than a more individually based, distance learning or blended learning approach. In particular, the interactive and discursive nature of the sessions was praised.

4.3.1.3   Particular praise was also expressed by many interviewees for the RGU presenters, who were congratulated for making the sessions engaging and providing 'real world' examples. The exception to this was the group of mentees at Aker Solutions. Although very positive about the session in which they participated alongside mentors, they were much more critical of the following session, which saw mentors and mentees separated into distinct groups.

4.3.1.4   The mentees interviewed explained that the diversity of their group made it difficult to treat them homogeneously. The mentees in attendance had a wide range of experience and exposure to personal development. For some, mentoring was already a crucial aspect of their development; for others, it was an entirely new concept. They argued that more preparation was needed to ensure that the needs of different types of mentee were identified and addressed accordingly. Although mentees were particularly critical of the general nature of the material, this was also expressed by other interviewees. Some felt that the slides were somewhat generic, and that tailoring them more (to the industry, the company, and participants' disciplines) would increase the impact, accessibility and relevance of the materials.

4.3.1.5   The mentees interviewed also explained that attendance was compulsory for them. This does not appear to have been the case for mentors in Aker Solutions, or any Tritech participants. This element of compulsion may have played a part in the

different reactions to the session. Where attendance was voluntary, those who attended presumably already had an interest in learning more about the topic. Where attendance was compulsory, this interest could not be guaranteed. In addition, for very new entrants at Aker Solutions, the value of mentoring may not yet have been explained, potentially making the experience seem irrelevant.

4.3.1.6   One other piece of constructive criticism emerged consistently across all sub-groups. A number of interviewees from both companies suggested that more than just one session would have been beneficial. One workshop was felt to be insufficient to fully cover the material. Others would have liked more information than was delivered on the day, but staggered over a series of shorter, themed workshops.

4.3.2   Level Two – Learning

4.3.2.1   There was very clear evidence of learning in a number of areas covered by the mentoring workshops.

4.3.2.2   Pre-workshop understanding of the roles and responsibilities of mentors and mentees (and the key skills and behaviours associated with these roles) was lower in Aker Solutions than in Tritech. This was surprising, given that many of Aker Solutions' employees had previously been involved in attempts to introduce a mentoring scheme, although it may suggest that a lack of clarity over key roles/responsibilities may have been a contributory factor to previous difficulties. Although levels of understanding clearly increased within both companies as a result of their participation, understanding remained higher in Tritech than in Aker Solutions.

4.3.2.3   In terms of the impact the mentor-mentee relationship has on the success of mentoring and how to build an effective mentoring relationship, mean levels of pre- and post-workshop understanding were higher in Aker Solutions than in Tritech. This may be because of Aker Solutions' prior experience: the difficulties they experienced in the past have possibly shown how important these key aspects of a mentoring relationship are.

4.3.2.4   The evaluation also sought to determine how much participants had learned in respect of the key skills of listening, questioning and feedback (as covered in the workshop). In terms of all three, the results show fairly similar pre- and post-workshop levels of understanding across both companies, with each sub-group and company reporting an increase in learning.

4.3.2.5   Participants were provided with an introduction to a number of tools (e.g. mind-mapping) to help their mentoring relationship. Pre-workshop awareness of these tools was notably higher in Aker Solutions than Tritech. Again, this may reflect Aker

Solutions' previous work in this area of staff development. However, levels of post-workshop understanding across the two companies were broadly similar.

4.3.2.6   Most interviewees explained that the workshop information was not new to them. However, in many cases, it was seen as a useful 'refresher'. Much of the information conveyed was seen as being common sense or good business practice. Many interviewees explained that they were already carrying out these activities without associating them with the concept of mentoring. However, interviewees across both companies consistently identified the section on learning styles as one which provided them with most in the way of 'new' learning.

4.3.3   Level Three – Behaviour

4.3.3.1   The behavioural impact of the mentoring intervention was measured primarily through qualitative follow-up interviews. Interviewees in both companies had very limited recollection of the workshop and there was very little evidence of changed behaviour. Interviewees pointed to two key factors behind this: firstly, the nature of the information in the workshop; and secondly, a lack of follow-up.

4.3.3.2   Interviewees suggested that because so much of the information was already familiar to them, it was unrealistic to expect a radical change in people's behaviour. One exception to this was the aforementioned concept of 'learning styles'. This was new to most interviewees, and was cited as having had a real impact upon their behaviour, in terms of the way they receive information and seek to transfer it to others.

4.3.3.3   For most interviewees, the lack of behavioural impact was more attributable to a lack of follow-up. Without any subsequent reinforcement activity, they explained that any expectation of meaningful behavioural change on the basis of one workshop was unrealistic. Interviewees across both companies were surprised there had been no attempt to build on the lessons of the workshops. Despite being enthusiastic about mentoring and knowledge transfer, this impetus quickly wore off as people settled back into 'business as usual' and forgot about the workshop.

4.3.3.4   Some Tritech interviewees expected that further action would be taken to improve communications between Ulverston and Westhill. However, they indicated that there was no evidence of this taking place. It was also expected that the capture, storage and transfer of information would improve: however, interviewees explained that this was not covered in the workshop.

4.3.3.5   At Aker Solutions, the lack of follow-up was most frequently associated with the idea of teaming up mentors and mentees. The mentoring workshop was seen as being a launchpad for this. However, many interviewees reported that almost six months on, they had still not received any information on the identity of their mentors/mentees.

4.3.3.6   Two main reasons were identified by Aker Solutions interviewees for this lack of follow-up. Firstly, there was a problem in identifying enough mentors to support the scheme. Secondly, there had been a change in strategic focus within Aker Solutions since the workshop. Since then, the company had hired an external consultant to review of the company's entire Structured Development programme. As a result, the original mentoring model had effectively been put on hold.

4.3.3.7   Interviewees in both companies were surprised by the lack of follow-up from the RGU delivery team. However, the team had prepared in advance a set of training materials to be provided to participants shortly after the workshop, to allow participants to continue working on mentoring skills and techniques. Despite this, none of the mentors/mentees interviewed were aware of these materials as they had not been released in either company.

4.3.3.8   In Aker Solutions, the change in strategic focus meant that there were no longer any definite plans to release the materials. In Tritech, it appears that the materials will be released in future. Tritech interviewees also mentioned that a more structured induction process, including more of a focus on mentoring and knowledge transfer, would be implemented.

4.3.4   Level Four – Results

4.3.4.1   The principal source of evidence for this section was the interviews conducted with participants and, more pertinently, with the strategic leads for the mentoring pilot within each participant company.

4.3.4.2   Other than isolated cases of individuals making minor changes to their mentoring approach, there was little evidence in our interviews of results in terms of performance and organisational structures. Given the change in strategic focus in Aker Solutions and the short space of time between the Tritech workshops and the evaluation interviews, this is not entirely surprising.

4.3.4.3   It was argued by some Aker Solutions participants that institutional structures are required in order to clarify people's roles and make mentoring less discretionary. However, there was no real evidence of organisational change to reinforce the learning from the workshop. Indeed, the biggest issue for most interviewees was the lack of progress on the most fundamental organisational change required to make mentoring work: identifying mentors for the mentees.

4.3.4.4   In Tritech, the lack of organisational change was due to the short period between the workshops and the evaluation interviews. However, plans were in place to make changes based around the recommendations of the mentoring workshop. The first

major change was that the workshop materials will be used with all future inductees to ensure that mentoring is embedded from the outset. Also, new inductees will in future be expected to spend some time working in each of the company's departments, to better understand and disseminate important operational knowledge throughout the company. In addition, the company is intending to mainstream mentoring in its annual Personal Development Reviews (PDRs).

4.3.4.5   Business performance improvement is the other key outcome which is typically expected to emerge as a result of a successful intervention of this nature. Given the timescales involved and the lack of significant impact upon participants' behaviour and organisational structures, it was unsurprising to note that no interviewees identified any improved business performance.

4.3.4.6   The evaluation therefore sought to identify in qualitative terms whether there was any improvement in the two key concepts behind the pilot (knowledge transfer and skills utilisation). A very small minority of respondents identified an improvement. This was typically correlated with interviewees who had earlier highlighted learning styles as being a new and useful component of the workshop: this new knowledge meant that they were better able to play to their strengths (and those of their colleagues) when trying to transfer knowledge.

4.3.5   Other Issues of Note

4.3.5.1   As with the other pilot, the interviews were also used to explore a number of other relevant issues. The first was the nature of the relationship between RGU and the participant organisations. Both companies praised the strength of the relationships with the pilot delivery team, and stated that this had been crucial to completing the pilots.

4.3.5.2   Another important aspect was whether the pilot would have run any differently if the companies were required to pay for them. Given the funding constraints on supply chain companies of Tritech's scale, it was seen as unlikely that the pilot would have taken place at all without external funding. In Aker Solutions, resources were not seen as such a barrier. Rather, the strategic representatives there emphasised that if they had been financing the pilot, they would have wanted a more hands-on role throughout.

4.3.5.3   The commitment of senior management emerged as an important factor to note for the future. At Tritech, senior management was clearly committed to the pilot from the outset.

4.3.5.4   In addition, the interviews with the strategic representatives of Aker Solutions suggested that within larger companies, the cost of an intervention may play a strong role in determining the company's perception of its value.

4.3.5.5   The final additional issue raised by interviewees from both companies related to the pace of the work undertaken. More specifically, the deadline for each of the interventions was thought to have led to compromise on the quality of the intervention.

5.0   CONCLUDING REMARKS

5.1   Overall, the evaluation of these pilots draws mixed conclusions. Whilst the responses to the interventions were generally very positive, there is little in the way of evidence of long-term change as yet. The evaluation team has arranged to remain in communication with representatives of both companies, and will continue to monitor the reported impact of the project.

Maximising the Impact of Skills in the Oil and Gas Industry

Report on Evaluation of Pilots[1]

May 2012

David Gibbons-Wood[2]

Centre for International Labour Market Studies (CILMS)

The Robert Gordon University

Dr Iain MacLeod[3]

Research Institute for Management, Governance and Society (IMaGeS)

The Robert Gordon University

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[1] Please note that a shorter Summary Report has also been prepared, and is available on request.

[2] d.gibbons-wood@rgu.ac.uk

[3] i.macleod1@rgu.ac.uk

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INTRODUCTION

This report is the final document detailing the evaluation of two pilot programmes carried out during 2011/12. These pilots were the culmination of a 30 month project run by Robert Gordon University and Aberdeen College. Funding for the pilots (and the project more broadly) was provided by the Scottish Funding Council in support of the Scottish Government's 'Maximising the Impact of Skills' agenda.

The first stage of this 30 month project was a 6 month study looking at patterns of skills utilisation in the oil and gas industry in Aberdeen. The findings of this research directly influenced the formation of two pilot schemes which were originally intended to improve levels of skills utilisation in the industry. As part of the second stage of the research project (i.e. the pilots themselves), the research team responsible for conducting the first stage of the project was tasked with evaluating the impact of the pilots.

This report sets out the rationale for the pilots, the methodology used to assess their impact, the results of the evaluation process and some conclusions on the basis of the findings. In doing so, we try to tie the findings of this stage to the findings that emerged from the earlier stage of the project[4].

Please note that a shorter Summary Report has also been prepared, and this is available on request.

For further information on any aspect of this report, please contact David Gibbons Wood (01224 263104; d.gibbons-wood@rgu.ac.uk) or Dr Iain MacLeod (01224 263430; i.macleod1@rgu.ac.uk).

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[4] These are provided in Gibbons-Wood, MacLeod & Tait (2010).

BACKGROUND

At the outset of this project in 2010, the initial focus had been on linking the project's work to increased performance and/or productivity. However, the research stage conducted in 2010 suggested that the industry does not appear to suffer from acute problems of performance/productivity, and that there were few systems in place to monitor individual performance/productivity. Furthermore, skills utilisation itself was not generally seen as a huge problem. Rather, the key issues identified were an absolute shortage of skilled entrants to the industry (subsequently confirmed by additional research conducted by the research team[5]) and issues relating to 'enablers': the fundamental characteristics of workplaces and employees which are needed for better skills utilisation. We identified three key 'enabler' issues. The first of these was a major problem in relation to fundamental levels of numeracy and literacy of workers in the industry. Secondly, we found that skills utilisation was dependent upon good quality leadership. However, the industry struggles to blood new leaders due to the often short-term, project-based nature of work and a reliance on technical skills as an indicator of leadership potential. Our research suggested that very often, newly promoted leaders struggle to adapt to the behavioural demands of their new role and as a result, skills utilisation of their team is impaired.

Finally, we also found evidence of a very clear demographic bias in many of the organisations we spoke to. The issue in question relates to the phenomenon of a 'missing generation' in the industry, which causes problems for the transfer of knowledge, a crucial prerequisite for skills utilisation. Many companies still employ a large proportion of workers from the early days of the industry. Many companies appear to have a dearth of 'middle generation' workers, many of whom left during the industry downturn in the 1990s in order to pursue more stable employment elsewhere. As a result, many companies tend to have a considerable skewing of their age/experience demographic towards the far ends of the scale, with relatively fewer employees falling between these two extremes. This is particularly acute as many of the older/more experienced employees are approaching the stage where they are considering retirement. In order to avoid losing all of the skills which these valuable workers have amassed during their time in the industry, companies are keen to see these skills transmitted to younger/less experienced counterparts using mentoring techniques. However, where mentoring has previously been used in the industry, it has typically met with little success. We found there was little rigour or expertise in terms of implementing mentoring schemes. As a result, many companies have had negative

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[5] See Gibbons-Wood & MacLeod (2010).

experiences and are now unsure as to how they can best go about transferring their older/more experienced workers' skills to their younger/less experienced workers.

The intention of the project from the outset had been to design one or more interventions which might be demonstrated to have an impact on skills utilisation. On the basis of the issues identified above, the project's Steering Group decided to pursue the following pilots:

1. A pilot project aiming to improve the rigour and quality of team leadership in the oil and gas industry, to be achieved through the development and provision of a short course (approx. 6 months in duration) in team leadership for new/aspiring team leaders in a number of companies; and
2. A pilot project aiming to improve knowledge transfer through mentoring processes, to be achieved through the development and delivery of an intervention provided to mentor/mentee partnerships in a small number of companies.

Team Leadership

For Team Leadership, it was proposed that a number of companies should be invited to put forward candidates (either newly promoted team leaders or aspiring future team leaders) to participate in an ILM[6] accredited short course in team leadership. The course selected was an ILM Level 2 qualification, to be delivered remotely by Aberdeen College.

Three companies expressed an interest in participating. These were EnerMech, PSN (now Wood Group PSN) and Weatherford. Initially, each company was asked to identify five volunteers to participate. At Weatherford, three participants were drawn from their Norwegian workforce.

Registration of the students took place in March 2011, and participants were initially given six months to complete the course. Although two years would usually be made available to learners to complete this course, it was felt by Aberdeen College and the project Steering Group that six months represented an appropriate timescale for the course, which would allow for evaluation prior to the end of the project.

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[6] Institute of Leadership and Management. See http://www.i-l-m.com/ for details.

Knowledge Transfer

For the Knowledge Transfer pilot, the proposal which emerged from the project Steering Group's consideration of the results of the research stage was based upon the notion of two companies being given access to mentoring expertise. It was hoped that this type of intervention could result in tangible benefits in relation to the transfer of knowledge within their company and – ultimately – better skills utilisation as a result. It was intended from the outset to work with one company with previous negative experience of trying to implement a mentoring system, and one company with no previous experience of formal mentoring schemes. A team from Robert Gordon University's Human Resource Management was commissioned to carry out this work.

Ultimately, two companies involved in the earlier research stage of the project expressed an interest in being involved in this follow-up pilot. Following initial discussions between these companies and representatives of the project, the Department of HRM and the evaluation team, it was decided to proceed with these two companies. The companies in question were Aker Solutions and Tritech. Whilst Aker Solutions had previous experience of mentoring (which was said not to have worked particularly well), Tritech had no previous experience of formal mentoring, but nevertheless felt that the benefits of introducing a mentoring scheme would be of value to them.

METHODOLOGY

The methodological design of the two pilots reflected both their differences and their commonality. In each case, the proposed methodological approach consisted of two distinct but overlapping and complementary modes of evaluation, which we termed *affective* and *strategic* evaluation. Together, these were intended to provide as comprehensive as possible an evaluation of the way individuals responded to the intervention (the affective dimension) and the impact the intervention had on organisational structures and performance (the strategic dimension).

The affective evaluation was delivered in accordance with the Kirkpatrick 'Four Levels' evaluation model. The strategic component of the evaluation was also informed by the Kirkpatrick model, but also used Tamkin's 4A model to build on this by informing our approach to satisfying a wider ambition of the project: namely, to understand the impact on performance. By aiming to triangulate quantitative indicators with a Kirkpatrick style evaluation, it was hoped that a greater understanding of the impact between individual and organisation would emerge.

Affective Evaluation – the Kirkpatrick Model

The Kirkpatrick model aims to provide a well-rounded and detailed evaluation of the impact of a given intervention. The model was developed in the 1950s (e.g. see Kirkpatrick, 1975) to assess the responses to and results of training and learning programmes, and has been used widely since then. It aims to consider the different levels of impact of a given intervention at different points in time in order to develop a holistic appraisal of the different ways in which an intervention has impacted upon participants (and their organisations).

Kirkpatrick's model identifies different levels of impact which need to be assessed in order to produce a rounded, robust evaluation. His 'Four Levels' of response to training and learning are Reaction, Learning, Behaviour, and Outcomes.

The most straightforward assessment is that of reaction. This aims to establish trainees' responses to the training provided, including items such as satisfaction with the format, the proposed learning outcomes, the relevance to their business and the extent to which the lessons are transferable. The second level of affective evaluation seeks to evaluate the extent to which the training has met with trainees' and participant companies' expectations. The final level of affective evaluation corresponds to the third level of the Kirkpatrick Four Levels model: behaviour. This

level aims to establish the impact that training has had and will continue to have on individual behaviour. Finally, whereas the first three levels of the Kirkpatrick Four Levels model are generally limited to evaluation of the individual impact, the fourth looks at a more holistic impact of individual-level interventions by considering issues of organisational change and business performance improvement. In this respect, it constituted the first part of our strategic evaluation.

Each of these levels tends to require more 'bedding in' time than the previous one. Unfortunately, a longitudinal approach was not one which could be accommodated within the timeframe available. Even trying to evaluate Levels 3 (Behaviour) and 4 (Outcomes) is generally not advised in a timescale as short as that available (e.g. Craig, 1996; Kirkpatrick, 1975; 2006). As such, the Evaluation Team sought from the outset to ensure that the expectations of the evaluation were realistic. It was recommended that each pilot should have a minimum of six months' bedding-in time, after which the evaluation team would return to conduct the post-pilot monitoring.

Strategic Evaluation – Tamkin's 4A Model

The primary focus of the 'Maximising the Impact of Skills' project is the development of a clear understanding of the impact that skills utilisation has in relation to workplace productivity piloted within the oil and gas sector. Leading researchers in the field (e.g. Keep et al, 2006) have consistently stressed that the drive towards skills utilisation must be grounded in a measured approach. This ambition is supported by the Scottish Government definition of skills utilisation (Scottish Government, 2010), which highlights the beneficial impact of the better use of skills on performance, job satisfaction, employee well-being, investment, enterprise and innovation. As such, the evaluation originally sought to evaluate not only the pilots themselves but also their contribution to wider measures of productivity for the companies. The literature review conducted by the research team (Gibbons-Wood, MacLeod & Tait, 2010) for this project concluded that Tamkin's 4A Model of Capability (2005) represented the most coherent and useful attempt to introduce a quantitative element to the consideration of the role of skills in performance/productivity. The model identifies four key dimensions of capability to consider, which are placed along two axes: from individual skill to organisational action on one axis, and from development of capability to deployment of capability on the other (see Figure 1).

Figure 1: Tamkin's 4A Model of Capbility

However, previous attempts (e.g. Brynjolfsson and Hitt, 1998) to model causal relationships between skills and productivity using statistical analysis have proved fraught with difficulty, and have in some cases led to paradoxical results. As such, greater emphasis has been placed on the stronger methodological approach provided by qualitative data (e.g. Patton et al, 2000). The over-riding message applicable to our project was that quantitative indicators alone are insufficient to demonstrate the impact of training interventions.

As a result, the evaluation team believed that any attempt to measure the impact of training upon skills utilisation and subsequently upon productivity needed to take into account the specific circumstances of the different partners involved in the pilots, and would likely require most of the evidence to be qualitative in nature. Furthermore, due to the small numbers of participants in each of the pilots, it was made clear from the outset that the results of the evaluation could not be taken as statistically generalizable and should be treated as indicative rather than conclusive.

Despite the limitations of quantitative data in a study like this one, the evaluation team sought to use this analytic framework as a departure point for the evaluation of the strategic component of the interventions. Prior to both pilots, the Evaluation Team met with the training providers to try to establish exact learning outcomes, and with participant companies in order to identify the

nature of their expectations and the type of data they had available to provide evidence of impact. Although most of Tamkin's indicators were inapplicable to the type of interventions put in place, the model and its indicators were used as a starting point for helping the participant companies to identify any suitable data they may gather in relation to individuals, teams and their company which might subsequently be used to evaluate departure from a pre-training baseline. Unfortunately, our discussions with the companies involved in the pilots revealed that the type of granular individual data we would have liked to include are simply not measured (at individual level) on a regular basis by companies, whilst our discussion with those co-ordinating both pilots suggested that the impact and learning outcomes of their work would best be evidenced in detailed discussions with participants rather than through quantitative measurements.

We overcame this issue by incorporating questions on the key indicators of motivation, confidence, skills utilisation and skills relevance in our monitoring questionnaires for Team Leadership, and also sought to explore these issues qualitatively in the post-intervention interviews conducted for both pilots.

Data Collection Tools

Having determined the broad methodological approach, the Evaluation Team determined that the proposed data collection tools for the pilots would be as follows:

Team Leadership:

- Leadership skills survey
- Qualitative interviews:
    - Course participants
    - Company representatives
    - Course administrator (Aberdeen College)
- Evidence from participants' reflective coursework

Knowledge Transfer:

- Mentoring skills survey

- Qualitative interviews
  - Course participants
  - Company representatives
  - Pilot lead (RGU)

These corresponded to the different levels of the Kirkpatrick Model as set out in Table 1.

Table 1: Proposed Affective Evaluation Model and Data Collection Instruments

Level of Evaluation	Variable(s)	Data Collection Instrument(s)
1. Reaction	General opinions on intervention (e.g. format of training, level of satisfaction, relevance to business etc.)	Post-intervention survey of participants
2. Learning	Acquisition of knowledge, attitudes, confidence, skills and commitment intended to be delivered through the intervention.	Comparison of pre-intervention and post-intervention participant survey results Post-intervention follow-up interviews Reflective coursework (for Team Leadership only)
3. Behaviour	Application of training: changes in participant behaviour; difficulties in application; willingness to implement etc.	Post-intervention survey of participants Post-intervention follow-up interviews Possible opportunities for action research self-assessment and observation (e.g. team members and line managers)
4. Results	Outcomes resulting from intervention and subsequent improvements in business performance.	Post-intervention follow-up interviews Quantitative data from participant companies (where available)

Further detail on each of these data collection tools is provided in turn below.

Team Leadership: Leadership / Management Skills Survey

The main quantitative component of our evaluation of the Team Leadership pilot was a leadership / management skills survey, which was issued to participants at the very start and very end of the course. Participants were also requested to ask two of their team members and two of their managers to complete a similar survey commenting upon the course participant's leadership / management skills. As such, we aimed to achieve both an objective and subjective assessment of the impact of the course upon participants' skills and performance.[7] In addition, we used these surveys (particularly the pre-pilot survey) to gather background information on issues like skills utilisation, motivation, team performance, productivity, barriers to increasing productivity, and workplace autonomy.

We used the Management Leadership Skills Inventory (MLPI; see http://www.midwgroup.com/mlpi-factors for more details) as a departure point for identifying the core skills associated with leadership and management. It is important to state that we were <u>not</u> aiming to replicate the MLPI or to apply its methodology. Rather, we used the MLPI as a source of top-level information on the type of practices and functions typically associated with good leadership and management. The MLPI identifies seventeen leadership and management practices, as laid out below.

- Management Practices
    - Goal Setting
    - Planning & Organizing
    - Technical Expertise
    - Performance Standards
    - Coaching
    - Evaluating Performance
    - Facilitating Change
    - Delegation
    - Recognition

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[7] In this respect, our approach is similar to the idea of 360-degree feedback.

- Leadership Practices
  - Strategy
  - Communication
  - Teamwork
  - Empowering Employees
  - Trust
  - Resourcefulness
  - Self Confidence
  - Decisiveness

The leadership / management skills section of our pre-pilot and post-pilot surveys were therefore based around these practices and functions. For each one, participants were asked to identify firstly whether they believed they had all the skills required to fulfil that practice, and secondly how well they believed they actually fulfil that function. A 10-point Likert-type rating scale was used to rate participants' skills and performance.

Finally, similar post-pilot surveys were issued to all those candidates who completed a pre-pilot survey (including team members and managers, as well as those participants who did not complete the course).

In the body of the report, we consider two key aspects of these surveys. Firstly, we consider the general background information provided in the pre-pilot surveys. This provides important contextual information for the pilots. Secondly, we consider the pre-pilot and post-pilot survey scores of those candidates who successfully completed the course. We take the scores from their pre-pilot survey and aggregate these according to leadership function to give a combined score for Management Practices and Leadership Practices. We then combine the scores provided by their Team member(s) and Manager(s) to obtain a more objective assessment. We then do exactly the same for the post-pilot surveys completed (which ask the same questions of respondents) and compare the pre-pilot aggregate scores with the post-pilot scores for the same indicators.

Team Leadership: Participants' Reflective Coursework

We also originally intended to refer to the reflective coursework which participants had to submit as part of their course assessment. As with the interviews, we proposed to use these as a source

of (primarily qualitative) evidence on participants' experience of the course and the way in which they had implemented the lessons they had learned. This intention was discussed with participants at the initial meeting between them and representatives of RGU and Aberdeen College. Written permission was obtained and all reflective coursework was passed to the Evaluation Team by Aberdeen College. However, the coursework was ultimately more limited in scope, less detailed and less outcome-focussed in nature than expected by the evaluation team. As such, evidence from this source was used to inform the interview approach rather than acting as evidence in itself for the purposes of the evaluation.

Team Leadership: Qualitative interviews

The final aspect of our data collection for the Team Leadership pilot was a number of key informant interviews conducted around four months after the pilot had completed. The intention was that course participants should be given time to put in place the results of their learning, with the interim period also allowing for the emergence of early signs of performance / productivity improvement.

We wanted to obtain the views of a number of key informant groups through these interviews. These groups were:

- Course participants;
- Representatives of the companies involved; and
- Course administrators (Aberdeen College).

For the first group (course participants), it was important to conduct interviews in order to ensure that we covered (as well as possible within the timeline) Levels 3 and 4 of the Kirkpatrick Model approach. Although some information on behaviour and results was requested via the post-pilot Leadership Skills survey, the primary vehicle for gathering data in relation to these levels was always expected to be interviews. In addition (as explained above), the post-pilot survey was not issued to all participants – those who did not complete the pre-pilot survey were not issued with the post-pilot survey. It emerged that there was a very strong correlation between the participants who returned the pre-pilot survey and those who went on to complete the course: all but one of the participants who completed the pre-pilot survey went on to complete, and only one participant who completed the pre-pilot survey did not finish the course. As such, it was important

to have an alternative vehicle for securing the post-pilot input of those participants who did not complete the course. Given the potentially multivariate nature of the reasons for not completing the course, it was felt that it would be more appropriate to explore these in an interview scenario than via a survey. As such, every single course participant (except those who withdrew entirely at an early stage) was approached with a view to being interviewed. However, it proved difficult to include non-completers due to lack of response both by telephone and by e-mail.

The overall distribution of course participant interviewees by company and completion status is provided below in Table 2.

Table 2: Course Participant Interviews by Company and Course Completion Status

Company	Completers		Non-Completers	
	Total	Interviewed	Total	Interviewed
EnerMech	2	2	1	0
Weatherford	1	1	3	1
Wood Group PSN	3	3	2	1

The next group of interviewees were the representatives of these companies who were involved in setting up the pilots. These representatives were interviewed in order to obtain a more strategic impression of the pilot's value. Interviewees were asked to give their opinions on how they felt the pilot had impacted upon their employees, their company and, where possible, upon skills utilisation and business performance. The overall distribution of company representative interviewees by company is provided below in Table 3.

Table 3: Company Representative Interviews by Company

Company	Interviewees
EnerMech	1
Weatherford	1
Wood Group PSN	2

The final group of interviewees were representatives of Aberdeen College who had been involved in the delivery of the course. Again, a more strategic overview of the course was being sought from these interviewees. Specifically, it was felt important to ensure that there was some degree

of input from the College, particularly when discussing barriers to completing or engaging with the course. We therefore interviewed the course tutor and the two key figures involved in coordinating the pilot within Aberdeen College.

In terms of interview methodology, a specific topic guide was developed for each group of interviewees, although many of these covered very similar ground. Half of the course participant interviews took place by telephone, with half taking place in person due to restricted availability of interviewees. Interviews with the representatives of the companies involved in the pilot took place in person, as did the interviews with the course administrators from Aberdeen College. All of the interviews were recorded, transcribed and subjected to content analysis.

Knowledge Transfer: Mentoring Skills Survey

The core quantitative component of our evaluation of the Knowledge Transfer pilot was based around a survey of participants' knowledge of and performance in relation to a number of crucial mentoring skills. In doing so, the Evaluation Team relied strongly upon the materials produced by the pilot delivery team as the source of valid indicators for mentoring skills. In other words, the mentoring skills for which we tested were those which were highlighted by the facilitators during the seminars. However, whereas the Team Leadership pilot presented participant companies with a ready-made proposed solution to an identified problem, this pilot was always intended to be iterative and shaped to the needs of the companies involved. As such, the focus of the seminars was subject to negotiation with the participant companies until shortly before the delivery of the pilot, with one company focused very much on a directive mentoring style (with a clear distinction between mentors and mentees) and the other focused upon a network mentoring style (in which mentoring is expected to take place across the entire organisation). The different approaches meant that the skills and focus of the two seminars were slightly different, and therefore the evaluation materials also had to reflect this difference.

As with the Team Leadership pilot, it was felt by the Evaluation Team that the best approach to a quantitative survey would be to use a pre-pilot survey and a post-pilot survey on the skills covered during the interventions prepared by the pilot delivery team. However, due to the fact that the materials prepared for each company were evolving until shortly before the delivery of each of the seminars, it was not possible to conduct a pre-pilot survey well in advance of the intervention and an entirely separate post-pilot survey just afterwards. As such, participants in each of the seminars

were asked to complete a questionnaire at the end of each session during their seminar. These surveys focused on the learning outcomes (i.e. mentoring-related knowledge and skills) covered during the previous session and, using a 5-point Likert scale, asked participants to rate their level of knowledge and current performance in relation to each of the mentoring skills covered, as well as asking them to think back and rate their level of understanding in each of these areas before the session began. Thus, participants were asked to complete a pre-pilot survey and post-pilot survey at the same time. Despite the potential for confusion, this approach appeared to work well, with the overwhelming majority of participants completing the surveys appropriately.

The general areas covered in the surveys were as follows:

- Roles and responsibilities of mentors/mentees
- Communication skills
- The mentor's toolkit / Working together (for mentors)
- Managing the mentoring relationship / Working together (for mentees)

Beyond this, there were some very minor differences in focus between the surveys deployed for the two different companies involved in the pilot. This reflected the difference in mentoring emphasis between the two companies. These differences are explored in greater detail in the relevant section in the chapter discussing the results from this pilot. The surveys also sought to identify participants' general views on their satisfaction with the intervention, the relevance and usefulness of the intervention, and the extent to which it met with their prior expectations.

In terms of reporting the data from these surveys, the approach adopted was broadly similar to the one adopted for the reporting of the Team Leadership surveys. Responses were aggregated according to the general areas outlined above and are presented in the appropriate section below. Where appropriate, we provide responses broken down by sub-group.

Finally, these surveys were also used to gather information on a range of additional relevant issues. The surveys also collected responses from participants on issues which are relevant across all of the work carried out under the auspices of this project: these included such issues as barriers to productivity and levels of motivation, productivity, confidence and skills utilisation.

Knowledge Transfer: Qualitative interviews

The other major vehicle for data collection in relation to the Knowledge Transfer pilot was a series of qualitative interviews with a number of different key informants. As with the Team Leadership pilot, representatives of both companies were interviewed in order to obtain a strategic overview of the pilot's value and impact. Two such representatives of Aker Solutions were interviewed, and two from Tritech (one from the Westhill site and one from the Ulverston site) were also interviewed. The overall distribution of company representative interviewees by company is provided below in Table 4.

Table 4: Company Representative Interviews by Company

Company	Interviewees
Aker Solutions	2
Tritech	2

We also conducted interviews with participants from each of the mentoring sessions. We originally aimed to speak to eight participants from each company, divided equally between mentors and mentees in Aker Solutions, and between Westhill and Ulverston participants in Tritech (the model of mentoring proposed for Tritech did not distinguish between mentors and mentees). In total, we were able to arrange interviews with seven participants from Aker Solutions (three mentors and four mentees) and seven from Tritech (four from Westhill and three from Ulverston). The purpose of these interviews was to obtain detail relating primarily to levels 3 and 4 of the Kirkpatrick model, including such issues as the way in which the lessons delivered in the mentoring sessions had been acted upon by participants, and barriers they might have experienced in doing so. The overall distribution of participant interviewees by company is provided below in Table 5.

Table 5: Participant Interviews by Company and Status

Aker Solutions		Tritech	
Mentors	Mentees	Westhill	Ulverston
3	4	4	3

Again, in terms of interview methodology, a specific topic guide was developed for each group of interviewees, although these covered similar issues. All of the participant interviews took place by telephone. Three of the company representative interviews took place in person, as did the interview with the member of the RGU pilot delivery team. The remaining Tritech interview was conducted by telephone. As with the Team Leadership pilot, all of the interviews were recorded, transcribed and subjected to content analysis.

TEAM LEADERSHIP – EVALUATION

This section focuses on our evaluation of the 'Team Leadership' pilot. Our evaluation is structured according to the Kirkpatrick evaluation model described in the preceding section. First, we provide some context, before turning to consider the reaction of key informants, the extent to which participants learned from the pilot, the impact of any learning and any longer-term outcomes which have arisen as a result of participation in the pilot. Finally, we consider a number of additional issues which emerged from our interviews with participants, company representatives and representatives of Aberdeen College.

Context

Some background information on the Team Leadership pilot was provided above in the section on Methodology. However, we present here some short additional information which provides a further degree of contextualisation for this evaluation.

Seven participants (all five completers plus two non-completers) returned a full complement of Leadership Skills surveys to the evaluation team. From these, we established that only two of them have had any previous leadership training. Three of them currently lead more than one team in their workplace.

In order to test the premise of the pilot, we also explored with participants (and their manager[s] and team member[s]) the barriers which exist to greater productivity within their team(s). The results are provided below in Figure 2, and show that the most commonly identified barriers to increased productivity were the inefficient use of physical resources, a lack of leadership (thereby confirming the premise of the pilot), a lack of people and a lack of motivation.

Figure 2: What are the biggest barriers to increasing productivity in the team(s) you lead?[8]

	Inefficient use of physical resources	Lack of confidence among team members	Lack of leadership	Lack of motivation among team members	Lack of people	Lack of physical equipment/ resources	Lack of qualifications within the team	Lack of skills within the team	Poor use of team members' skills	Don't know	Other
Team Members	7	2	1	0	0	1	0	2	1	1	1
Managers	4	0	7	4	4	2	2	2	0	1	2
Participants	0	3	1	2	5	1	1	1	2	3	0

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[8] Participants' managers and team members were asked a slightly different question: "What are the biggest barriers to increasing productivity in your team?"

Reaction

Our evaluation now turns to consider the four levels of the Kirkpatrick evaluation model. The first of these is reaction, which aims to gauge the general response of participants to an intervention. For the purposes of our evaluation, we broaden this scope to consider not just the participants themselves, but also their companies.

Due to the more longitudinal nature of this pilot (compared to the Knowledge Transfer pilot), it was felt more appropriate to gauge reaction through our in-depth interviews than through a survey. We were surprised to find a high degree of homogeneity in our interviews. Every one of the course participants we spoke to said that they had found the course to be enjoyable, although perhaps not quite as enjoyable as they had hoped in advance.

> *It was alright, yes. It wasn't, to be honest, something that was thrilling and exciting to do, but it was fine enough to work through.*
>
> (Course Participant)

Surprisingly, this included the two non-completers we spoke to, both of whom had praise for the course at a general level.

The representatives of two of the companies we interviewed also provided positive feedback on the general principles of the pilot. In particular, there was praise for the general concept behind the course, and of the energy in the pilot at the outset.

> *For me it seems to be a good project; a good concept in itself. That's the general feeling that I have.*
>
> (Company Representative)

> *I was involved at the start, and what initially I found engaging was that there was a real energy about the project, and getting it up and moving. And it was something different; it was something new [...] My initial impression was: great project, good sound reasoning for getting it up and running.*
>
> (Company Representative)

Most participants stated that there was nothing they had particularly disliked about the course. The course content was said to be good quality, with no areas falling below the level of quality expected by participants. In addition, participants were generally in agreement that the course had been useful and fairly relevant to their position. Indeed, a number of participants were also able to point to specific areas of professional development in which they felt the course had been particularly helpful.

There was a bit more on how to help try and motivate your team […] and also the bit on conflict. I do have a couple of team members that just for the sake of saying black is white; just to be confrontational with each other... I did take a bit out of that and try to resolve their situation quicker, before the arguments and all that flare-up.

(Course Participant)

To handle situations, to take care of our time, to make a plan how to do things in the right way […] I have to delegate, to trust my team mates, because I'm not capable of doing everything myself […] So I guess there are some things; I guess the learning process will slowly make you a better leader.

(Course Participant)

However, a note of caution was added to this endorsement. Most participants argued that the learning contained in the course did not represent new knowledge for them. Although interesting and relevant, it was generally felt that the information conveyed was very basic and pitched at an introductory level which fell below that which most participants and their companies had been expecting.

It was more like a refresh on previous courses that I'd been on throughout the years within the working environment. A lot of it was just working through the modules, using your common sense on how to deal with situations.

(Course Participant)

In my opinion, it was just a refresh on common sense; how to deal with things appropriately and in a professional manner.

(Course Participant)

One particular company presented an exception to this rule. This company's strategic representative argued that the level had been perfect for the user group in question, whilst the same sentiment was expressed by one of the two participants we interviewed from this company. Interestingly, in this company – where satisfaction with the level of the course was highest – the participants put forward for the course appeared to conform most closely to the type of participant sought at the outset of the pilot: namely, new or aspiring team leaders. In the other two companies, virtually every participant had already been in the position of leading a team for some time, and it later transpired that some had very large teams working for them. As such, where the participants most closely matched the original participant specification, satisfaction with the level of the course was highest. In the other companies – in which participants were considerably more experienced as team leads – satisfaction with the level of the course tended to be lower, with participants flagging up perceptions that the information was too basic. However, it is also worth noting that the company which put forward the most appropriate participants relative to the original pilot brief was also the company which had the lowest proportion of completers among its participants. It became clear from our interviews that a delicate balancing act needs to be struck in relation to the experience level of course participants. This was largely due to the perception that although the information was not new to those who had been leading teams for some time, the course assessments were very much geared towards people with previous experience of team leading. A majority of the participants we interviewed said that they would have struggled to answer many of the assessment questions in the course if they did not have the breadth of experience they had built up as a result of already leading teams over a number of years. Although the course was supposed to be targeted at new or aspiring team leaders, these interviewees said that many of the questions required participants to provide concrete examples from their own experience of leading a large team. It was felt that without this experience, it would be very difficult to complete the assessments required to pass the course.

If I remember right, there were a few of the questions that was almost as if you were leading quite a large team, whereas at the moment, like I say, I could say there's two people, maybe two trainees under me [...] So some of the questions would have been a little bit more difficult on that basis.

(Course Participant)

As an overview, it's a worthwhile course for us. However, the questions, I think, are more suited to actual team leaders, rather than possible team leaders […] Our answers were predominantly work experience that we have actually all had an involvement in […] If I was looking towards becoming a team leader, there was nothing in the coursework that would have helped us to answer the questions.

(Course Participant)

Although the immediate temptation here would be to suggest that the course presented too great a challenge for those participants who had little or no experience of leading a team yet, the data we collected from non-completers suggest that this would be an overly simplistic assessment of the situation (further details are provided below in the section on barriers and facilitative factors). Rather, we suggest that this feedback is more likely to be indicative of the need for more greater attention to be devoted to ensuring that participants are matched with the level of course which best meets their requirements in terms of experience, and that in respect of the evidence required for the assessment process, the course may be better geared towards serving the needs of <u>new</u> team leads rather than <u>aspiring</u> team leads.

Participants also praised the distance learning format of the course, although they had a number of specific recommendations to make with a view to improving the course in future. In particular, most were keen to see a more blended approach of distance learning and classroom learning. In practical terms, participants also raised a number of issues relating to IT access and distance learning. All of these factors are discussed in greater detail in the section on barriers and facilitative factors.

Learning

We turn now to consider the second level of the Kirkpatrick evaluation model: learning. The main source of evidence for participants' learning was the Leadership Skills survey carried out at the very start and very end of the course. In addition to candidates themselves being requested to complete a pre- and a post-course survey, we also asked them to identify two managers and two team members who would be able to complete the survey, with a view to providing a 360° feedback-style overview of their competencies and how these developed over the course of the pilot. As such, we break each participant's results down into a number of different areas. Firstly,

we divided our questions into those focussed on leadership and those focussed on management. By identifying the mean response provided across all questions in each section, we generated aggregate figures for management and leadership competency (on a scale of 1-10, where 10 is the most competent).

Secondly, we distinguish between the scores provided by the candidates themselves, their manager(s) and their team member(s). Finally, we also provide in the same chart a mean aggregate score from the surveys submitted prior to the pilot and from those submitted some months after it ended. As such, each candidate has a pre- and a post-pilot score in the areas of leadership and management from themselves, from their manager(s) and from their team member(s). The results of breaking these figures down in this way are provided below in Figures 3-9. Each candidate's results are anonymised.

For both areas considered (management and leadership), the results show that self-assessed capability increased by a small amount (typically by less than a 1.0 increment on the mean response scale used). The only exception to this was in the case of one of the completers: for this individual, a comparison of the pre-and post-pilot survey scores showed that their self-assessed capability in respect of management skills had declined (albeit very slightly).

However, when considering the pre- and post-pilot survey scores provided by participants' manager(s) and team member(s), the results were far more mixed. In terms of participants' manager(s), Figures 3-9 show that in some cases, managers had a slightly different view of the capabilities of the participants than the participants themselves. Of the seven participants for whom we have a full set of survey data, it can be seen that for four of them, their managers rated their leadership and management abilities more poorly than the participants themselves. In most cases, the difference was very small, although in the case of Completer 2, Completer 4, Completer 5 and Non-Completer 2, a gap between the two sets of scores was quite evident. Encouragingly though, every set of managers bar one stated that their respective participants' leadership and management abilities had increased over the course of the pilot.

Turning to consider participants' team members, Figures 3-9 again provide some interesting results. The charts show that in most cases, the rating of participants' team members matched reasonably closely the scores provided by participants. Overall, they tended to be more positive in

their assessment of participants' abilities than the participants' managers were in their scores. However, despite this positivity, the results show that the team members of three participants (Completer 1, Completer 2 and Non-Completer 1) stated that participant's leadership and/or management abilities had decreased over the course of the pilot.

Figure 3: Leadership Skills Survey Results – Pre vs. Post (Completer 1)

	Self Pre	Self Post	Manager(s) Pre	Manager(s) Post	Team Member(s) Pre	Team Member(s) Post
Management	7.24	7.81	8.00	8.32	9.65	8.33
Leadership	7.68	8.21	8.29	8.68	9.89	8.00
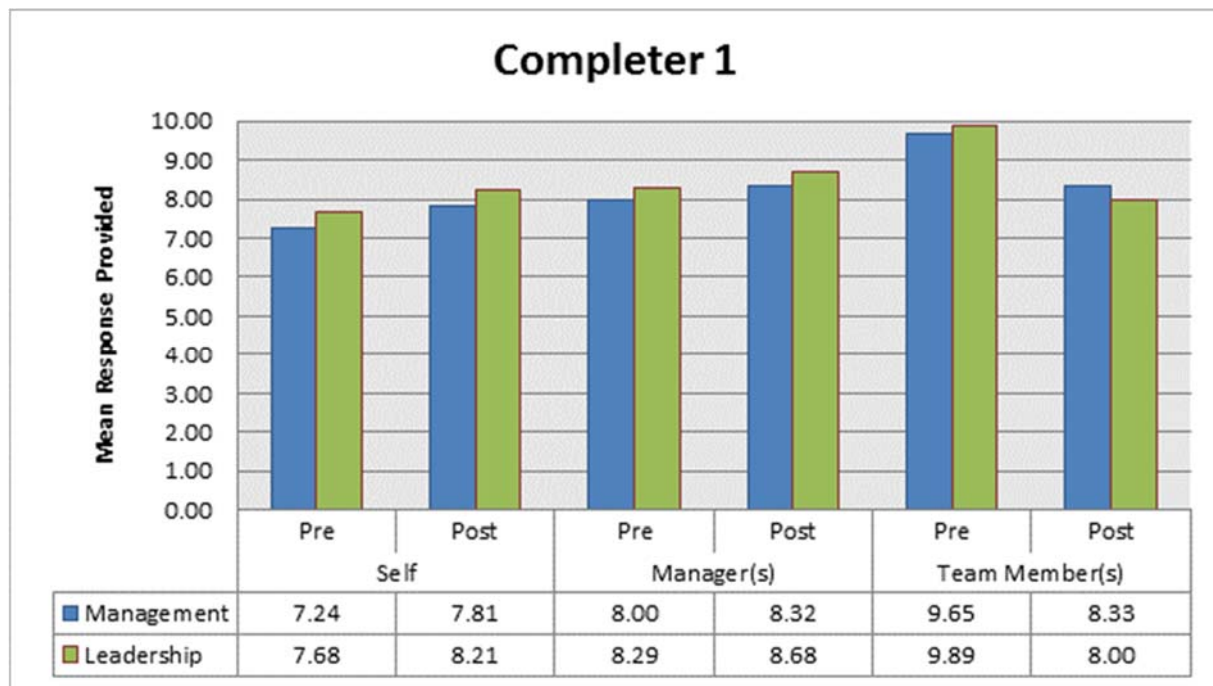
Figure 4: Leadership Skills Survey Results – Pre vs. Post (Completer 2)

Completer 2

	Self		Manager(s)		Team Member(s)	
	Pre	Post	Pre	Post	Pre	Post
Management	9.29	9.88	7.50	7.88	9.18	8.59
Leadership	9.68	10.00	8.21	7.95	9.21	9.00
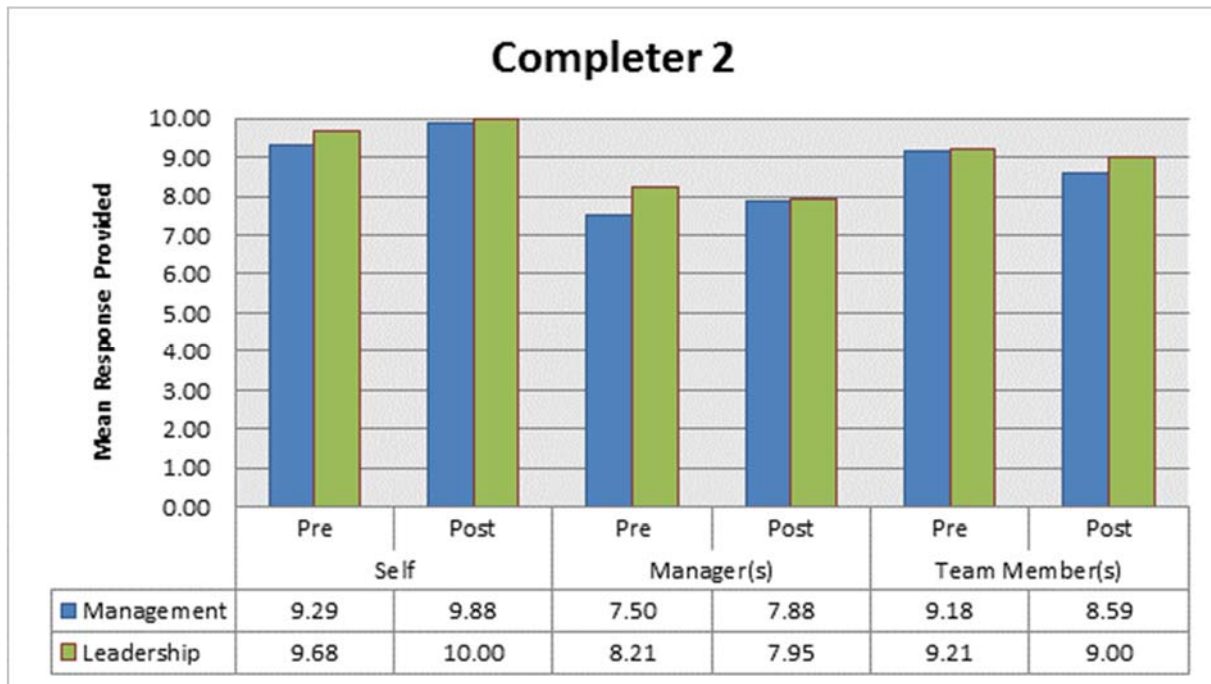
Figure 5: Leadership Skills Survey Results – Pre vs. Post (Completer 3)

Completer 3

	Self		Manager(s)		Team Member(s)	
	Pre	Post	Pre	Post	Pre	Post
Management	7.35	6.88	7.35	7.88	9.03	9.12
Leadership	7.42	7.47	7.37	8.16	8.97	9.26
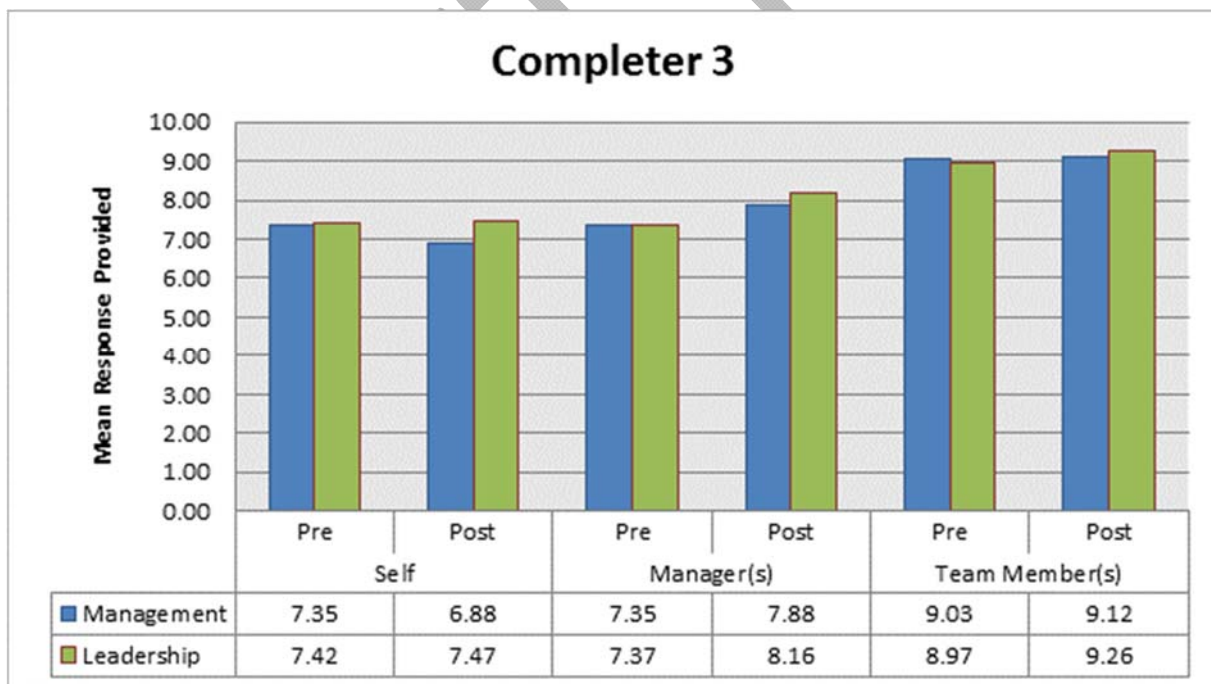
Figure 6: Leadership Skills Survey Results – Pre vs. Post (Completer 4)

Completer 4

	Self		Manager(s)		Team Member(s)	
	Pre	Post	Pre	Post	Pre	Post
■ Management	7.41	8.94	4.47	6.12	8.29	8.71
■ Leadership	7.21	9.05	4.26	5.74	8.58	8.63
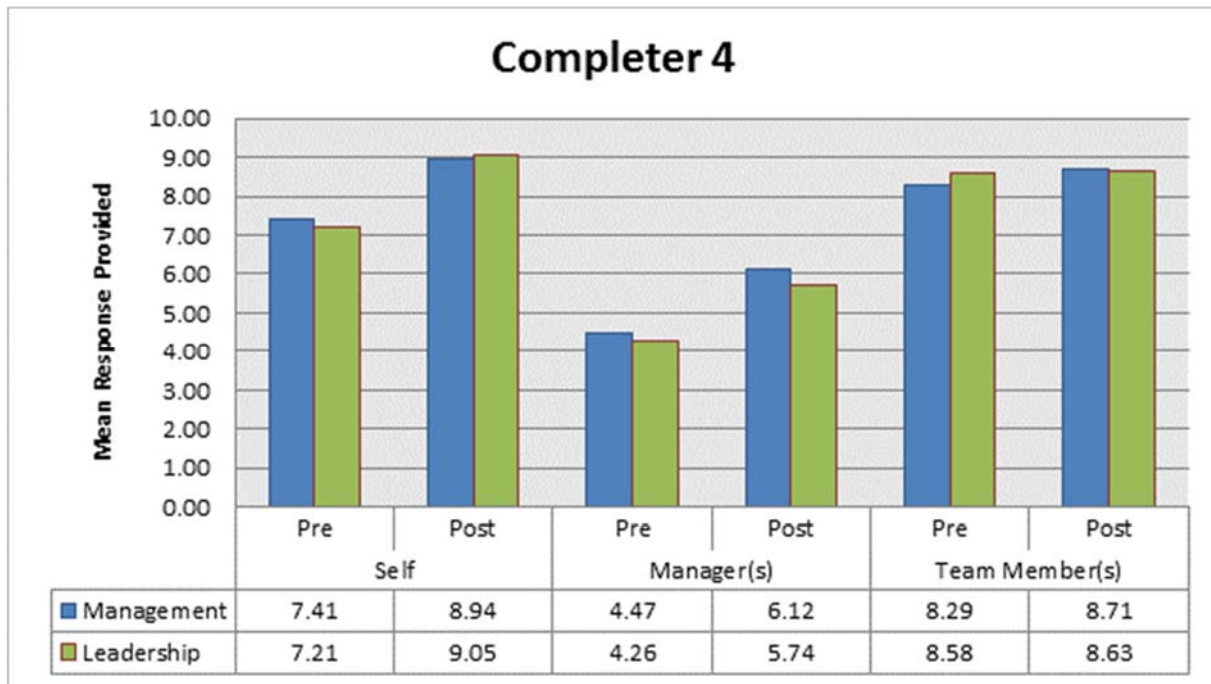
Figure 7: Leadership Skills Survey Results – Pre vs. Post (Completer 5)

Completer 5

	Self		Manager(s)		Team Member(s)	
	Pre	Post	Pre	Post	Pre	Post
■ Management	7.82	9.00	6.65	8.24	7.35	9.06
■ Leadership	8.68	9.16	7.74	8.32	6.95	9.63
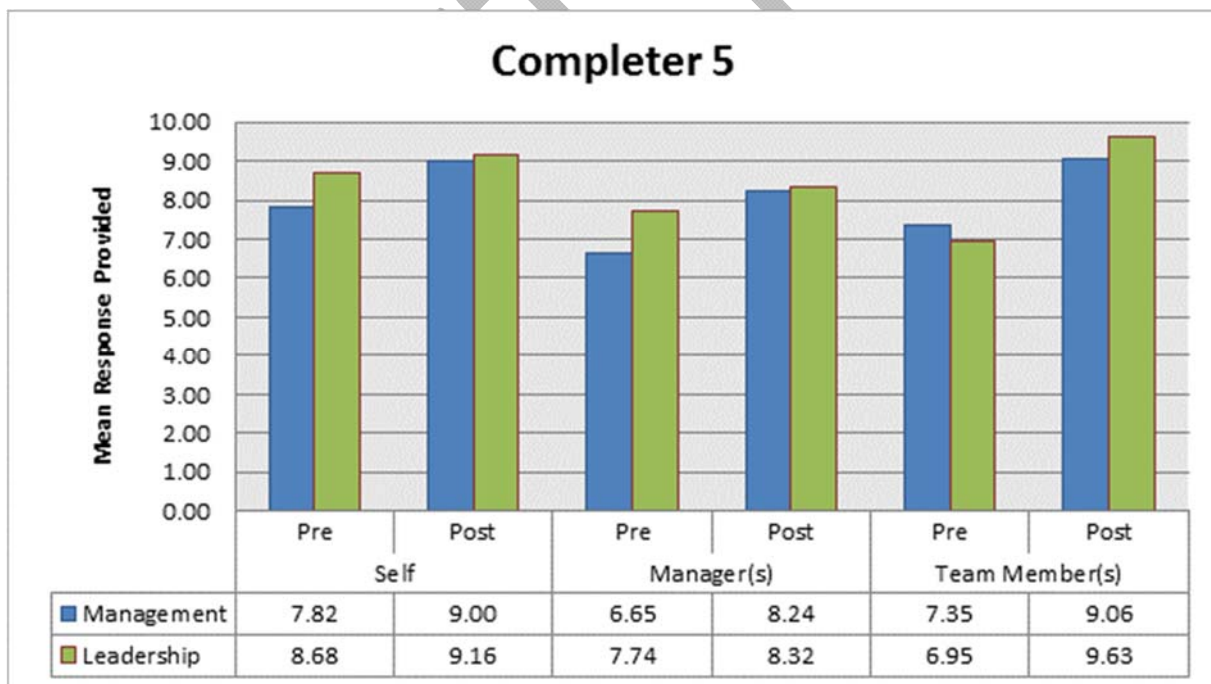
Figure 8: Leadership Skills Survey Results – Pre vs. Post (Non-Completer 1)

Non-Completer 1

		Self	Manager(s)		Team Member(s)	
	Pre	Post	Pre	Post	Pre	Post
Management	5.20	6.44	6.94	7.65	7.94	7.59
Leadership	6.54	6.84	7.21	7.89	8.26	8.63
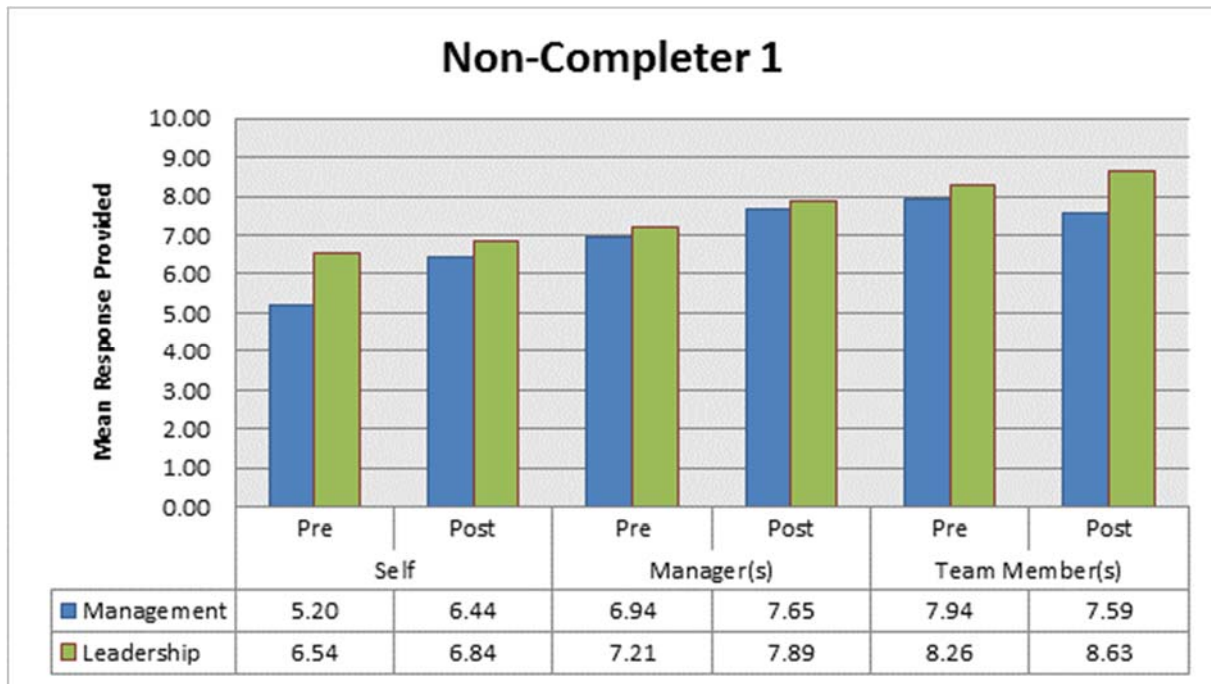
Figure 9: Leadership Skills Survey Results – Pre vs. Post (Non-Completer 2)

Non-Completer 2

		Self	Manager(s)		Team Member(s)	
	Pre	Post	Pre	Post	Pre	Post
Management	7.18	7.94	6.68	6.06	7.35	7.71
Leadership	7.53	7.89	6.29	6.11	6.97	7.63
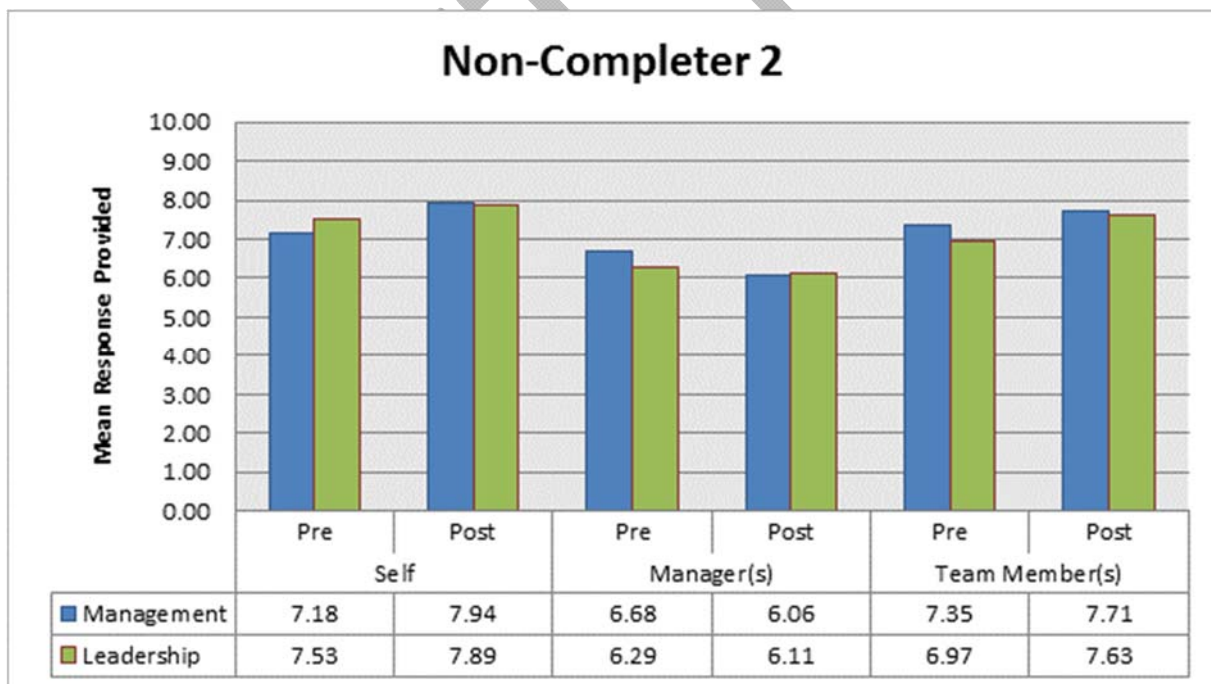
The Interviews we conducted also seemed to confirm that there had not been a considerable amount of new knowledge acquisition as a result of the pilot. Again, participants pointed to the level of the course, stating that it was more of a refresher on common sense business practice or existing knowledge rather than an introduction to new skills, tools and techniques. This was also

the feedback received from the representatives of the companies involved, who felt that the content had fallen short in relation to the target audience.

> *My opinion on it is that it didn't add a lot of value […] I would have said it was focussing on showing competence and it felt like a <u>recording</u> rather than a <u>learning</u> experience […] What did they do? Was it development or was it training? As I say, I just don't feel it was a <u>learning</u> experience for them; it felt more of a tick-box and an affirmation.*
>
> (Company Representative)

> *It might be better with a group who had a little bit less experience, because I think some of the feedback – which we'll probably come on to – was that some of the material was at too low a level for them.*
>
> (Company Representative)

Again, this led to questions being raised about the potential mismatch between participants' levels of experience and the level at which the course was pitched. The results were very similar to those already discussed in relation to reaction (see above): namely, that a majority of interviewees felt that the level of the course was more suited to new entrants to leadership positions, but – paradoxically – the type of questions included in the assessment depended upon participants having a certain level of experience to draw upon.

> *[We] didn't think that the coursework was suitable to anyone who hadn't actually acted as a lead, which seems to counteract the whole idea of the course itself. The questions were weighted as an experience question, rather than a third party looking into something and developing it from the literature we were given.*
>
> (Course Participant)

Although most participants interviewed felt that the information was not sufficiently new, this is not to say that the familiar information was useless: indeed, a number of the participants stated that a refresher was very welcome. Others stated that although they were perhaps familiar with the theory of team leadership, the course materials offered useful advice on moving from theory to practice.

There were areas that were maybe not new to me, but made it clearer how I should do things […] I certainly think that some areas were just giving you more confidence in what you're doing […] There were certainly areas where I feel as if I've gained a bit more experience and possibly able to deal with situations better.

(Course Participant)

Despite much of the knowledge being familiar to them, a couple of the participants we interviewed were able to point to areas of learning in which they felt they had genuinely learned valuable new knowledge or skills.

What I have had problems with is to get control, not to be angry, just to be balanced and stay calm when I have discussion with one of my team mates. I often lost my temper, to be honest, and then you say things you shouldn't be saying so I understand the importance of thinking, count to 10, take it easy. So that's one thing [I've learned].

(Course Participant)

This type of attitude was strongest among those participants whose background most closely matched the original research specification for participants (i.e. new or aspiring team leaders). Indeed, one such participant stated that all virtually of the information he had learned had been new to him (although it is worth noting that this was a non-completer who only began a small number of modules).

I'm moving into that kind of position […] so we know that this is kind of new to me anyway […] It was very good. It was a lot of things that I'd never really come across; I never quite thought about; were not really related to anything before.

(Course Participant)

There was also a slight concern that the type of learning involved in the course was not entirely relevant to participants' positions. For example, one participant explained that the course was more focused on generic management skills rather than team leadership as it is understood in the oil and gas industry.

> *I'm glad I had management experience prior to doing it, because I thought it helped me do it […] Some of the content was at a more management level than I thought it may have been.*

<div align="right">(Course Participant)</div>

Overall, there was little evidence of participants having learned a considerable volume of new knowledge as a result of their participation.

Behaviour

The next stage of the Kirkpatrick evaluation model to consider is that of behaviour: in other words, the impact of the evaluation upon the way in which individuals act. The primary source of information for this aspect of the evaluation was the collection of qualitative interviews conducted with participants and the representatives of their companies.

As the extent of behaviour change is naturally dependent upon the extent to which an intervention provides participants with new knowledge, skills or techniques, the results of the foregoing section on learning mean that it was not entirely surprising to discover that interviewees provided very limited evidence of tangible behavioural change. However, that is not to say that the pilot had <u>no</u> effect on the other participants' behaviour. Indeed, most of them stated that even though the course had not taught them much in the way of new information, it had nevertheless reassured them that they were doing things correctly. As such, even though there may have been limited evidence of immediate behavioural change, our interviews revealed clear evidence of a longer-term attitudinal change among most interviewees, with many of them describing a sense of increased confidence in their leadership and team development abilities, as well as their communication skills.

> *I'm more confident after doing the course […] All in all, it was a good course and it helped me […] I printed out lots of stuff from the course so I can go back and take a peek and read it again.*

<div align="right">(Course Participant)</div>

It's given me a wider scope of things to think, areas to think of when dealing with the issues that are cropping up. It's going to sound a bit silly but being an all-rounder really: looking at every angle with both teams that I have to work with, and the different sides of operations that we're in. It's given me a better approach on things with them, especially on the communication level […] Just a general all-round, the communication, the people skills help, get them motivated to get things done.

<div align="right">(Course Participant)</div>

[I've got] more confidence in what I'm dealing with, and there's also certain areas where it's given me a different insight into what I'm doing.

<div align="right">(Course Participant)</div>

Three interviewees were able to give detailed examples of ways in which they had been able to implement learning from the course. The first of these participants claimed not to have taken much in the way of new knowledge from the course. However, he nevertheless explained how he had used his new knowledge and understanding to redevelop the appraisal process within his team, and how he subsequently presented the new approach to senior management within the company.

I'd started planning to do appraisals for the team [at] the tail end of last year […] I signed up to the ILM website because there was a lot of good material there for appraisals. I printed it all off; I did a presentation to my supervisors […] So we've started doing appraisals now and it it's given them a chance to get their brain engaged into what we're about to do with the structure that's going to follow, and they can start thinking about their answers to the type of questions we'll be asking them […] That's probably one of the most significant things out of the whole process and that is directly related to the course.

<div align="right">(Course Participant)</div>

This example was also highlighted by the strategic representative of this participant's company, who identified it as a good example of the impact the course had had on participants' behaviour.

He used some of the materials out of that, delivered some appraisal training to his team, which was very proactive. What you had there was certainly good value.

(Company Representative)

Another interviewee to describe a tangible impact talked about her improved ability to deal with issues such as performance management and disciplinary matters within her team.

We do a lot of performance management meetings and disciplinaries. So again, it's good to get that awareness […] It was good at giving you an overall grounding of your role, and what's expected.

(Course Participant)

The final participant to describe tangible change was particularly encouraging, as the participant conformed closely to the original research brief of a new or aspiring team leader. He felt that his learning on the course was at least partly responsible for a change in the way he contributed to the daily running of his team.

I probably have changed, […] especially over the last couple of months where I've made my lead actually been taking a less involved role, and I've been dealing with the day-to-day running and stuff like that. So I would definitely say that I think I've probably changed a little bit in this last couple of months, and certainly some of that would have been from what I've taken away from the course.

(Course Participant)

Beyond this, though, there was no evidence of tangible behavioural change.

Outcomes

The final level of the Kirkpatrick evaluation framework to consider is outcomes. The purpose of this stage is to identify and account for any business performance improvement and/or changes made to organisational structures as a result of the intervention in question. Similar to the foregoing section on behaviour, the only source of evidence for this section was the interviews conducted with the Team Leadership participants and the representatives of their companies.

It should again be noted that from the outset, the evaluation team urged caution in relation to the timescale of these pilots, particularly in terms of being able to establish the longer-term impact of the interventions on participants' behaviour and the results of these changes within their company (i.e. Levels 3 and 4 of the Kirkpatrick evaluation model). This caution was based upon our previous experience and familiarity with the literature on pilot evaluation: typically, it is accepted that firm conclusions regarding behavioural change and longer-term outcomes can only be assessed some time after an intervention has ended: ideally a minimum of 3-6 months afterwards for behaviour and 6-12 months afterwards for outcomes (e.g. Craig, 1996; Kirkpatrick, 1975; 2006). At the time of conducting the evaluation interviews, a maximum of around 4 months had elapsed (for two of our interviewees, even less time – around 2 months – had elapsed due to their being given an extension to complete the course). An ideal scenario would allow more time for bedding-in of a successful pilot and as such, the evaluation team was clear that the full impact of the course may not yet be evident (particularly in respect of longer-term outcomes i.e. Level 4) at the point of evaluation.

However, this assumption is based upon an ideal scenario in which an intervention has a very clear impact at the earlier levels (1 and 2) of the Kirkpatrick evaluation model. It has already been established that that due to the course being more of a refresher than an introduction to new knowledge and techniques, there was limited evidence of learning and behavioural change. As such, it was unsurprising to find that there was also little evidence in our interviews of outcomes in terms of business performance (both personal and collective) and organisational structures. Indeed, only one participant was able to point to any type of organisational change: this was the aforementioned revision of the appraisal system within on participant's company.

> *Some of them that I was expecting to be really difficult, have been really positive […] Sticking with the structure that we learnt from the course material, we found that the structure overcomes any conflict or barriers throughout the process […] Some of them have been pretty tough on the people on the receiving end – a few home truths, so a lot of constructive criticism. And they've all gone out with a spring in their step, looking forward to getting on with the objectives.*
>
> (Course Participant)

Beyond this, there was no evidence of any type of organisational change from any of the participants. Similarly, none of the company representatives we interviewed were able to point to any evidence of organisational changes being made as a result of this pilot. However, given that the focus of this pilot lies on individuals rather than organisations, on reflection the lack of organisational impact is perhaps not entirely surprising; nor is it necessarily even a valid criticism under the circumstances.

In terms of the impact on business performance, there was again very little in the way of evidence. Although the short period of time elapsed between the end of the intervention and the evaluation interviews might be thought to have prevented the development of business performance indicators, our interviewees actually suggested that this was not the case. Instead, they suggested that evidence of improvement <u>was</u> visible, but only in qualitative rather than quantitative terms. Rather than looking at financials or output data, these interviewees explained that there was simply a sense of smoother running, based partly upon personal observation and also on observations made by their manager(s) and team members.

> *I don't think the numbers have changed [but] you may have found that your team's running a little bit smoothly more with the information you now have.*
>
> (Course Participant)

We explored this further in the surveys issued to participants, asking them to rate the productivity of their teams on a scale of 1-10. Their responses are provided below in Table 6, which appears to confirm that there has been no dramatic increase in productivity over the course of the pilot. Indeed, in many cases, reported productivity appears to have decreased, although a number of participants explained that this may be due to different team personnel at the different times when the surveys were issued.

Table 6: On a scale of 1-10, how productive is/are the team/s you manage?[9]

	PRE			POST		
	Participants	Manager(s)	Team Member(s)	Participants	Manager(s)	Team Member(s)
Completer 1	7.0	8.5	9.0	8.0	8.5	9.0
Completer 2	9.0	7.5	7.0	8.0	8.5	8.5
Completer 3	7.0	7.0	8.0	8.0	8.0	9.0
Completer 4	7.0	6.0	9.0	7.0	6.0	8.5
Completer 5	8.0	7.0	8.0	9.0	8.0	9.0
Non-Comp. 1	8.0	8.0	8.0	7.0	8.0	9.0
Non-Comp. 2	5.0	6.0	5.5	7.0	6.0	6.0

Rather, most participants again accounted for this by referring back to the idea (explored above) of greater confidence. Rather than direct, tangible performance improvements, this confidence and increased self-assurance had led to indirect improvements to team performance

> *When I say it doesn't affect output, maybe in a tiny amount it has improved output, on the basis that I am managing the issues that have arisen in my team, rather than handing it over to someone else […] If you manage it yourself, and try and not look at it negatively, but try and put a positive spin on it, then you can manage the situation and the individual that you are working with doesn't even know that he's being managed […] It is not a direct output, but indirectly the effect you are having on your team is stopping the negative part of the issue, the negative effect.*
>
> (Course Participant)

> *All round, the communication, the people skills help: you know, get them motivated to get things done […] The feedback I get from them [i.e. team members] as well is quite good.*
>
> (Course Participant)

We also sought to establish the extent to which the course had impacted upon skills utilisation, or was likely to do so in future. There was some evidence that levels of skills utilisation had improved

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[9] The question asked of team members and managers was slightly different to that asked of participants: "Thinking about the team(s) led by the participant, on a scale of 1-10, how productive would you say those teams are?" Where more than one manager or team member responded, the result provided is a mean figure. This approach is repeated throughout this section.

in the intervening period, but again, this was limited and anecdotal rather than demonstrable through hard evidence.

> *[Interviewee 1] I think it's made me more aware of what I do on a day-to-day basis, and it's made me stop and look at the skills that the team have, and how to best utilise them.*
> *[Interviewee 2] I agree with that as well. Yes; just exactly the same.*
>
> (Course Participants)

> *Yes, we're getting better with that, I can say that. We had a couple of new members within our team over the last couple of months so I can say we're actually realising the skills of each other better and helping put that into better utilisation. I can use my operations coordinators as an example: one of them is very, very good at organisation and the plan servicing and that, and the other one is very good at customer service with our vendors […] [Now] they both realise: "well, okay, you're skilled better at that than that," and they just work.*
>
> (Course Participant)

This result is also largely borne out by a question included in the Team Leadership survey issued to course participants and their team members. Tables 7-9 (see below) provide a comparison of pre- and post-pilot responses to questions on the extent of skills utilisation and two of its key components (motivation and confidence) within participants' teams. For skills utilisation, Table 7 shows that all but one of the course participants said that better use of skills was being made in their team after the course had finished. Similarly, when comparing the pre- and post-pilot responses from participants' team members (the figures provided in the table represent the mean response provided by the members of each participant's team), we see decrease in reported levels of skills utilisation among the team members of only two of the participants who responded.

Table 7: On a scale of 1-10, how confident do you feel that the skills of the members of the team(s) you lead are being utilised as effectively as possible?[10]

	PRE		POST	
	Participants	**Team Member(s)**	**Participants**	**Team Member(s)**
Completer 1	7.0	9.0	10.0	9.0
Completer 2	8.0	7.0	7.0	7.5
Completer 3	6.0	8.5	7.0	9.0
Completer 4	7.0	7.0	8.0	8.5
Completer 5	7.0	8.0	8.0	-
Non-Comp. 1	6.0	9.0	7.0	8.0
Non-Comp. 2	7.0	8.0	8.0	7.0

Table 8 (below) shows that when asked to rate the level of confidence members of their team have in their own ability to do their jobs, the responses again seemed to indicate that confidence had grown among most participants' team members: only two participants reported that confidence had decreased.

Table 8: Thinking about the members of the team(s) you lead, how would you rate the level of confidence they have in their ability to do their job(s) on a scale of 1-10?

	PRE	POST
Completer 1	6.0	8.0
Completer 2	8.0	10.0
Completer 3	8.0	8.0
Completer 4	7.0	6.0
Completer 5	8.0	9.0
Non-Comp. 1	9.0	8.0
Non-Comp. 2	7.0	8.0

However, Table 9 (below) shows that the results were slightly more mixed when participants were asked to rate the level of motivation their members have to do their job(s). Comparing the pre- and post-pilot results, we see that three participants reported that levels of motivation seemed to

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[10] Team members were asked a slightly different question: "Thinking about you and the other members of your team(s), how effectively do you believe all of your team's skills are being utilised?" Where more than one team member responded, the result provided is a mean figure.

have dropped slightly. Of course, it must be borne in mind that for each of these tables, we are working with a small sample size and the results are intended to be indicative rather than conclusive.

Table 9: Thinking about the members of the team(s) you lead, how would you rate the level of motivation they have to do their job(s) on a scale of 1-10?

	PRE	POST
Completer 1	8.0	7.0
Completer 2	9.0	9.0
Completer 3	7.0	6.0
Completer 4	8.0	9.0
Completer 5	6.0	8.0
Non-Comp. 1	9.0	7.0
Non-Comp. 2	5.0	7.0

As set out above, confidence is also a key component of skills utilisation and as such, we would hypothesise that the increased confidence among participants themselves which seems to have accrued as a result of participating in this course is likely to have a beneficial impact on skills utilisation in future.

Barriers/Facilitative Factors

In addition to the evaluation based around the Kirkpatrick evaluation model, we were also keen to investigate a number of additional issues. With only around half of all participants actually completing the course, one of the most important additional issues to investigate was the barriers and obstacles faced by participants, as well as the kind of factors which they felt were instrumental in helping them to complete the course.

We discussed these issues with participants in the follow-up interviews we conducted. Despite considerable effort, we were only able to obtain evidence from two non-completers. Although we would clearly have preferred to speak to more non-completers, such participants are, by virtue of their lack of engagement with the pilot, difficult to access. However, within each company we

were able to speak to at least one participant who was able to provide us with their view on the reasons why their colleagues had struggled to complete the course.

By far the most prominent factor to emerge from our interviews was a lack of time for participants to complete the required work. Two main reasons were provided for this. Firstly, interviewees identified a lack of protected time at work (or a lack of support from managers) for the completion of training or self-development courses. Secondly, a number of interviewees cited pressures of workload. Although these are similar, they are not identical: in the former, interviewees identified a discretionary decision by managers not to allow them time, whilst in the latter, interviewees explained that whilst some protected time might have been available to them, the pressures of day-to-day work were simply far more pressing than those associated with the course.

In terms of protected time, only a very small number of interviewees stated that they had received any kind of protected time (or an offer thereof) from their manager. Where this was accepted, it was seen as a key reason behind their completing on schedule. Without this time, it was recognised that they might have struggled to meet the deadline.

> *If I needed to take time out to get things done, that wasn't an issue at all […] As soon as something cropped up, […] I would just take time out, maybe an hour towards the end of the day […] I would have still have completed it [without protected time] but it might have been a struggle by the deadline.*
>
> (Course Participant)

However, the remaining interviewees made it clear that they did not have access to protected time at work and, as a result, had to use their own free time at evenings and weekends to complete the course. This was a source of disappointment for some interviewees, who felt that protected time should have been made available, given that the course was essentially a piece of professional development which was expected to bring benefits to the company. For other participants, it had been made clear to them that no protected time would be given.

When initially it was mooted this was coming along, we fully appreciated that it would be done in our time. Because at the end of the day, it is developing ourselves, as individuals, with the possibility that it is going to help the company in the long-run.

(Course Participant)

Every spare minute, I would come in early in the mornings, spend a bit of time at night, work through the weekends. I got a huge amount of support from [the course tutor], to be fair, and managed to get it done just a few days before the actual deadline.

(Course Participant)

There was never really any time set aside – like a couple of hours – to sit and do it. The emphasis, I think, was more in your own time […] If you knew that you had an hour or a couple of hours a week, and you had that in your calendar, […] it would remind you. You'd have to sit down and do it, so you would be making progress every week […] I think that probably would have helped me early on.

(Course Participant)

As introduced above, the more immediate pressures of everyday work also played a part. In some cases, this meant that the offer of protected time may have been available, but was unfeasible due to the knock-on effect of taking time away from day-to-day duties. Interviewees from each of the companies explained that the summer period (over which this pilot was running) was their busy period due to the combination of platform shutdowns and annual leave of colleagues.

The peak in the season is from… well, it could start as early as May/June, through to September/October, with the peak right in the middle of the summer.

(Course Participant)

The summer months in some parts of the business are absolutely the worst in terms of 'busyness' [sic] months, because that's when the offshore shutdowns happen […] These guys would have been involved in helping the platforms plan for shutdowns […] Between May and August/September time, some of them could have been quite often working longer hours, having to turn round work more quickly, really getting stuck in to a lot more detail that would have taken them away from this.

In addition, it should be noted that two of the three companies were subject to a degree of significant growth and/or reorganisation during the course of the pilot. This, coupled with the immediacy of day-to-day work and demands from clients, further added to the workload of participants and their difficulty making time to engage with the course during working hours.

> *[Our] motives for doing it were good motives, but I think realistically where we were in our evolution and our growth… We were just so busy that it wasn't a good time, really, to ask people to participate.*
>
> (Company Representative)

> *The client changes a job and pushes for that to be done very, very, <u>very</u> quickly. We are in working overtime, and you just have to be able to react.*
>
> (Course Participant)

> *I'm always open to this type of thing but I just didn't know where I was going to fit it in. And going through the busy spell that we had, […] [I thought] I might as well concentrate on getting my job done, and when I can fit the course around some spare time that I've got, I'll do that […] And you know yourself, time flies when you're busy […] It got to the stage where we were so close to the deadline, I thought: there's no point in starting now.*
>
> (Course Participant)

Interestingly, only one of our interviewees (one of the non-completers) suggested that six months was not long enough for the course. Every other interviewee was of the opinion that six months was more than sufficient for the completion of this course, although as above, there was a recognition that this was dependent upon either protected time at work, or the sacrifice of evenings and weekends to do it in one's own time. This included the other non-completer we interviewed, who indicated that six months was long enough, but that a combination of personal issues or poor time management had frustrated their attempts to complete the course.

> *The main reason is I left it too late to start the mandatory units, and then all of a sudden you found the weeks were edging by […] If I'd actually sat down and just done it as soon as*

we'd got it and as soon as all the material was there, I would have probably got through it no problem.

<div align="right">(Course Participant)</div>

The next most prominent factor identified by interviewees related to issues experienced with the distance learning format or IT issues associated with the systems used to facilitate distance learning with Aberdeen College. In relation to the former, a number of interviewees explained that a more blended approach to learning would have been better than a distance learning approach. These opinions ranged from simply having a collective, day-long induction involving <u>all</u> participants (rather than doing quick inductions with each company individually) to having regular meet-up sessions in which all participants would be involved.

[It would have been better] if the roll-out was a day thing that they actually took you through everything rather than: "this is it; this is your password; you're in here; there's the Blackboard; there it is; thanks very much; we're away." An hour later, it's done! If time was a constraint, rather than having three single hours for each thing, have a day in Aberdeen College or pick EnerMech, Weatherford or PSN: find a room, everyone in together, and walk through exactly what the College's expectations of us were, what our expectations from the College were.

<div align="right">(Course Participant)</div>

A blended approach where you meet up every three months or something like that, that would make much more pressure for delivery. Not pressure, but obligation. You don't want to come to a gathering like that and not do your homework!

<div align="right">(Company Representative)</div>

This finding is of particular relevance to one company, which has previously offered this ILM qualification in an in-house classroom learning format and was keen to establish how well the distance learning approach would work.

It was also made clear in two companies that there was no strong culture of e-learning, and that this may account for some of the difficulties in terms of acclimatising to the new approach.

[Normally] if we were going to do anything like this, it would be part of a blended approach. A purely online learning environment doesn't [usually] work for us at all, because we've got no way of seeing the guys in action.

(Company Representative)

It's the culture here: we don't have a huge e-learning culture. Generally, our guys are quite hands-on, so the classroom based environment where they get a chance to get stuck in is in ways more successful […] It's not for everyone, but that seems to work better for us. But yes; it's maybe a culture thing.

(Company Representative)

However, more prominent than company culture in our interviews was the issue of IT access and the Aberdeen College 'Blackboard' system used as the portal for participants to access their module materials and assessments. This was raised as a concern in every single interview we conducted with participants and company representatives as part of this evaluation. A number of specific issues were raised. The most prominent ones were the time taken to release module materials, and issues experienced by virtually every participant with login issues.

In terms of the former, around half of the participants we interviewed explained that the time at which course materials were released for the optional modules had presented a particular challenge for them and their colleagues involved in the course. Two participants who were interviewed together explained that after completing their mandatory modules, they had to wait over a month before they were given access to the materials for their optional modules. Out of a total of 13 credits required to satisfy the assessment requirements, they explained that they were expected to complete 9 of these credits in just two months before the deadline. Despite managing to meet the deadline, they felt very disappointed to have been put in such a pressured position, and believed that this may have played a very strong role in discouraging other participants from completing.

[Interviewee 1] The first four [mandatory] units we had to get done by July. It went silent again, and we had to chase them up. It went into August before we finally got the last pieces of material, and then we were expected to do nine credits before October.

[Interviewee 2] We were under the impression that as soon as you handed one in in July, then you could start picking up the next [optional] ones. But they weren't there until August.

[Interviewee 1] Thirteen credits… Well, when you are given three months to do the first four credits and then three months to do nine credits…

[Interviewee 2] No, in fact: two months.

[Interviewee 1] When you are doing coursework, you try and do it to your own pace, but when you are backed into a corner, then you start kicking and punching back, as if to say: "Well, wait a minute: this is not really fair at all. This is not what we signed up for".

[Interviewee 2] I think that is maybe why you did not get so many people completing the course. I would suggest that's a fairly big obstacle.

(Course participants)

Other interviewees also expressed similar concerns about the timing of the materials being released. A concern expressed by a similar number of participants and by every company representative interviewed related to issues with the login system for Aberdeen College's Blackboard interface. There were two main complaints in this respect. Firstly, many participants found themselves locked out of the system after not logging in sufficiently regularly. Due to the pressures of work, many participants went for weeks without having time to access their materials, and due to the College's automated password reset process, found themselves locked out of the system if more than 30 days elapsed between logins. However, a member of the pilot delivery team explained that this was simply Aberdeen College policy, and that it was not possible to make exceptions.

They needed the passwords to get into Blackboard. They expired after 30 days, which is college-wide for hundreds and thousands of students: they can't be any different. So some of them were saying they couldn't get into Blackboard to get the material. I was then e-mailing them, saying: "here's your new password". [I was then] checking and they still weren't going in, so our hands are tied.

(Pilot Delivery Team)

Although the strategic representatives of the companies involved in the course accepted that there were certainly IT issues which had played a part in the course completion rate, in some cases there was only a limited amount of sympathy for participants in relation to the password issue.

> *If the guys didn't log in within a certain period of time, then they'd go back and reset their password. Oh my word; we heard about that once or twice! But the bottom line is: if that is a process that exists within the College, suck it up, guys! [...] [It] might not be ideal but you know that if you don't log in within this window, then you are going to lose your password.*
>
> (Company Representative)

The second major issue in relation to login problems was one of incorrect e-mail addresses being used to try to contact learners. This was an issue flagged up by two of our interviewees, but we also know from our interviews that this issue also affected at least one of the non-completers whom we were unable to interview.

> *The initial contact I wasn't getting because my e-mail address was taken down incorrectly, so I missed out.*
>
> (Course Participant)

Another participant explained that they had not been given login credentials at all.

> *I didn't realise that you needed a College log in. It was [colleague's name removed] that told me, because I'd asked him if he'd done it and he said no. I said: "where do you get the information?" and he says: "you need to have your college number," but I'd never been given one!*
>
> (Course Participant)

Despite general dissatisfaction with various aspects of the system's mechanics, there was universal praise for the course tutor in general, and more specifically in relation to his efforts to overcome these password issues by e-mailing participants their materials and assessments directly. Praise was also forthcoming in relation to his speed of response to participants' enquiries and the quality

of his feedback, and his support and encouragement for a large proportion of participants in the final stages.

> *I got a <u>huge</u> amount of support from Mike.*
>
> (Course Participant)

> *You definitely couldn't fault Michael's support; he was excellent.*
>
> (Course Participant)

> *We can't fault Michael; he was excellent at his support […] I think one week I submitted three units […] One on a Monday; started another one Tuesday; possibly managed to finish it Wednesday. And I would get the results back from Michael, and it would be updated and finished by that Friday.*
>
> (Course Participant)

Aside from the IT issues, most participants also praised their interactions with the other individuals involved in the pilot delivery team at Aberdeen College. There was praise in relation to the general package of support they provided, including their willingness to engage with participants and provide them with advice on how best to approach the pilot.

> *[Interviewee 1] [Debbie] said to me: "if you do this, this and this for your assignments, that'll get you your points for the least amount of reports".*
> *[Interviewee 2] The support from the college was pretty good, yes.*
>
> (Course Participants)

In particular, interviewees from one company explained that a member of the pilot delivery team had visited them in person in order to try to iron out some of the IT problems and reinvigorate the participants, some of whom had become disillusioned by these problems. This met with a mixed response, however: whilst the company representatives were broadly satisfied with the additional support, some of the course participants felt otherwise.

I had to do quite a lot of work, probably by the end of the second month, to encourage them to actually keep going with it. At that point we got the Aberdeen College folks back in again to kick-start the process again.

<div align="right">(Company Representative)</div>

It was more [them] coming in to appease us that everything was working nicely and "this is how we would get it working". It wasn't a case of them coming in to give us <u>more</u> support, it was them trying to fix the <u>lack</u> of the support that they had up until that point.

<div align="right">(Course Participant)</div>

This segues into the next set of barriers identified by interviewees. Some participants explained that they would have benefited from a greater degree of coordination and, in some cases, support from their company and Aberdeen College during the course of the pilot, whilst a number of company representatives also felt that Aberdeen College's coordination of the project might have played a role in participants becoming disengaged or disinterested.

In terms of company coordination, there was unhappiness from participants within one company in relation to the start-up of the project. It was expected that this company would bring together all of its participants in one location to initiate the pilot, but this was cancelled shortly before the event was due to take place, leaving participants feeling deflated and dispirited.

They were talking about going two days to Aberdeen [...] [but] the income to the company wasn't that great, and to save money they fixed it so we could take the first talk by phone.

<div align="right">(Course Participant)</div>

[The plan] was for the guys to travel over in person to get that kick-off initiated, but that didn't happen because the economic considerations made us decide that this is supposed to be an online project, so let's stick to doing everything online [...] That was a bad decision, I think, because if everybody had met face-to-face, I think there would have been more drive from our side.

<div align="right">(Company Representative)</div>

In addition, there was unhappiness expressed within one company in relation to the redeployment of the individual responsible for driving forward the pilot at company level. Although it was recognised that this individual made considerable effort to remain connected with and committed to the pilot, the redeployment nevertheless made it more difficult for the company representative to provide support to the participants and, particularly, to ensure buy-in from the participants' managers in terms of the need for time and support. Indeed, the individual concerned accepted that this was an unfortunate development from the point of view of the pilot and also accepted that it had had an impact.

We had a bit of organisational change […] so I lost the connection with Aberdeen, and a lot of changes creates a lot of work, which also meant for me to focus on other things […] [The pilot] for me became a left hand; something that I did if I had time […] I think that created a loss of momentum.

(Company Representative)

To be honest, our leaders didn't care much about it to give us space so we could work with this, so we were pretty much left alone, I guess. Our leaders were very proud of having us in the university, but it only lasted for a month or two maybe, and then we didn't hear anything. They didn't ask us about how we are doing and so on, just to encourage us to go on or give us more time.

(Course Participant)

Similarly, a number of company representatives pointed to the reorganisation at Aberdeen College early in 2011 as having been an issue. In particular, it was felt that some momentum had been lost as a result of the previous principal contact at Aberdeen College being redeployed to a different role. While these interviewees made it clear that they were not criticising this individual's successors on the pilot, they nevertheless explained that the reorganisation in and of itself had created a disruption in the project at a very early stage.

The final group of barriers or obstacles we encountered related to personal issues. Only a small number of the participants we interviewed mentioned this. Specifically, these were mentioned in relation to participants who had not completed the course. Firstly, it was mentioned by a

colleague that one participant had been unable to complete the course due to serious family illness and considerable compassionate leave.

> *One of my colleagues got serious problems with one of his kids [...] He and his wife had to stay all the time at hospital, so he was a lot away from work.*
>
> (Course Participant)

The only other mention of personal reasons lying behind a failure to complete came in an admirably candid admission from one participant that 'laziness' had essentially been behind his lack of progress on the course.

> *It's just unfortunately down to my laziness in the first couple of months, and not actually making the time to sit and do it when I had it. Then, when I needed to do it, I didn't have the time.*
>
> (Course Participant)

Despite the limited reference to personal issues in our interviews, it was nevertheless suggested by the pilot delivery team at Aberdeen College that personal issues (such as a lack of interest) were perhaps an important factor in understanding why non-completers had not completed. This suggestion was based principally upon the very low level of progress among some participants, suggesting that they simply did not engage enough with the course to give credence to some of the other reasons cited for not completing.

> *There was only so many times [we] could e-mail them: "How are you doing, do you want any help?" Because it was distance [learning], and if they chose not to, other than going to their house and knocking on their door, there really is very little more that we can do.*
>
> (Pilot Delivery Team)

> *It doesn't look good for our stats when your achievement rate's not great. In comparison to the majority of our other courses, it certainly wasn't great [...] [but we] couldn't have physically helped or supported them any more than we did.*
>
> (Pilot Delivery Team)

The final aspect we considered in this section was a brief overview of the factors cited by completers when asked to identify what had pushed <u>them</u> to complete the course. Their responses would appear to lend some credence to the immediately preceding statements from the members of the pilot delivery team at Aberdeen College in relation to personal motivation being an important factor. Whilst few participants cited personal reasons as a barrier to completing the course, virtually every one of the completers we interviewed cited some form of personal motivation, pride, stubbornness, dislike of failure or sense of obligation to their managers as being their biggest motivating factor when approaching the course.

> *I don't like the feeling of failure […] I never liked the feeling of not being able to complete the course especially with the certificates at the end of it, and the possibility to progress more in my career […] After having a chance to think about that, it just motivated myself to go and get the work done; get the certificate at the end of it, and learn something along the way.*
>
> (Course Participant)

> *I felt privileged that they'd asked me to do it, and if I didn't do it then I would be letting them down, and surely they wouldn't be impressed if I hadn't had made any effort and I hadn't completed it […] I just think if they've invested time in me to do this course and want me to do it, then it's important that I show them that I <u>want</u> to do it, and I <u>want</u> to learn, and I <u>want</u> to improve.*
>
> (Course Participant)

> *In my case, it's because I said I would do it. I joined up with it and said I would complete it. Others struggled within our team […] to actually find time to get around to doing the work, which is unfortunate but that is just the way our business is.*
>
> (Course Participant)

> *If I sign something up for it, I mean, I'll carry it through. It's just part of the individual I am.*
>
> (Course Participant)

Other Issues of Note

We also used our interviews to explore a small number of additional aspects of the pilot. In particular, we were keen to explore how the funding arrangements for the pilot affected the approach of participants and their companies. Specifically, we wished to establish firstly whether companies would consider recommending the course in future, and secondly whether they would have treated the pilot differently if they had been paying for the intervention themselves.

In terms of the first issue (i.e. whether or not participants' companies would recommend the course to others within their company, or to other companies), there was mixed feedback. One company representative was very positive about the course, arguing that the problems experienced were in no way insurmountable and could be overcome through better coordination, better buy-in from managers and more careful selection of participants according to their level and experience.

> *Absolutely, I would recommend anybody to do a course like this […] [But] if I were to be responsible for this again, I would approach it quite differently. I would have much more agreement with the managers beforehand, and explain what it actually means. And I think that it would need much more co-ordination, […] [but] I don't think it's anything wrong with the course. I would recommend it.*
>
> (Company Representative)

One company was at the opposite end of the spectrum, arguing that there had been very little return on investment (in terms of time, particularly). This was partly because the approach was seen as too much of a 'one size fits all' approach which did not offer sufficient company-specific value. In future, this company would much rather pursue a bespoke, tailored approach to staff training and development.

> *I'd always do something specific to [company name removed] […] It's not necessarily the cost of the course that's the issue; it's the giving up of the time and what the outputs are at the end of the day. For me, I need to know that if somebody's given up nine or ten days of their time to do some training, that they're coming back into the workplace and there's something happened to them, there's something changed in them and that they're able to*

be a better manager. So I would not be comfortable with something that I didn't have an ability to shape.

In the case of the final company, the response fell some way between the two other responses. It was recognised that the course offered through the pilot was not a complete solution, particularly given that many companies in the industry can already claim 'free' management training through their ECITB levy. However, there was a recognition that the course had potential to complement the existing offering in terms of leadership and management training. As such, the company would not close the door entirely on using the ILM course through Aberdeen College in future, so long as a more blended approach could be used.

I'm not sure... If we were going to do anything like this, it would be part of a blended approach. A purely online learning environment doesn't work for us […] But there's the bones of something there, I think.

A lot of the training that we do, we don't pay for, or we pay for through a levy. So we're already paying money into ECITB for so much training that in effect are free – inverted commas. No upfront cost, or if it is an upfront cost we're getting, we're claiming it back.

In terms of the second issue, we asked the pilot delivery team and company representatives whether or not anything would have been different if the companies had been expected to pay for the pilot. The pilot delivery team believed that things would possibly have been different, claiming that companies would maybe feel more obliged to make the pilot work if they had made a financial contribution. It was felt that companies would perhaps have been more considered in their selection of participants, and may have proposed candidates whose skills and experience more closely matched the original pilot brief.

If they had been paying for it, they would have wanted them to complete it. Because the price of doing the ILM is £486, […] they would have wanted to see something for their

return. And as it was, they didn't have that incentive [...] They would have probably been more selective with who they were putting forward for it, if they had to pay for it.

<div align="right">(Pilot Delivery Team)</div>

The response from the companies appeared to confirm this, at least in part. Evidence from our interviews with company representatives suggests that they would have played a more prominent role if they had been paying, particularly in terms of ensuring that fewer participants dropped out of the course.

My perception was that we wouldn't have treated it any differently from any other kind of training that we were doing. Okay, we wouldn't have let two guys drop out. There would have been some kind of penalty for that one way or another, but the guys who persevered with it and our approach in trying to make sure it happened and there was a certain momentum… That wouldn't have been any different.

<div align="right">(Company Representative)</div>

Summary

We conclude this section by providing an overview of the key points to emerge from each of the sub-sections discussed above.

The evaluation began by considering general reactions to the Team Leadership course offered through Aberdeen College. Overall, our interviewees (both completers and non-completers) indicated that they had found the course to be interesting and useful. None of them were able to point to any aspects of the course which they had particularly disliked. The strategic representatives of the companies involved also praised the general concept behind the pilot. However, it was widely reported that the information contained within the course was not new to the participants. This, however, appears to be related to the type of candidates put forward by the companies: whilst the course was intended for new or aspiring team leaders, virtually all of the candidates put forward by two of the three companies already had considerable experience of leading teams. However, those participants who conformed most closely to the description of 'new or aspiring team leaders' found that they struggled to deal with parts of the course

assessment due to a lack of experience. In addition, interviewees praised aspects of the distance learning approach, although they made it clear that the system had not been perfect.

The second level of the Kirkpatrick evaluation relates to participants' learning as a result of participating in the pilot. The quantitative results obtained through the Leadership Skills survey showed that in most cases, the participants, their manager(s) and their team member(s) identified only a modest increase in participants' leadership and management abilities over the course of the pilot. Given that the course contents were not new to most participants, this was not entirely unsurprising. Our interview evidence suggested that for most participants, although the course had proved to be a useful refresher, it nevertheless fell short of their expectations (although again, this may be due to the mismatch between participants and the original intended target audience). A small number of participants identified areas in which the course had provided them with new knowledge, skills and techniques: this tended to be found among the interviewees whose role most closely matched the 'new or aspiring team leaders' sought at the outset of the pilot.

Given that changes in behaviour (the third level of the Kirkpatrick evaluation) can only reasonably be expected to emerge if significant new knowledge, tools or techniques have been communicated during the intervention, we were able to find only limited evidence of a behavioural impact among course participants. The most commonly identified impact was an increased sense of confidence or self-assurance in participants' existing practices and approaches. A small number of participants were able to identify isolated areas in which the course had had an impact upon the way they approach certain aspects of their job, but overall the impact upon behaviour was negligible due to the issues identified above in relation to the level of learning.

As with the previous level, the final level of the Kirkpatrick evaluation model (outcomes) is contingent upon some degree of impact at earlier levels of the intervention. Due to the limited impact in terms of learning and subsequently behaviour, there was very limited evidence of any outcomes i.e. organisational changes and business performance improvement. However, we contend that a lack of organisational impact is not necessarily a shortcoming, since this pilot was always intended to be an individual-level intervention. As such, we focused upon business performance improvements at the personal and team levels. However, there was little evidence of improved performance from our interviewees. This was not thought to be due to the relatively short space of time which had elapsed between the end of the pilot and the evaluation interviews.

Rather, it was simply the case that few interviewees believed that there would <u>ever</u> be any impact in terms of quantifiable business performance. That said, there was widespread recognition of a less tangible, more qualitative impact: many interviewees referred to their teams running more smoothly now as a result of their improved confidence, particularly in relation to communication and people skills. There was also a general belief among participants that the level of skills utilisation within their teams had increased slightly, and this was borne out by quantitative results obtained from the Leadership Skills survey.

A crucial further aspect of the evaluation (above and beyond the impact of the course on those who participated) we considered related to the barriers and facilitative factors which impacted upon participants. In brief, we wished to establish why non-completers did not complete the course, why some of the completers struggled, and which factors ultimately pushed the successful participants to complete the course. Of the factors identified, the most prominent by far was time. It was felt by all but one of our interviewees that if protected time were to be made available and the course were to run smoothly, six months was more than long enough for people to complete the course comfortably. However, Interviewees identified a lack of protected time at work and the immediacy of day-to-day work commitments as being significant barriers to being able to complete the course. As a result, most completers reported having to spend considerable amounts of their own time at evenings and weekends to complete the material. In addition to protected time not being made available, our interviewees also suggested that IT issues meant the pilot did not run as smoothly as hoped. In particular, participants struggled with Aberdeen College's Blackboard system, with the most prominent issues being access to course materials, and the password reset system. Despite these issues with the online system, participants were full of praise for the course tutor for his role in helping throughout the duration of the course.

There were, however, some recommendations from participants in relation to the coordination of the course by Aberdeen College and their respective companies. A lack of buy-in from participants' managers was seen as a crucial barrier for some participants, whilst reorganisation within Aberdeen College was also pinpointed by company representatives as having caused a degree of momentum to be lost in the early stages of the pilot.

The last barriers identified were personal issues. Only a very small number of participants cited personal issues as having played a role in preventing them (or their colleagues) from completing

the course. However, on the basis of their interactions with the full range of participants, members of the pilot delivery team at Aberdeen College felt that commitment to the pilot at a personal level was perhaps not high enough among many of the non-completers. We then considered 'push' factors in relation to completion. The results here appear to give credence to the pilot delivery team's claim of low personal commitment among some non-completers, as every one of the completers we interviewed cited personal determination or pride as the main motivating force behind their completion.

The final part of the section considered two aspects of the funding mechanism for the pilot. Our interviews suggested that there was a mixed response to the idea of recommending the course to other participants or companies. One company's representative stated that they would do so without hesitation (although recommended that certain aspects – such as manager buy-in – would be beneficial), another stated that they would be unlikely to do so, and the final company provided a more ambivalent response. Finally, we sought to determine whether or not the participant companies would have behaved differently had they been paying for the ILM course themselves. Overall, the impression gained from the pilot delivery team at Aberdeen College and from the companies themselves was that there would have been a higher level of commitment to the pilot, particularly in terms of trying to ensure that the completion rate was higher.

KNOWLEDGE TRANSFER – EVALUATION

This section focuses on our evaluation of the 'Knowledge Transfer through Mentoring Techniques' pilot. As with the previous pilot, we discuss our results according to the framework set out by the Kirkpatrick model. We firstly provide some context, before moving on to consider reaction, learning, behaviour and outcomes. We then consider any additional issues emerging from the data collection process which have not been covered by the Kirkpatrick model.

Context

Some background information on the process followed was provided in the Methodology section. However, it is worth reiterating a number of key contextual points prior to discussing the results of this section.

In Aker Solutions, a clear distinction exists between mentors and mentees. In Tritech, no such distinction was made due to the company's preference for a 'network mentoring' approach (which emphasises the reflexive nature of mentoring, in which all employees may be thought of as both a mentor and a mentee). As such, we do not attempt to draw a distinction between mentors and mentees in our discussion of the Tritech results. However, the Tritech sessions provided a distinction of another sort; namely, the geographic split between employees based in Westhill and those based in Ulverston. Previous work with Tritech suggested that the two sites had different working cultures, and as such we choose to explore this by reporting the results for Ulverston and Westhill separately. We do likewise for mentors and mentees at Aker Solutions.

Table 10 provides a breakdown of the total number of participants in each location, as well as their breakdown by mentoring/geographic status. 30 Aker Solutions staff participated in their session in October 2011; this breaks down into 18 mentees and 12 mentors. The Tritech sessions in January 2012 attracted a total of 38 participants, with 18 Ulverston employees attending their session and 20 doing so in Westhill.

Table 10: Breakdown of participants

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
	18	12	18	20
Total	30		38	

In order to place the study within the wider skills utilisation context, we used our evaluation forms to ask staff a number of questions pertaining to this agenda. We first asked participants whether or not they believed they had all of the skills required to do their job. Responses to this question are provided below in Figure 10, which shows that there was no great difference between Tritech employees in Ulverston and Westhill, with 64.7% of respondents in the former and 57.9% in the latter stating that they do have all the skills necessary. There was, however, a far greater difference between the mentors and mentees when looking at the Aker Solutions results. Unsurprisingly, a far greater proportion of mentors (91.7%) than mentees (41.2%) stated that they have all of the skills required to do their job.

Figure 10: Do you believe that you have all of the skills required to do your job?

	Mentees	Mentors	Ulverston	Westhill
	Aker Solutions		Tritech	
■ No	58.8%	8.3%	35.3%	42.1%
■ Yes	41.2%	91.7%	64.7%	57.9%
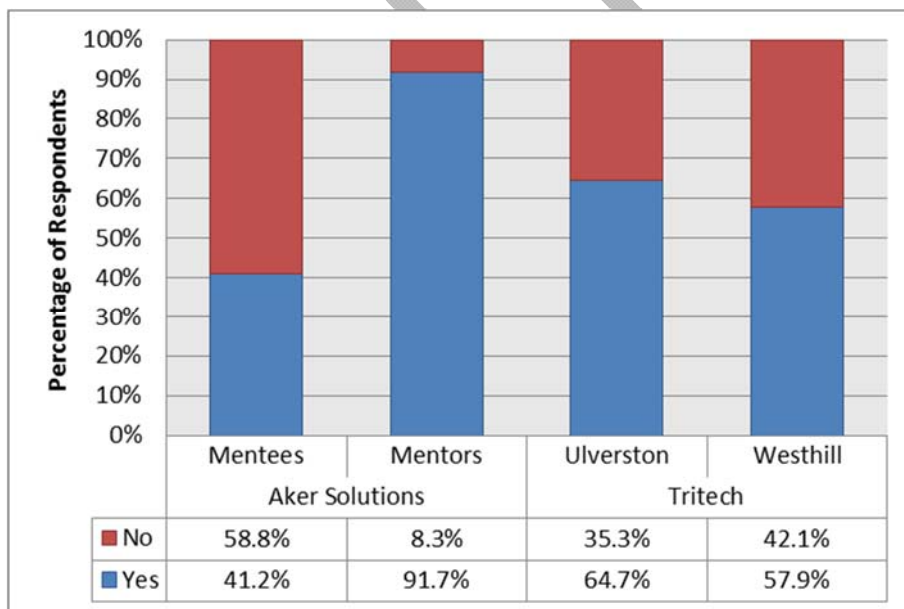
We then sought to establish exactly which type of skills employees might be lacking. We asked about three categories of skills: technical; behavioural; and other. Participants' responses are provided below in Figure 11, and show that the greatest aggregate demand is for technical skills (21 participants in total). This was followed by behavioural skills (11 participants) and other (6

participants in total). Given the distinction between mentors and mentees within Aker (and the resultant differences in skill levels), it is perhaps unsurprising that over 60% of mentees there stated that they were lacking some technical skills to do their job. At Tritech – in which there is much less of a distinction between those who mentor and those who need to be mentored – there was a much more even distribution of skills needs, although the Westhill site contained a greater number of participants citing a need for additional technical skills.

Figure 11: If you do <u>not</u> believe that you have all of the skills required to do your job, which skills do you feel you are lacking, or which skills do you feel have to be improved?

	Aker Solutions		Tritech	
	Mentees	Mentors	Ulverston	Westhill
Technical	11	0	2	8
Behavioural	3	1	4	3
Other	0	0	3	3
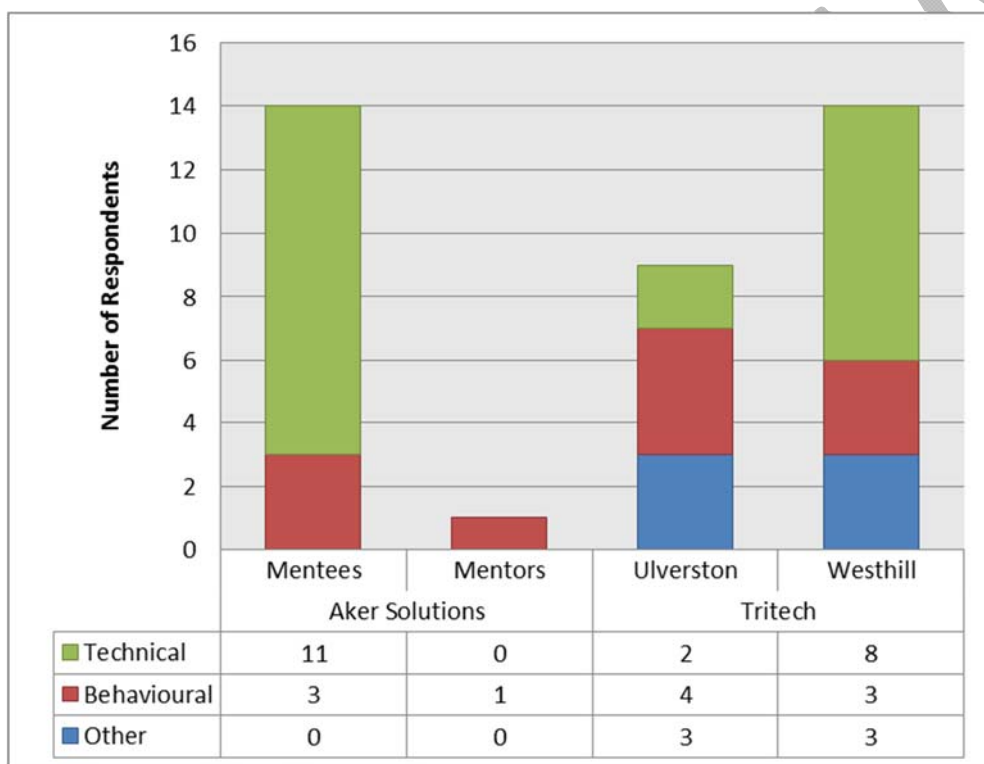
We then considered the extent to which participants in the two projects felt that their skills were being utilised. Participants were asked to rank this on a scale of 1 to 5, in which 1 represented 'not at all effectively' and 5 represented 'extremely effectively'. Their responses are provided below in Table 11. We provide a mean score for each of the four sub-groups, in which the total score provided across all members of each sub-group is divided by the number of members of that sub-group. This practice is repeated throughout this section.

Overall, the stated level of skills utilisation across the two companies was broadly similar. Perhaps surprisingly, the mentees within Aker Solutions believed that their relevant skills were being

utilised more effectively in their current role than was the case for their mentor counterparts. However, this may simply reflect the fact that mentors would, by definition, have a broader range of experience and skills which may be difficult to utilise effectively in one single job role.

There was little difference in terms of perceived skills utilisation between the two Tritech sites, although the mean score was marginally higher among Ulverston employees than Westhill employees.

Table 11: On a scale of 1-5, how effectively do you believe all of your relevant skills are being utilised in your current role?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean score	3.76	3.62	3.71	3.53

A further breakdown of the results from Table 11 is provided below in Figure 12. This shows the distribution of responses between mentors and mentees within Aker Solutions, and between Ulverston and Westhill employees within Tritech. The only notable divergence within Aker Solutions is the proportion of mentees selecting '5' (17.6% of mentees vs. 0.0% of mentors). Within Tritech, the only noteworthy difference is the proportion of employees in Westhill selecting '2' (10.5% vs. 0.0% of those in Ulverston).

Figure 12: On a scale of 1-5, how effectively do you believe all of your relevant skills are being utilised in your current role?

	Mentees	Mentors	Ulverston	Westhill
	Aker Solutions		Tritech	
■ 5 - Extremely effectively	17.6%	.0%	5.9%	5.3%
■ 4	47.1%	69.2%	58.8%	52.6%
■ 3	29.4%	23.1%	35.3%	31.6%
■ 2	5.9%	7.7%	.0%	10.5%
■ 1 - Not at all effectively	0.0%	0.0%	0.0%	0.0%
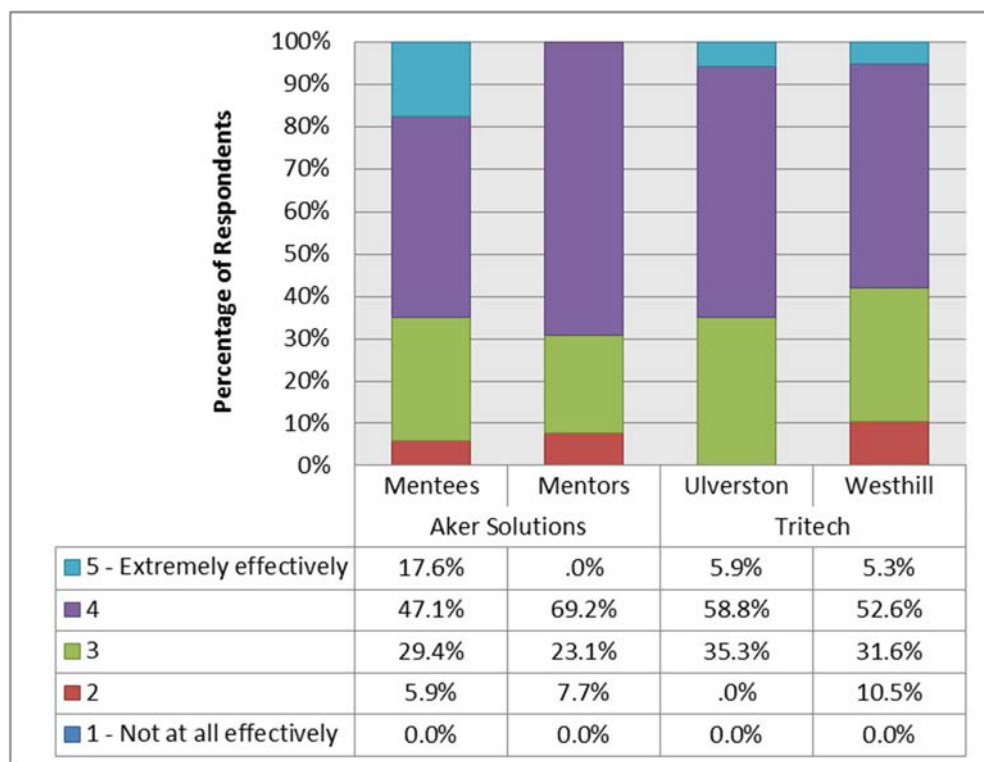
The Scottish Government's definition of skills utilisation[11] makes it clear that the concept is a multi-dimensional one. Confidence is one of the key dimensions and accordingly, we also sought to establish how confident employees felt in their ability to do their job. Their responses to this question are provided below in Table 12. The results show a greater level of confidence among mentors than mentees within Aker Solutions, and very similar levels among employees in Ulverston and Westhill within Tritech.

Table 12: On a scale of 1-5, how would you rate the level of confidence you have in your ability to do your job?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean score	3.82	4.08	4.18	4.21

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[11] "Effective skills use is about confident, motivated and relevantly skilled individuals who are aware of the skills they possess and know how to best use them in the workplace, engaged in workplaces that provide them with meaningful and appropriate encouragement, opportunity and support to use their skills effectively, in order to increase performance and productivity, improve job satisfaction and employee well-being, and stimulate investment, enterprise and innovation." (Scottish Government, 2010)

Again, these results can be further broken down across the two companies. Figure 13 provides an overview of the responses provided by mentors and mentees in Aker Solutions, and by Ulverston and Westhill employees in Tritech. Overall, there is little in the way of major difference between employees across Tritech's two sites, although within Aker Solutions, a greater proportion of mentors selected '4' than was the case among mentees, whilst the opposite was true in relation to those selecting '3'.

Figure 13: On a scale of 1-5, how would you rate the level of confidence you have in your ability to do your job?

	Mentees	Mentors	Ulverston	Westhill
	Aker Solutions		Tritech	
■ 5 - Extremely confident	11.8%	15.4%	35.3%	42.1%
■ 4	58.8%	76.9%	47.1%	42.1%
■ 3	29.4%	7.7%	17.6%	10.5%
■ 2	0.0%	0.0%	.0%	5.3%
■ 1 - Not at all confident	0.0%	0.0%	0.0%	0.0%
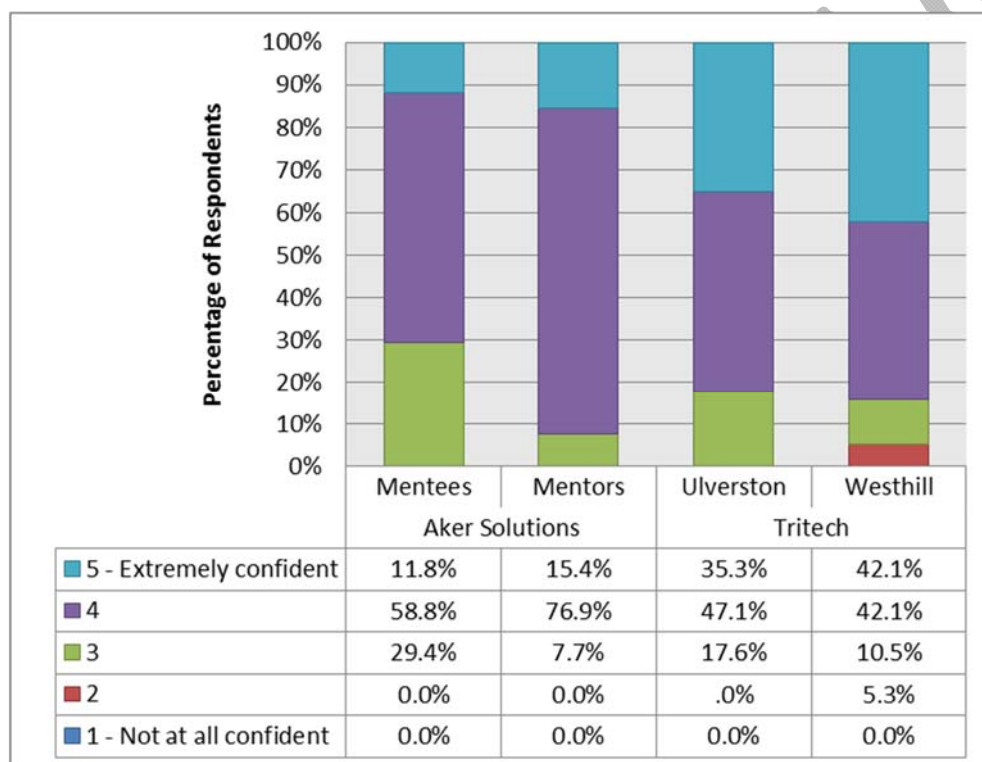
We then went on to ask employees about the final individual aspect of skills utilisation; namely, the level of motivation they have to do their job. Once again, mean results from the different groups within each company are provided below in Table 13. The results show that levels of motivation are broadly consistent, both internally across groups, and externally across the two companies. The reasonably high levels of self-assessed performance in relation to the component concepts of skills utilisation (coupled with the high-scoring responses provided in relation to the question explicitly focussed on skills utilisation) lends weight to our earlier assertion (see Gibbons-Wood, MacLeod and Tait, 2010) that skills utilisation in and of itself is not a major problem for the

oil and gas industry, whose systems of demonstrable competence and skills frameworks ensure that regular attention is paid to employees' skills and their ability to use these within their role(s).

Table 13: On a scale of 1-5, how would you rate the level of motivation you have to do your job?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean score	4.12	4.25	4.24	4.16

A more detailed overview of responses to the question on motivation is provided below in Figure 14. Again, there is only minor variation between the companies and between the different groups within the companies. However, it is perhaps interesting to note that the only participants to provide a score lower than '3' were mentees from within Aker Solutions (5.9%).

Figure 14: On a scale of 1-5, how would you rate the level of motivation you have to do your job?

	Mentees	Mentors	Ulverston	Westhill
	Aker Solutions		Tritech	
5 - Extremely motivated	35.3%	33.3%	29.4%	36.8%
4	47.1%	58.3%	64.7%	42.1%
3	11.8%	8.3%	5.9%	21.1%
2	5.9%	0.0%	0.0%	0.0%
1 - Not at all motivated	0.0%	0.0%	0.0%	0.0%
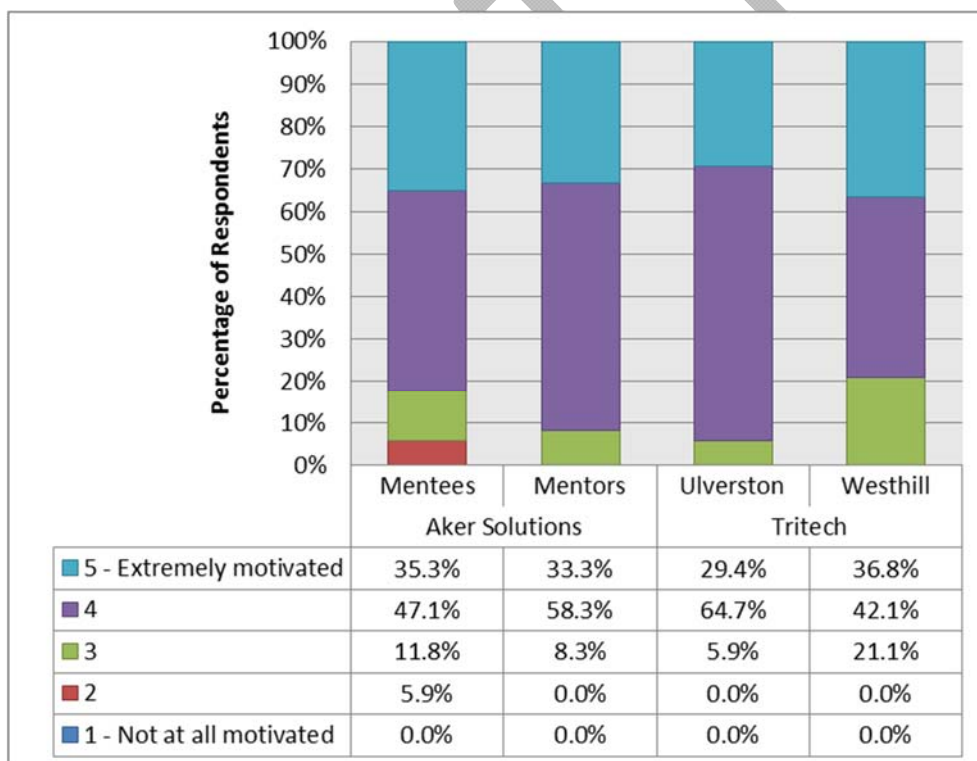
Our final broad question related to levels of productivity at work. Again using a scale of 1-5, the mean responses provided by each group within the two companies is provided below in Table 14.

There is some variation within each company. In Tritech, self-assessed productivity is higher among Ulverston employees than Westhill employees, whilst within Aker there is an even clearer difference between mentors and mentees, with the former providing a notably higher mean score than the latter.

Table 14: On a scale of 1-5, how productive are you at work?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean score	3.88	4.25	4.29	4.00

A fuller exploration of these results is provided in Figure 15, which shows that a far greater proportion of mentors in Aker Solutions provided a '5' response than was the case among mentees, who provided a greater proportionate response in the '3' and '4' categories. Although similar proportions of employees in Ulverston and Westhill provided a '5' response, a greater proportion in Westhill provided a '3' response than a '4' response, whilst the opposite was true in Ulverston.

Figure 15: On a scale of 1-5, how productive are you at work?

	Mentees	Mentors	Ulverston	Westhill
	Aker Solutions		Tritech	
5 - Extremely productive	11.8%	33.3%	35.3%	42.1%
4	64.7%	58.3%	58.8%	21.1%
3	23.5%	8.3%	5.9%	31.6%
2	0.0%	0.0%	.0%	5.3%
1 - Not at all productive	0.0%	0.0%	0.0%	0.0%
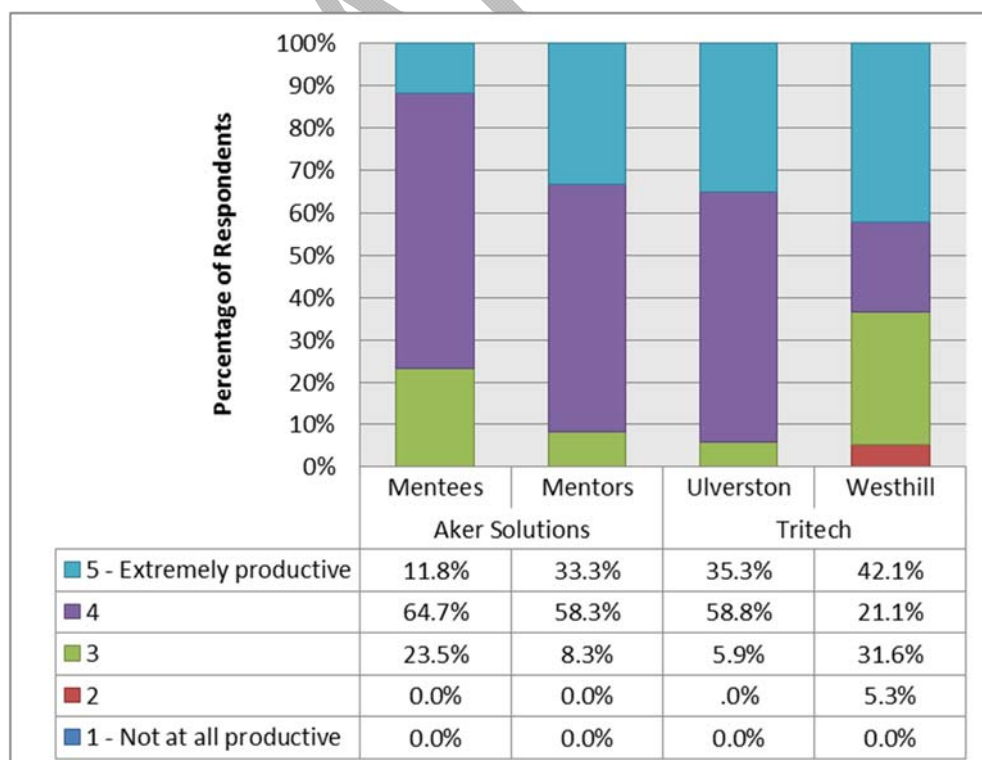
Having established the skills utilisation context, we now turn to consider results pertaining specifically to the mentoring intervention. Before exploring participants' responses to the workshop though, we were keen to establish exactly what impact their companies' current efforts in respect of mentoring have had. We identified eight key areas in which mentoring might reasonably be expected to have a positive effect. These were as follows:

- Mentees' technical knowledge

- Mentees confidence

- Mentees' motivation

- Mentees' loyalty to the company

- Mentees' workplace performance

- Mentees' workplace productivity

- Mentees' awareness of the skills they have

- How well mentees' skills are utilised

Having set out these areas, we then asked participants to rate the impact of their company's previous attempts at mentoring (in Tritech's case, informal mentoring) on these areas, using a 5-point Likert scale (running from very negative to very positive). The results are set out in Figure 16 (responses provided by Aker Solutions mentees), Figure 17 (Aker Solutions mentors), Figure 18 (Tritech Ulverston employees) and Figure 19 (Tritech Westhill employees).

The principal point worth noting is that only a very small minority of participants felt that their company's previous attempts at mentoring had had a negative effect in the areas we considered. Only on one factor (mentees' loyalty to their company) did more than 10.0% of any one sub-group (Aker Solutions mentees, in this case) state that the previous work towards mentoring had had a negative effect. Indeed, this was the only combination of sub-group and factor in which any respondents reported that their company's previous attempts at mentoring had resulted in a very negative effect.

For most factors, each sub-group's responses tended to be much more positive than negative. The sole exception to this was again found among the Aker Solutions mentees. An identical proportion

of these participants stated that Aker Solutions' previous attempts at mentoring had had a negative or very negative effect on mentees' loyalty to their company (11.8%) as those who stated that it had had a positive or very positive impact on their loyalty.

Within Tritech, the most popular response for all but one factor was 'positive'. The exception was found in their Westhill employees' responses to how well mentees' skills are utilised: for this factor and this sub-group, the most popular response was 'neither nor'. In Aker Solutions, a similar trend was observed. 'Positive' was the most popular response (or joint most popular) among both mentors and mentees, with the exceptions of mentees' loyalty to their company (the most popular response among mentees was 'neither nor') and mentees' confidence (the most popular response among mentors was 'neither nor').

Overall though, the picture is perhaps more positive than might have been expected, given that the involvement of these two companies in the pilot was predicated upon the fact that they had not been successful with their previous attempts at introducing effective mentoring (Aker Solutions) or that they had no experience of trying to introduce effective formal mentoring (Tritech).

Figure 16: In your opinion, what effect has Aker Solutions' mentoring scheme had up to now on…

Mentees

	Mentees' technical knowledge	Mentees' confidence	Mentees' motivation	Mentees' loyalty to the company	Mentees' workplace performance	Mentees' workplace productivity	Mentees' awareness of the skills they have	How well mentees' skills are utilised
■ Don't know	23.5%	23.5%	25.0%	23.5%	23.5%	23.5%	23.5%	23.5%
■ Very positive	23.5%	17.6%	.0%	.0%	17.6%	5.9%	11.8%	5.9%
■ Positive	41.2%	41.2%	37.5%	11.8%	47.1%	58.8%	29.4%	35.3%
■ Neither nor	11.8%	17.6%	37.5%	52.9%	11.8%	11.8%	29.4%	29.4%
■ Negative	.0%	.0%	.0%	5.9%	.0%	.0%	5.9%	5.9%
■ Very negative	.0%	.0%	.0%	5.9%	.0%	.0%	.0%	.0%

Figure 17: In your opinion, what effect has Aker Solutions' mentoring scheme had up to now on…

Mentors

	Mentees' technical knowledge	Mentees' confidence	Mentees' motivation	Mentees' loyalty to the company	Mentees' workplace performance	Mentees' workplace productivity	Mentees' awareness of the skills they have	How well mentees' skills are utilised
■ Don't know	8.3%	8.3%	8.3%	16.7%	8.3%	8.3%	8.3%	8.3%
■ Very positive	.0%	25.0%	16.7%	8.3%	16.7%	25.0%	.0%	.0%
■ Positive	66.7%	25.0%	33.3%	33.3%	50.0%	41.7%	58.3%	58.3%
■ Neither nor	25.0%	33.3%	33.3%	41.7%	25.0%	25.0%	33.3%	33.3%
■ Negative	.0%	8.3%	8.3%	.0%	.0%	.0%	.0%	.0%
■ Very negative	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%

Figure 18: In your opinion, what effect has informal mentoring within Tritech had up to now on…

Ulverston

	Mentees' technical knowledge	Mentee's confidence	Mentees' motivation	Mentees' loyalty to the company	Mentees' workplace performance	Mentees' workplace productivity	Mentees' awareness of the skills they have	How well mentees' skills are utilised
■ Don't know	5.6%	5.6%	11.1%	11.1%	5.6%	5.6%	11.1%	5.6%
■ Very positive	16.7%	11.1%	11.1%	.0%	22.2%	22.2%	22.2%	5.6%
■ Positive	72.2%	50.0%	50.0%	61.1%	55.6%	44.4%	44.4%	61.1%
■ Neither nor	5.6%	33.3%	27.8%	27.8%	16.7%	27.8%	22.2%	27.8%
■ Negative	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
■ Very negative	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%

Figure 19: In your opinion, what effect has informal mentoring within Tritech had up to now on…

Westhill

	Mentees' technical knowledge	Mentee's confidence	Mentees' motivation	Mentees' loyalty to the company	Mentees' workplace performance	Mentees' workplace productivity	Mentees' awareness of the skills they have	How well mentees' skills are utilised
■ Don't know	.0%	.0%	.0%	15.0%	.0%	5.0%	10.0%	5.0%
■ Very positive	30.0%	20.0%	20.0%	20.0%	26.3%	25.0%	25.0%	20.0%
■ Positive	45.0%	60.0%	60.0%	30.0%	52.6%	45.0%	35.0%	30.0%
■ Neither nor	25.0%	20.0%	15.0%	30.0%	21.1%	20.0%	25.0%	40.0%
■ Negative	.0%	.0%	5.0%	5.0%	.0%	5.0%	5.0%	5.0%
■ Very negative	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%

Our evaluation also aimed to explore the main barriers to increasing productivity in the two companies. This was partly to test the premise of the pilot (i.e. that lack of knowledge transfer within companies hampers increased performance and productivity) and partly also to gather wider contextual information on barriers within the industry. Responses to this question are laid out in Figures 20 and 21 (below).

Broadly, the results confirm that lack of knowledge transfer is an issue for the companies involved. This factor was the most frequently identified across all Aker Solutions participants, particularly among mentors. In Tritech, this was the second most popular answer, although it should be noted that the type of knowledge transfer problems identified in the Interim Research Report were different to the ones identified by Tritech (who were more concerned about the disproportionate impact of staff turnover on retained knowledge in a company of their size).

The most frequently cited barrier within Tritech was a lack of employee involvement in decision-making. This was also one of the most frequently cited barriers by Aker Solutions employees, lending weight to the premise of the work on employee autonomy also being carried out as part of the wider skills utilisation project. The only other factors mentioned by more Aker Solutions participants than lack of employee autonomy were a lack of knowledge transfer, a lack of leadership within the company and a lack of motivation among employees. These were also identified by a relatively large number of Tritech participants, as was a lack of physical equipment/resources.

Figure 20: What do you believe are the biggest barriers to increasing productivity in your company? (Aker Solutions)

	Inefficient use of physical resources	Lack of confidence among employees	Lack of employee involvement in decision-making	Lack of knowledge transfer within the company	Lack of leadership within the company	Lack of motivation among employees	Lack of people	Lack of physical equipment/ resources	Lack of qualifications within the company	Lack of skills within the company	Poor use of team members' skills	Don't know	Other
■ Mentors	5	2	6	9	6	6	4	2	2	2	6	0	3
■ Mentees	4	2	4	7	5	5	1	1	1	1	1	4	4

Figure 21: What do you believe are the biggest barriers to increasing productivity in your company? (Tritech)

	Inefficient use of physical resources	Lack of confidence among employees	Lack of employee involvement in decision-making	Lack of knowledge transfer within the company	Lack of leadership within the company	Lack of motivation among employees	Lack of people	Lack of physical equipment / resources	Lack of qualifications within the company	Lack of skills within the company	Poor use of team members' skills	Don't know	Other
■ Westhill	1	4	11	7	6	6	5	6	1	4	5	0	1
■ Ulverston	2	4	5	6	3	5	2	5	0	4	4	1	3

Reaction

We next sought to establish participants' reactions to the mentoring sessions. Firstly, we asked participants to rate their enjoyment of the session. Their responses are provided below in Table 15, which shows that there were clear differences between the enjoyment of the two different sub-groups in each company. In Aker Solutions, enjoyment was markedly higher among mentors than mentees. Similarly, the Tritech participants in Ulverston rated their enjoyment of the session more positively than their counterparts in Westhill. However, the difference was not as pronounced as it was between mentors and mentees in Aker Solutions.

Table 15: On a scale of 1-5, how much have you enjoyed today's workshop?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean score	2.82	4.23	4.35	3.63

These figures are broken down further below in Figure 22. The chart shows that the only participants who stated that they did not enjoy the session at all were found in the mentees group at Aker Solutions. However, this was still a very small proportion. The greatest proportion of participants in this session (almost two thirds) provided an ambivalent response, whilst in each of the three other groups the most popular response was a positive one ('4'), selected by a majority of participants in each case. Another notable result is the particularly large proportion of participants in Ulverston who stated that they enjoyed the session a great deal.

Figure 22: On a scale of 1-5, how much have you enjoyed today's workshop?

	Mentees	Mentors	Ulverston	Westhill
	Aker Solutions		Tritech	
■5 - Enjoyed a great deal	.0%	23.1%	41.2%	5.3%
■4	11.8%	76.9%	52.9%	63.2%
■3	64.7%	.0%	5.9%	21.1%
■2	17.6%	.0%	.0%	10.5%
■1 - Did not enjoy at all	5.9%	.0%	0.0%	0.0%
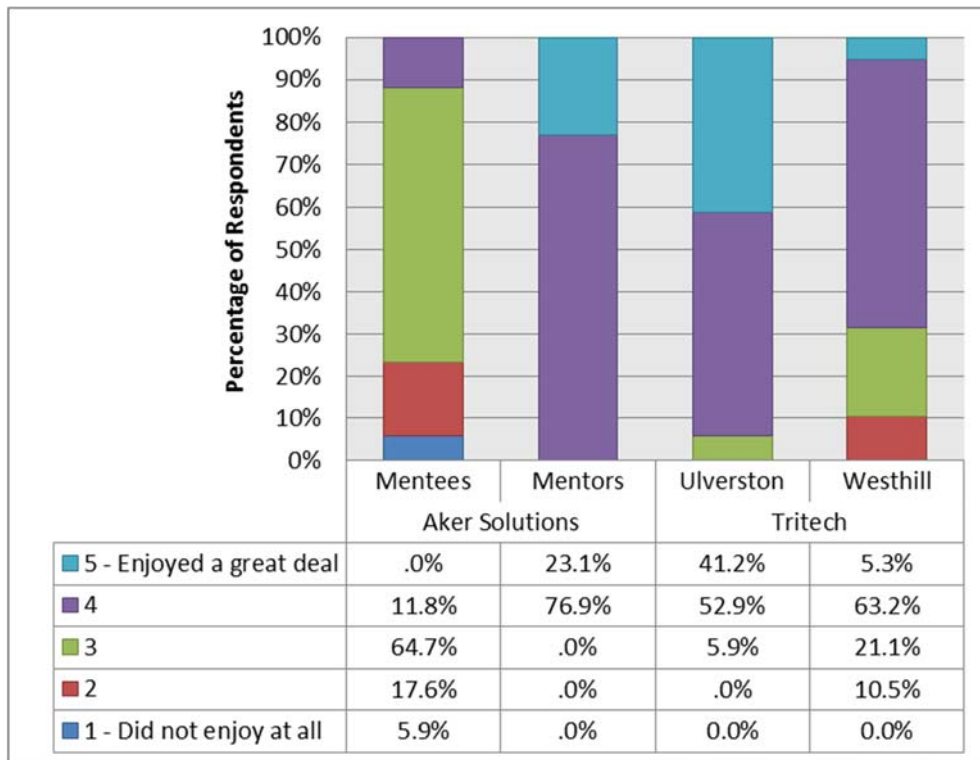
Respondents were then asked to rate how useful they felt the day's workshop had been to them. Their responses are provided below in Table 16, which shows the same type of division by sub-group as in the previous question. Tritech participants in Ulverston stated that they had found the session more useful than did their counterparts in Westhill, whilst in Aker Solutions there was again a clear distinction between mentees and mentors, with the latter providing a significantly more positive assessment than the former.

Table 16: On a scale of 1-5, how useful did you find today's workshop?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean score	2.71	4.31	4.29	3.53

These figures can again be broken down to provide more detail. The results of doing so are provided in Figure 23. In relation to this question, a similar proportion of Aker Solutions mentees and Tritech Westhill employees stated that they had not found the workshop at all useful. Less than a fifth of the mentees at Aker Solutions stated that they had found the session helpful or extremely helpful, whilst every single one of the mentors who participated stated that they had

found the session helpful or extremely helpful. At Tritech, almost every Ulverston participant stated that they had found the workshop helpful or extremely helpful, whilst in Tritech Westhill the most popular response from participants was that they had found the session neither helpful nor unhelpful.

Figure 23: On a scale of 1-5, how useful did you find today's workshop?

	Mentees	Mentors	Ulverston	Westhill
	Aker Solutions		Tritech	
5 - Extremely useful	.0%	30.8%	35.3%	21.1%
4	17.6%	69.2%	58.8%	31.6%
3	47.1%	.0%	5.9%	36.8%
2	23.5%	.0%	0.0%	0.0%
1 - Not at all useful	11.8%	.0%	.0%	10.5%
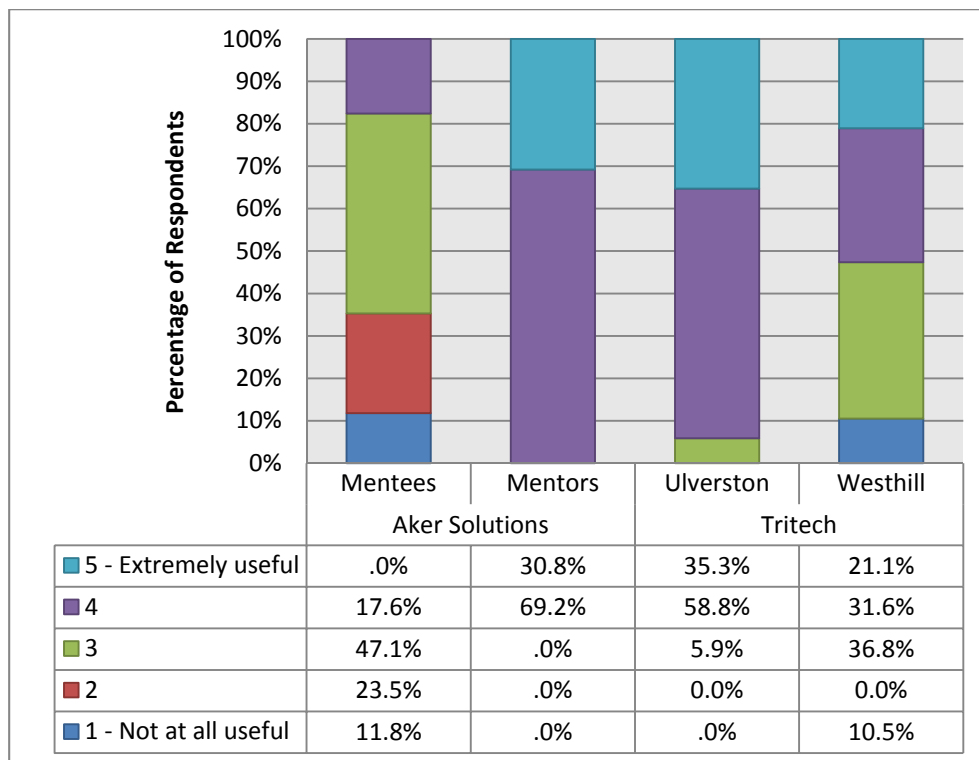
The next area of reaction we aimed to establish was that of relevance. Again using a 5-point response scale, participants were asked to rate how relevant the contents of the day's session had been to their role as a mentor/mentee. The mean response from each sub-group is provided below in Table 17. The results follow the same pattern as that which emerged in the two previous questions, with a more positive response from mentors in Aker Solutions and Ulverston participants in Tritech. However, the division between mentors and mentees at Aker Solutions was much less pronounced than in relation to the previous questions, which suggests that the issue for mentees may not be entirely explained through reference to relevance alone.

Table 17: On a scale of 1-5, how relevant were the contents of today's workshop to your role as a mentor/mentee?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean score	3.59	4.23	4.47	3.26

More detailed exploration of these responses is provided below in Figure 24. Again, it can be seen that the response from mentors in Aker Solutions and Ulverston participants in Tritech was overwhelmingly positive: every Aker Solutions mentor stated that they had either found the contents relevant or extremely relevant, whilst almost every Tritech Ulverston participant did likewise. Interestingly, a majority of mentees at Aker Solutions stated that they found the contents relevant, although this was offset by around a third who stated that it had been neither relevant nor irrelevant, not at all relevant or not very relevant.

Figure 24: On a scale of 1-5, how relevant were the contents of today's workshop to your role as a mentor/mentee?

	Mentees	Mentors	Ulverston	Westhill
	Aker Solutions		Tritech	
■ 5 - Extremely relevant	11.8%	23.1%	52.9%	5.3%
■ 4	58.8%	76.9%	41.2%	36.8%
■ 3	11.8%	.0%	5.9%	42.1%
■ 2	11.8%	.0%	.0%	10.5%
■ 1 - Not at all relevant	5.9%	.0%	.0%	5.3%
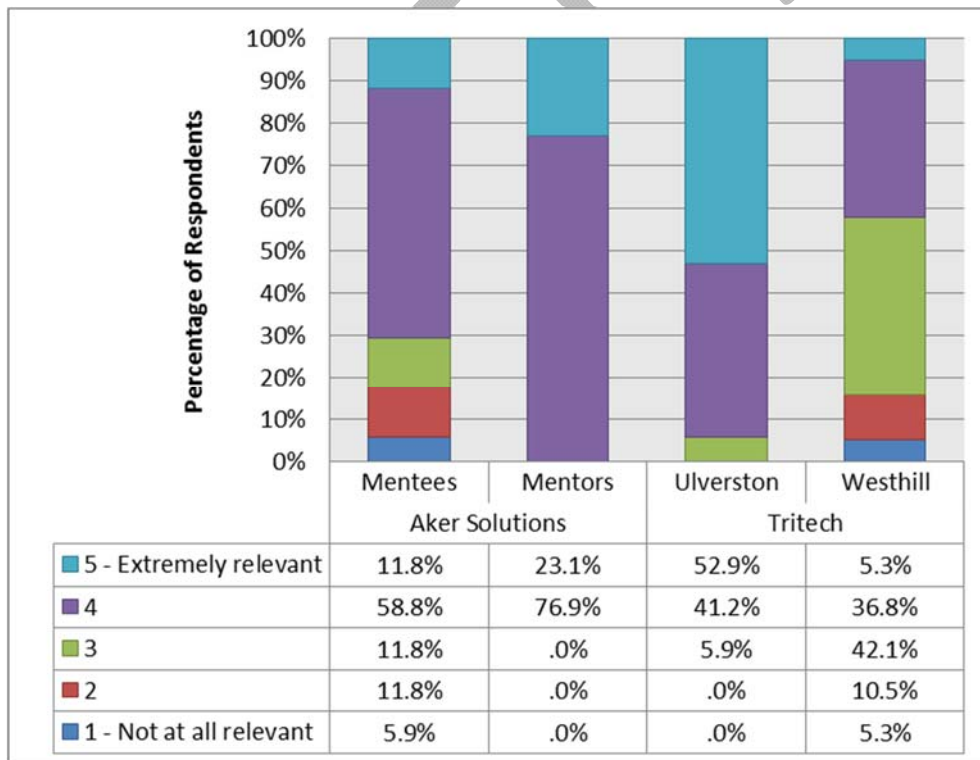
The final aspect of immediate reaction to be measured using our survey instrument was the extent to which the sessions had met participants' expectations. Once again using a 5-point response

scale, the mean response from each sub-group is provided below in Table 18. The same pattern again held true across the two companies. Mentors in Aker Solutions provided a more positive mean response than did mentees, whilst in Tritech the mean response from Ulverston participants was higher than that from Westhill participants.

Table 18: On a scale of 1-5, how well did today's workshop meet your expectations?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean score	2.94	4.08	4.12	3.63

Figure 25 provides a more detailed breakdown of these responses. Again, it can be seen that at Aker Solutions, almost all mentors provided a positive response (i.e. either a '4' or a '5'). In contrast, almost three quarters of mentees provided an ambivalent response and of the remainder, a greater proportion provided a negative response than a positive one. At Tritech, the proportion of Ulverston participants who stated that the session had completely met their expectations was greater than for any other sub-group in either company. None of the Ulverston participants provided a negative response (i.e. a '1' or a '2'). For Tritech Westhill participants, only a small proportion provided a negative response, but the proportion of participants who provided an ambivalent response ('3') or a slightly positive one ('4') was greater than at Ulverston. However, this was offset by the fact that less than half the proportion of participants in Westhill provided a '5' response than was the case at Ulverston.

Figure 25: On a scale of 1-5, how well did today's workshop meet your expectations?

	Mentees	Mentors	Ulverston	Westhill
	Aker Solutions		Tritech	
■ 5 - Greatly exceeded	.0%	15.4%	41.2%	15.8%
■ 4	11.8%	76.9%	29.4%	42.1%
■ 3	70.6%	7.7%	29.4%	31.6%
■ 2	17.6%	.0%	.0%	10.5%
■ 1 - Did not meet at all	.0%	.0%	0.0%	0.0%
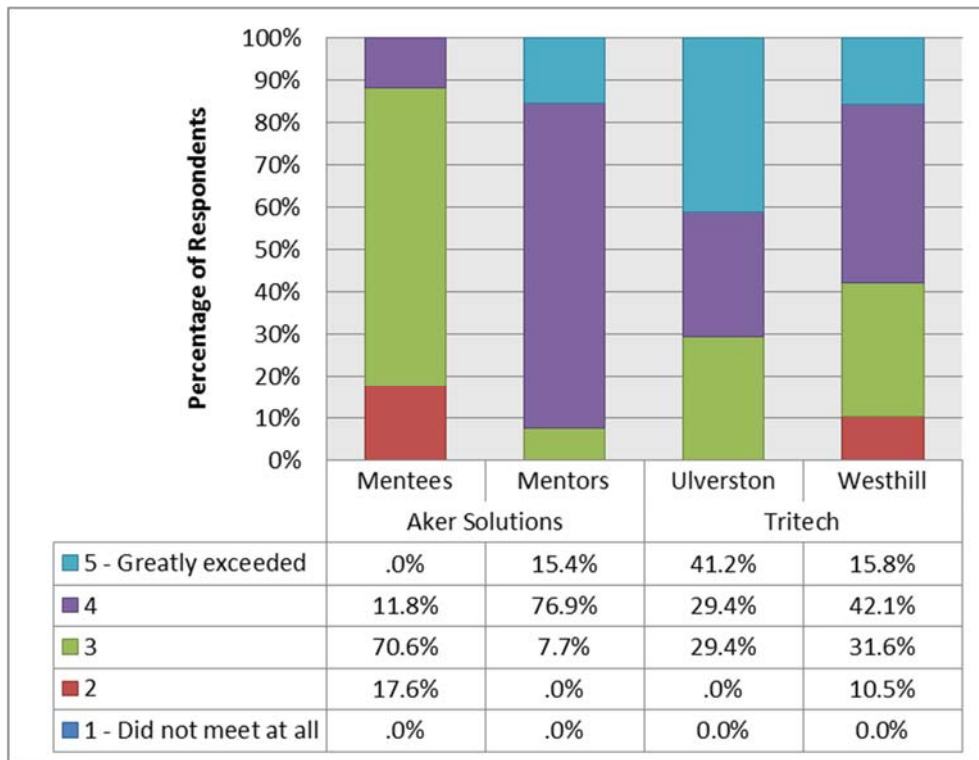
We sought to explore these responses in our interviews with a sample of people from both companies who had participated in their respective workshops. At Aker Solutions, we spoke to a mixture of mentors and mentees, whilst at Tritech we spoke with a mixture of participants from the Westhill and Ulverston sites.

Overall, the general reaction to the workshop in the interviews matched the findings from the surveys as laid out above. Among both Tritech groups and the mentors from Aker Solutions, the evidence from the interviews was that they had enjoyed the sessions. The mentees from Aker Solutions were less positive: this is discussed in greater depth below. In terms of the response from the other three sub-groups, the response from Tritech participants was overall more positive than from Aker Solutions participants, with Tritech's Ulverston participants the most positive of all of our interviewees. Interviewees from these three sub-groups explained that the workshops had been enjoyable and relevant.

> *It all seemed fairly relevant to what we were doing.*

(Tritech Ulverston participant)

It was all pretty consistent. It was all very informative and useful.

<div align="right">(Tritech Westhill participant)</div>

Really engaging and very, very good […] Whether the people around about me got the same opinion, I don't know. I certainly didn't hear any negative comments.

<div align="right">(Aker Solutions mentor)</div>

There was also praise for the delivery format. It was felt that conducting a face-to-face, group-based intervention was definitely the correct approach to take, rather than a more individually based, distance learning or blended learning approach. In particular, the interactive and discursive nature of the sessions was praised. Hearing different experiences from different areas of the company was also highlighted as a real benefit, allowing people to see how mentoring can or could work outside their own department. Within both companies, interviewees stated that participating in the sessions alongside members of senior management suggested to them that their company was taking the issue seriously.

I didn't actually know that the top managers at Tritech were that interested in it [i.e. mentoring], to be honest with you. I thought that was quite nice, actually, to get that kind of feedback […] I think they seemed to get quite a lot from it.

<div align="right">(Tritech Ulverston participant)</div>

Particular praise was also expressed by interviewees from these three sub-groups for the RGU presenters, who were congratulated for making the sessions engaging and for being able to provide numerous real world examples to illustrate mentoring theory being put into practice.

[The] enthusiasm of the presenters, I thought, was absolutely superb […] All the lecturers who I came across just amazed me so much, because they were all bursting with enthusiasm. They were getting great satisfaction out of passing on their knowledge to other people.

<div align="right">(Aker Solutions mentor)</div>

There were, however, some concerns raised by participants. In particular, the group of mentees at Aker Solutions raised concerns in greater numbers than other sub-groups. Their specific concerns

are dealt with in greater depth below. However, a number of pieces of constructive criticism emerged consistently across all sub-groups. Firstly, interviewees suggested that it might be beneficial to hold more than one session. Although they were generally pleased with the information being conveyed to them, it was felt that one workshop of a few hours' duration was insufficient to do justice to the content of the session. As a result, some interviewees suggested that the day had seemed somewhat rushed. Others suggested that they would have liked to have been given <u>more</u> information than was delivered on the day, but for this to be provided in a series of shorter, themed workshops running over a period of, say, a few weeks rather than just one single session.

> *It kind of gets you in the mind-set as well if you are doing something for a few weeks rather than just for one day, randomly.*
>
> (Aker Solutions mentee)

> *You could have it shorter, but more of them and more structured. And then once you've got the basis, then I would start restricting it down to certain areas, like engineering or admin.*
>
> (Aker Solutions mentor)

Secondly, a minority of interviewees in each company commented that they felt the workshop had perhaps been pitched at too general a level. These interviewees felt that the slides being used were somewhat generic, and that tailoring them more to the audience's needs would considerably increase the immediate impact, accessibility and relevance of the materials to the workshop participants. This tailoring took two forms. Firstly, it was recommended that more attention be paid to specific company circumstances. Secondly, it was felt by some participants that greater attention could be paid to the disciplines from which participants are drawn.

> *It did just feel that other than the Aker logo being in on some slides, it was a generic presentation.*
>
> (Aker Solutions mentee)

> *I can only speak on behalf of my own discipline and we obviously do things a little bit different, maybe as opposed to engineering where they've got the graduates going from*

different parts to different parts. Their mentoring is quite different from ours [...] Everything's geared towards engineering, but engineering are not the only discipline in the company.

(Aker Solutions mentor)

Related to this were a small number of comments about the pitch of the presentation materials. A small number of interviewees within Aker Solutions commented that they felt the workshop would have been better received if it had been more industry focussed. These interviewees felt that the session had been too academic in tone. However, interviewees also accepted that getting the pitch right depended in large part upon the companies feeding relevant contextual information to the presenters. These interviewees were sceptical as to whether this had been done by their company. Indeed, some interviewees within Aker Solutions were unconvinced that their company was completely committed to the premise of the workshop, with concerns expressed that the session seemed like an HR box-ticking exercise.

I never, ever deal with senior management just now, ever. So I don't really know what their ideas were about the thing or who was driving it [...] It seemed like an HR exercise, but I don't know if someone from senior management had suggested it or whether they've truly invested in it.

(Aker Solutions mentee)

The idea of the scheme and the principles, they are all in the right place [...] It's just like you really need the company to be fully invested in it, and it just doesn't seem like Aker really are.

(Aker Solutions mentee)

As mentioned above, the general response from the Aker Solutions mentees we interviewed was markedly less enthusiastic than that of the other three sub-groups. Given that the quantitative results laid out above in Tables 15-18 revealed much the same type of finding, this is not particularly surprising. However, in terms of accounting for the differences in reaction, a few issues from the interviews are worth noting.

The first thing to note is that the mentees interviewed were very positive about the session in which they participated alongside mentors. Given that many of the mentees were very new to the company, and given that many of them (including longer term mentees) did not have mentors, the opportunity to mingle with mentors and take part in collaborative exercises was seen as a real strength of the opening session of the Aker Solutions workshop.

> *The first part of the day was useful. We had a sort of integrated session with a lot of more experienced people in the company, so we got a chance to talk to them about their experiences […] That was really good.*
>
> (Aker Solutions mentee)

However, they were markedly less enthusiastic about the following session, in which the mentors and mentees were separated into distinct rooms to receive slightly different presentations. A number of reasons were suggested by our interviewees for the less positive response to the workshop among mentees.

Firstly, the interviewees recognised that the diversity of the group made it difficult to treat them as a homogeneous group. The mentees group contained employees with a wide range of experience and exposure to personal development of this nature. Some mentees had only joined the company a few weeks previously direct from high school, whilst others had completed engineering degrees and worked for the company for a number of years. Interviewees explained that the mentees within the group had very different mentoring needs according to their background: for some it was a crucial aspect of their development towards chartered status, whilst for others it may have been an entirely new concept. The interviews with mentees reflected this tension, with some mentees claiming that the training had been pitched too high and others asserting that it had been pitched too low. A number of the mentees mentioned that this had produced some difficulties in this session, with some mentees feeling that their needs and opinions had not been addressed, or had been overlooked. In addition, the time pressures mentioned above meant that it was not possible for these concerns to be addressed by the presenter, which left some mentees feeling frustrated. These interviewees believed that if these sessions were to be repeated in future, more preparation should be carried out (both by the company and by the facilitators of the workshop) to ensure that the needs of different types of

mentee were identified and addressed accordingly, perhaps in separate groups or by matching mentees with experience and those without.

Say you do SWOT analysis, for example. I knew all about it; the guy next to me had never heard of it [...] I don't know whether it would have worked, but maybe divide the time equally between these different techniques, and if there are people that have used it before, they could work with people that hadn't. That way, if you can't divide up the session then you can at least take advantage of other people's abilities and knowledge.

(Aker Solutions mentee)

Maybe there was too much of an assumption on the part of the people who were delivering these sessions that you can treat all mentors as one group and all mentees as one group [...] In reality, the range of experience and backgrounds within both of those groups is incredibly wide. Maybe you need to drill down a bit deeper to make it meaningful for all the people there.

(Aker Solutions mentee)

This issue was also identified by one of the strategic representatives of Aker Solutions we interviewed.

Design School [i.e. the school/College leavers] had just come in as well, so they hadn't been exposed to any mentoring. Then all of a sudden we were trying to tell them the basics about mentoring, if that makes sense, whereas I think their expectations were something slightly different [...] We maybe should have just done the Design School: you know, had those four designers and trying to make it work for them as a pilot. Rather than the whole group, where you've got people who've been in the graduate or trainee scheme for three to four years compared to a six month trainee with slightly different needs.

(Aker Solutions representative)

In addition, it should also be noted that there were different degrees of compulsion in relation to participants' attendance at the sessions. At Tritech, attendance was strongly encouraged in Westhill, but more discretionary in Ulverston. At Aker Solutions, mentors were requested to attend (although again this was not compulsory), whilst for mentees attendance was compulsory.

At Aberdeen you've got a lot of the site involved, whereas [at] Ulverston, you haven't, and it's probably the people that have got more of a positive attitude taking part […] [If] they had been forced into doing it, maybe that result would be a different way round.

(Tritech representative)

Although it was important to ensure as healthy as possible an attendance on the day, this element of compulsion may play a part in the different reactions to the session, particularly in terms of enjoyment. Where attendance was voluntary, it might reasonably be expected that those who attend would have an interest in the topic and learning about the matter at hand. Where attendance was compulsory, on the other hand, this interest and goodwill would not be guaranteed. In addition, for very new entrants at Aker Solutions, the value of having mentoring support may not yet have become apparent, potentially making the experience seem irrelevant or disconnected from their role (particularly for those who had not yet been allocated mentors). This was highlighted as an issue by the pilot delivery team.

What we didn't know was the fact that an awful lot of people [i.e. mentees] who in theory were supposed to be on the scheme, didn't know that they were on the scheme. That didn't come to the surface until we actually started doing the training.

(Pilot Delivery Team)

Indeed, the feedback from some experienced mentors in Aker Solutions suggested that this may be the case, with concerns expressed about the extent to which the correct "selling job" had been done within the company prior to the workshop. This was seen not only as a reason for lower than expected attendance from mentors, but also as a possible explanation for the response from the mentees (in the sense that the relevance of the session had not been fully communicated to them).

I was invited along to the presentation, but I don't know what the aim was.

(Aker Solutions mentor)

Learning

Having considered participants' reaction to the workshops, we used a combination of survey forms (collected on the day of each session) and follow-up interviews (in the weeks or months following each session) to establish exactly how much participants felt they had learned through their participation in the workshops.

The way in which we obtained our 'pre' and 'post' intervention scores is laid out in the Methodology section. In the remainder of this section, we explore the extent to which participants felt they developed their understanding of key aspects of mentoring through their participation. Where relevant and appropriate, we elaborate upon the quantitative survey results with evidence gained from our qualitative interviews.

The first questions we consider relate to participants' understanding of the mentoring context within their company. Due to the difference between the two companies in terms of the existence of previous mentoring schemes, the questions asked of participants was slightly different in the two companies.

Beginning with Aker Solutions (in which a mentoring scheme has existed for a number of years), participants were asked (using a 5-point scale) how well they understood the role of mentoring within Aker Solutions prior to and following their participation in the workshop. The mean pre- and post-participation responses from mentors and mentees are provided below in Table 19. The results show that both mentors and mentees had a patchy understanding of the role of mentoring within Aker Solutions prior to taking part in the mentoring session. However, in both groups there was a clear increase in understanding as a result of taking part in the session.

Table 19: On a scale of 1-5, how would you rate your understanding of the role of mentoring within Aker Solutions?

	Aker Solutions	
	Mentees	**Mentors**
Mean PRE score	2.33	2.17
Mean POST score	3.64	3.56

Turning to Tritech, participants were asked to rate how well they understood the importance of introducing a formal mentoring system to the company. Given that the impetus for the introduction of a formal mentoring system appears to have been driven by the Westhill site, it is perhaps unsurprising to see in Table 20 that pre-session understanding was higher there than in Ulverston. However, following the session, the importance of mentoring to Tritech appeared to be better understood in Ulverston than in Westhill, although understanding had clearly increased at both sites as a result of taking part.

Table 20: On a scale of 1-5, how would you rate your understanding of the importance of mentoring to Tritech?

	Tritech	
	Ulverston	**Westhill**
Mean PRE score	2.94	3.60
Mean POST score	4.35	4.10

Tritech participants were then asked to rate how well they understood the type of mentoring approach envisaged by the company. Again, Table 21 shows that the same pattern was evident in relation to this question: pre-workshop understanding was lower in Ulverston than in Westhill, although understanding increased at both sites with Ulverston employees ultimately appearing to have a better understanding than their Westhill counterparts of the type of mentoring scheme envisaged by the company.

Table 21: On a scale of 1-5, how would you rate your understanding of the type of mentoring approach which Tritech wants to implement?

	Tritech	
	Ulverston	**Westhill**
Mean PRE score	2.33	2.85
Mean POST score	4.18	3.90

Participants from both companies were subsequently asked a series of identical questions relating to the content of the sessions (which was broadly similar across the two companies). Firstly, all participants were asked to rate their understanding of the role of a mentor (see Table 22). For each company and sub-group, understanding improved in each case. Pre-workshop understanding

in each group of Aker Solutions participants was lower than in the Tritech sub-groups. However, each sub-group showed considerable improvement in the mean level of understanding as a result of taking part in the workshop. Improved understanding was least pronounced among Tritech's Westhill employees, although it is worth noting that this is offset by the fact that their pre-session understanding (and also their post-session understanding) was higher than in any of the other sub-groups.

Perhaps surprisingly, mean levels of pre-workshop understanding were lowest among mentors in Aker Solutions, when it might be expected that those who have been involved in a mentoring scheme for a number of years should show the highest levels of understanding of their role. On the other hand, the purpose of including Aker Solutions in the pilot was because they felt that their mentoring scheme was not working well. These results are perhaps indicative of a lack of understanding of key roles being a contributory factor to the under-performance of the extant Aker mentoring scheme.

Table 22: On a scale of 1-5, how would you rate your understanding of the role of a MENTOR?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean PRE score	2.83	2.78	3.17	3.60
Mean POST score	3.64	3.83	4.18	4.20

Similarly, all participants were then asked to rate their understanding of the role of a mentee (see Table 23). The mean responses were unsurprisingly similar to those in relation to the role of a mentor (see above). Mean pre-workshop levels of understanding were lower overall in Aker Solutions than in Tritech, although understanding among Aker Solutions' mentees was marginally higher than among Tritech's Ulverston employees. Pre-workshop awareness was once again lowest among Aker Solutions' mentors and highest among Tritech's Westhill employees. For both companies, there was a notable increase in mean levels of understanding of the role of a mentee following the workshop. Understanding was still higher overall in Tritech than in Aker Solutions, but there was little difference between the two sub-groups in each company.

Table 23: On a scale of 1-5, how would you rate your understanding of the role of a MENTEE?

	Aker Solutions		Tritech	
	Mentees	Mentors	Ulverston	Westhill
Mean PRE score	3.18	2.94	3.11	3.55
Mean POST score	3.80	3.83	4.24	4.15

A similar pattern could also be seen in relation to participants' pre- and post-workshop understanding of the key responsibilities associated with being a mentor (see Table 24) and a mentee (see Table 25). Pre-workshop awareness was lower in Aker Solutions than in Tritech, which is surprising given the previous experience of both companies (or lack thereof, in Tritech's case). The mean post-workshop scores suggest that understanding increased over the course of the session, although post-workshop understanding was still higher among Tritech participants than their Aker Solutions counterparts.

Table 24: On a scale of 1-5, how would you rate your understanding of the key responsibilities associated with being a MENTOR?

	Aker Solutions		Tritech	
	Mentees	Mentors	Ulverston	Westhill
Mean PRE score	2.92	2.83	3.06	3.45
Mean POST score	3.73	3.89	4.18	4.25

Table 25: On a scale of 1-5, how would you rate your understanding of the key responsibilities associated with being a MENTEE?

	Aker Solutions		Tritech	
	Mentees	Mentors	Ulverston	Westhill
Mean PRE score	2.82	2.83	2.89	3.55
Mean POST score	3.70	3.72	4.18	4.10

The same trend was also apparent when considering pre- and post-workshop understanding of the key skills and behaviours associated with being a mentor (see Table 26) and a mentee (see Table 27). Mean levels of pre-and post-workshop understanding were higher among Tritech participants than Aker Solutions participants. In particular, mean levels of understanding of the key skills and behaviours associated with being a mentor were lowest among the mentor sub-group in Aker

Solutions, despite the fact that many mentors had previously been involved in mentoring relationships within the company. Again, this testifies to the importance of one of the key findings of the Interim Research Report; namely that it is important to establish rigour in a mentoring scheme and that leaving people just to 'get on with it' is unlikely to yield positive results or even an understanding of how to perform in the role as a mentor. Although the results here show a clear increase in mean levels of understanding of the key roles and responsibilities associated with both sides of the mentoring relationship, the fact that mean levels of understanding are still lowest among mentors in Aker Solutions is an important issue which the company will perhaps wish to address in future.

Table 26: On a scale of 1-5, how would you rate your understanding of the key skills and behaviours associated with being a MENTOR?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean PRE score	3.17	2.72	3.00	3.35
Mean POST score	4.00	3.61	4.24	4.05

Table 27: On a scale of 1-5, how would you rate your understanding of the key skills and behaviours associated with being a MENTEE?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean PRE score	2.91	2.89	2.94	3.45
Mean POST score	3.80	3.72	4.18	4.00

The next aspect of impact considered by our evaluation focussed on understanding of the impact the mentor-mentee relationship has on the success of mentoring. Unlike previous areas of understanding, mean levels of pre-workshop understanding of this factor were higher in Aker Solutions than in Tritech (see Table 28). The level of understanding was highest among mentors in Aker Solutions. We would hypothesise that this is a reflection of the fact that Aker Solutions has prior experience of introducing a mentoring scheme. The fact that these previous attempts were deemed unsuccessful would, we suggest, account for the fact that many of the mentors (and some of the mentees) involved in this workshop would have prior experience of less-than-successful mentoring relationships. Bearing in mind the relatively low mean levels of understanding of the

key skills, behaviour and responsibilities associated with being a mentor or mentee in Aker Solutions, these results suggest that the negative experience of Aker Solutions mentors/mentees in the past has made it clear to them how important it is to establish these key aspects of a mentoring relationship if it is to be successful.

Table 28: On a scale of 1-5, how would you rate your understanding of the impact the mentor-mentee relationship has on the success of mentoring?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean PRE score	3.24	3.46	2.78	3.05
Mean POST score	4.12	4.46	4.44	4.10

The next area of impact to be considered in our evaluation was participants' understanding of how to build up an effective mentoring relationship. The mean pre- and post-workshop levels of understanding across the different sub-groups of the two companies are laid out below in Table 29. The results again seem to point to Aker Solutions' previous experience of mentoring. The level of pre-workshop understanding in both of Aker Solutions' sub-groups was higher than in either of Tritech's sub-groups, presumably as a result of Aker Solutions' prior experience of mentoring, whether successful or unsuccessful. Pre-workshop understanding among Tritech's Ulverston employees was lower than the company's Westhill employees, but the post-workshop scores suggest that mean levels of understanding of this factor are now higher in Ulverston than in Westhill. Both Aker Solutions sub-groups also showed an increase in their levels of understanding, although the post-workshop scores are still perhaps lower than might have been hoped.

Table 29: On a scale of 1-5, how would you rate your understanding of how to build up an effective mentoring relationship?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean PRE score	3.12	2.92	2.59	2.84
Mean POST score	4.18	4.00	4.06	3.84

The next aspect considered was participants' understanding of the listening, questioning and feedback skills required to be a good mentor or mentee. In terms of listening skills (see Table 30),

the results show fairly similar pre- and post-workshop levels of understanding, with participants in each company and sub-group reporting an increase in mean levels of understanding in this area.

Table 30: On a scale of 1-5, how would you rate your understanding of the listening skills required to be a good mentor/mentee?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean PRE score	3.38	3.38	3.11	3.35
Mean POST score	4.12	4.31	4.39	4.30

In terms of questioning skills (see Table 31), the results show that mean levels of pre-workshop understanding were lower among mentors than mentees within Aker Solutions. However, this may simply be a reflection of the fact that questioning skills are likely to play a bigger part in being a mentee than in being a mentor. Post-workshop levels of understanding across the two sub-groups were broadly similar, with both showing an increase on their pre-workshop levels of understanding.

At Tritech, both Ulverston and Westhill employees showed increased levels of understanding of the questioning skills required to be a good mentor/mentee. The increase was more pronounced among Ulverston employees, whose mean pre-workshop scores were lower than those of their Westhill counterparts, with this trend reversed in relation to mean post-workshop scores.

Table 31: On a scale of 1-5, how would you rate your understanding of the questioning skills required to be a good mentor/mentee?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean PRE score	3.24	2.92	3.00	3.20
Mean POST score	4.06	4.15	4.28	4.10

The same type of pattern was evident in relation to feedback skills (see Table 32). At Aker Solutions, pre-workshop levels of understanding were lower among mentors than mentees, although both sub-groups reported similar mean post-workshop scores. At Tritech, mean levels of pre-workshop understanding were lower in Ulverston than in Westhill, but this switched when

considering post-workshop understanding scores. In general, although aggregated pre-workshop levels of understanding were similar between the two companies were similar, post-workshop levels of understanding in this area appear to be higher in Tritech than in Aker Solutions.

Table 32: On a scale of 1-5, how would you rate your understanding of the feedback skills required to be a good mentor/mentee?

	Aker Solutions		Tritech	
	Mentees	Mentors	Ulverston	Westhill
Mean PRE score	3.18	2.92	2.89	3.35
Mean POST score	4.00	3.92	4.33	4.05

The next question in our evaluation pertained to a portion of the workshop which was targeted at mentees only. As such, Aker Solutions' mentors are excluded from Table 33 (see below) which nevertheless includes both Tritech sub-groups, as the proposed network mentoring model depends upon employees taking on the role of both mentor and mentee.

Again, pre-workshop awareness of how to set the direction of a mentoring relationship was higher among Aker Solutions participants than Tritech participants, presumably reflecting the difference between their respective prior experience(s) of mentoring. Although understanding increased across all three sub-groups as a result of their participation, the increase was once again most pronounced among Tritech's Ulverston participants, whose mean post-workshop level of understanding was higher than that of their Westhill counterparts or even Aker Solutions' mentees.

It is perhaps worth pointing out again that for this important aspect of mentoring, the post-workshop scores are perhaps slightly lower than might have been hoped. This is possibly something which the companies involved might wish to consider revisiting in future.

Table 33: On a scale of 1-5, how would you rate your understanding of how to set the direction (i.e. development goals etc.) you want your mentoring relationship to follow?

	Aker Solutions	Tritech	
	Mentees	Ulverston	Westhill
Mean PRE score	3.12	2.76	2.58
Mean POST score	3.94	4.06	3.68

Another key aspect of developing an effective mentoring scheme is ensuring that meetings between mentors and mentees are prepared and conducted effectively. Table 34 contains the mean levels of pre- and post-workshop understanding of this factor across the two participant companies. Again, pre-workshop understanding of this practical aspect of the mentoring process was lower among Tritech participants than Aker Solutions participants. It may once again be the case that prior exposure of Aker Solutions staff to the practical side of mentoring has resulted in their being aware of how to carry out this aspect of mentoring. Awareness increased across all sub-groups as a result of participating, although it is again worth noting that the post-workshop understanding among Tritech Westhill employees was lower than among other groups.

Table 34: On a scale of 1-5, how would you rate your understanding of how to prepare and hold effective mentoring meetings?

	Aker Solutions		Tritech	
	Mentees	Mentors	Ulverston	Westhill
Mean PRE score	3.24	2.92	2.29	2.47
Mean POST score	4.35	4.08	4.12	3.58

The mentoring workshop for each company also provided them with an introduction to a number of tools (such as SWOT analysis, mind-mapping, ABC, 4 As etc) which should be able to assist them with their mentoring relationship. Table 35 (below) shows that pre-workshop awareness of these tools was notably higher among Aker Solutions participants than Tritech participants, and broadly consistent across the two sub-groups within each company. This is presumably another reflection of Aker Solutions previous work in this area of staff development. Despite higher levels of pre-workshop awareness, levels of understanding across the sub-groups increased to the point where

mean levels of post-workshop understanding were broadly consistent across sub-groups, although understanding was again lowest among Tritech Westhill employees.

Table 35: On a scale of 1-5, how would you rate your understanding of how to use the tools (e.g. SWOT, ABC, mind-mapping etc.) available to support mentoring?[12]

	Aker Solutions		Tritech	
	Mentees	Mentors	Ulverston	Westhill
Mean PRE score	2.71	2.77	1.82	1.89
Mean POST score	3.76	3.67	3.71	3.37

The importance of different learning styles was also emphasised by the workshop facilitators. Pre-workshop understanding of different learning styles was similar across Aker Solutions mentors, Aker Solutions mentees and Tritech Ulverston participants (see Table 36 below). The mean level of understanding was again markedly lower among Tritech Westhill participants. As a result of the intervention, mean levels of understanding clearly increased across each sub-group, particularly at Tritech, where mean levels of post-workshop understanding (even among Tritech Westhill participants) were higher than at Aker Solutions.

Table 36: On a scale of 1-5, how would you rate your understanding of different learning styles?

	Aker Solutions		Tritech	
	Mentees	Mentors	Ulverston	Westhill
Mean PRE score	3.00	3.00	3.11	2.50
Mean POST score	3.88	3.83	4.44	4.00

The subsequent impact of different styles upon the mentoring approach required was also covered in the workshop. Table 37 (below) shows that there were few differences within and between the two companies involved. As would be expected given their higher levels of pre-workshop understanding of different learning styles (see Table 36 above), it is unsurprising that pre-workshop awareness of the different types of experience which suit different learning styles was slightly higher among Aker Solutions participants than Tritech participants. However, mean

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[12] There were some minor differences between the tools delivered to the two companies. For Tritech, the question was phrased as follows: "On a scale of 1-5, how would you rate your understanding of how to use the tools (e.g. Dilts model, "4 As" etc.) available to support mentoring?"

aggregated levels of post-workshop understanding of this aspect of mentoring were slightly higher in Tritech than in Aker Solutions. Once again, levels of post-workshop understanding were highest among Tritech Ulverston employees.

Table 37: On a scale of 1-5, how would you rate your understanding of the types of experience which best suit different learning styles?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean PRE score	2.94	2.77	2.61	2.65
Mean POST score	3.88	3.75	4.11	3.85

The final question in this section applied to Tritech only. Given the geographic distance between their sites and their focus upon pooling knowledge through a network mentoring approach, the company was very keen to explore the benefits and limitations of adopting an e-mentoring system. Table 38 sets out the mean levels of pre- and post-workshop understanding of the benefits and limitations of e-mentoring in Ulverston and Westhill. The results show that levels of understanding were relatively low across both sites prior to the workshop. While the level of understanding increased considerably among Ulverston employees, the increase was less pronounced among Westhill employees. Again, this is something which the company may wish to consider as it moves forward with its nascent mentoring system.

Table 38: On a scale of 1-5, how would you rate your understanding of the benefits and limitations of e-mentoring?

	Tritech	
	Ulverston	**Westhill**
Mean PRE score	2.53	2.32
Mean POST score	3.94	3.00

The quantitative results on pre- and post-session knowledge of the key areas of mentoring covered in the session clearly demonstrate that participants from both sub-groups in each company increased their knowledge in each area. Despite the apparently clear evidence of impact in this respect, we nevertheless used our interviews to gather some additional evidence on the extent to which participants felt they had learned from the workshop.

A number of additional points and areas of explanation/clarification emerged from the interviews. Firstly, most interviews suggested that participants found most of the information relevant to their position as a mentor/mentee. Again, the exception to this was the mentees sub-group within Aker Solutions, who argued that because of the wide variation in their backgrounds, much of the information was either pitched too high or too low.

> *The information was quite basic. It might have been more suited to school leavers for example: how to operate in an office, you know?*
>
> (Aker Solutions mentee)

> *The material that we got in the mentee session, which was very, very simplified to me… Like talking to people who are working; it just didn't seem the right sort of level […] I can't speak for anyone else, I've no idea; but I know that I was bored.*
>
> (Aker Solutions mentee)

Interestingly though, most interviewees across all sub-groups said that for the most part, the information delivered was not entirely new to them. This was not necessarily implied as a criticism, as in many cases it was seen as very useful to have had a refresher on the points in question. This is perhaps a useful explanatory account to use in understanding the quantitative results: for many of the areas covered, the mean level of pre-session knowledge was higher than might have been expected. The notable exceptions to this are the questions on the intended type of mentoring approach proposed for each company, in which levels of pre-session knowledge are lower than might have been expected. Our feedback suggests that each company's concept of mentoring had not been widely communicated within the company beforehand; suggesting that this was an area in which the information delivered was not simply a refresher. Much of the information conveyed was seen as being common sense or good business practice, and a number of interviewees said that they were already carrying out these activities without knowing that they were associated with the concept of mentoring.

> *A lot of the mentoring stuff is what we already do; it's just we don't call it mentoring […] It was interesting but […] I didn't feel I learned an awful lot from it; there was no 'revelation'.*
>
> (Tritech Ulverston participant)

I've served an apprenticeship before, so I know what's expected between a trainee and a journeyman [...] I know what worked and what didn't [...] It was just like they were trying to tell me how to build relationships, which I've done in the past.

(Aker Solutions mentee)

As a result of this, our interviews confirmed that most people obtained a clearer understanding of the topics discussed, rather than a considerable increase in knowledge on them.

I thought certain parts were interesting and I thought certain parts were not very useful. I think I knew most of certain parts of it already.

(Aker Solutions mentee)

There was a lot of new things there, but then there was also a lot of things that you knew about but you didn't actually know you were doing, or it highlighted things that maybe you do on a day-to-day basis but you didn't see it in that sort of light. But I would say probably about 50/50.

(Tritech Westhill participant)

Maybe about 80% of it came across as techniques that I'd used [...] I think most of it I'd come across to some extent. A lot of it I'd actually forgotten or had not needed to implement.

(Tritech Westhill participant)

Despite the mixed reaction in terms of the relevance and novelty of the information conveyed, our interviewees consistently identified one aspect of the workshop as having been both helpful and relevant. The area in question was the section on learning styles, which was praised by mentors and mentees within Aker Solutions, and by Westhill and Ulverston participants in Tritech. Indeed, there was evidence of this aspect of the learning having made a real difference on a personal level to many of our interviewees: this is discussed at greater length in the next section on behaviour.

I wasn't aware of any of us having certain learning styles. I just thought we were told what to do and that was it [...] If I ever got somebody who needed to work under me, I'd quite like

to know how they learn so I'd know the best way to transfer the knowledge over to them. And the same with knowing how your peers learn as well, so that they know how you learn so that they can teach you in the best way.

<div align="right">(Tritech Westhill participant)</div>

A number of our interviewees expressed surprise that one specific aspect of learning was not included in the workshop. However, this was not intended as a criticism of the delivery team. Rather, interviewees stated that they had been expecting their companies to provide them with information on the day about what the next steps within the company would be. It was felt that this would have been the logical conclusion to the session within both Aker Solutions and Tritech, and participants felt that this may have had an impact upon the longer-term effects of the workshop (again, this is discussed in more depth in the next section).

Tailoring the presentation, I assume, would come down to the [RGU] section of this. Leaving it hanging, that's probably mainly down to the Aker staff, because I suppose they're the ones that will be implementing it [...] So maybe both parties needed to work together a bit more.

<div align="right">(Aker Solutions mentee)</div>

The two companies also identified issues specific to their particular workshop. At Aker Solutions, mentees were very surprised that the session had not included information on who their mentees would be. Our interviewees suggested that they had expected this information to be provided to them on the day. However, this was not forthcoming: indeed, some mentees explained that they were disappointed not to have received any such information at all between the point at which the workshop ended and the interview took place.

As mentioned above, a small number of Tritech interviewees also identified areas of learning which they had expected would be present in the workshop. Specifically, this related to the idea of physically capturing and transferring information. This was a key aspect of the Tritech approach, and the interviewees who mentioned this stated that they had expected that some kind of information on systems to do this would be provided during the session.

It didn't teach me what I <u>really</u> wanted to know: [...] 'how do I capture the knowledge physically?' And then the software packages and stuff like that which we'd need to look at. I know from the mentoring side that I don't feel I learned anything. It just kind of put down in black and white what we do already, just gave them a name and terms to what we do.

(Tritech Ulverston participant)

At Tritech, we were also keen to explore the pattern which emerged in the quantitative results, whereby learning among Ulverston employees was typically greater than among Westhill employees. We probed as to why this might be the case during our interviews, but there was no clear answer offered by our interviewees. A number of suggestion were provided, though. Firstly, it was thought that the area of focus in Westhill may be less conducive to mentoring concepts than would be the case in Ulverston. A small number of Tritech interviewees explained that the Westhill location was more focussed on sales and engineering than the Ulverston location, which focussed far more upon skilled assembly processes (including much more of a reliance on apprentices). Whereas some interviewees saw the former as being better inclined towards a more individualistic approach, they saw the latter as being more disposed to the idea of sharing knowledge and therefore being more open to learning and having higher interest levels.

It's a bit of a different environment in Aberdeen. We are more production orientated and we all work together whereas up there it's sales; that kind of sales environment [...] It's a different way of working. Here everything's communal; we've a lot more communication [...] We don't have our own tools. Everything's shared, whereas up there you've got your own bench, you've got your own tools. It's a bit more insular.

(Tritech Ulverston participant)

The difference between the two sites was also recognised by the strategic representatives we interviewed.

The actual roll out of the solutions eventually might be slightly different across the sites because obviously one's a production environment as opposed to an office environment. But the solution will be the same.

(Tritech representative)

Behaviour

The next level of the Kirkpatrick evaluation is behaviour. This aspect of the evaluation framework is primarily concerned with the type of impact achieved by a given intervention. We sought to measure this primarily through our qualitative follow-up interviews, but also used some questions in our quantitative surveys issued on the day of the workshops to gain a baseline reading in relation to a small number of key indicators, which were then re-measured during the interviews. These areas were the listening skills, questioning skills and feedback skills identified by the workshop as being important to being a good mentor or mentee.
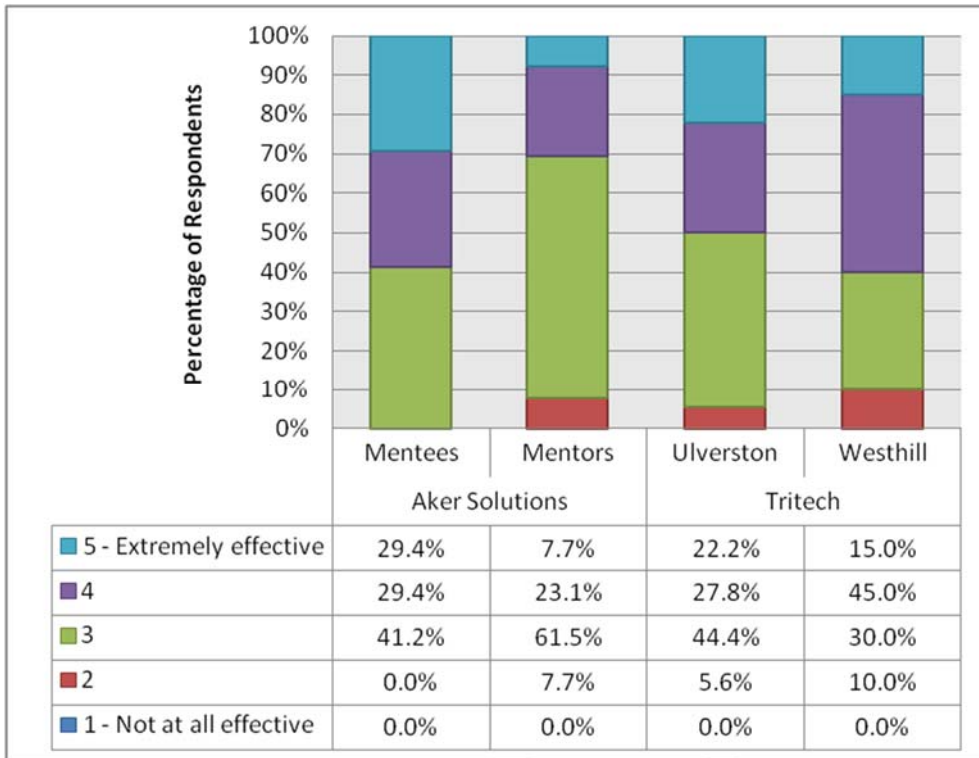
Firstly, we asked participants in their workshop evaluation forms to tell us how well they feel they perform in relation to the listening skills associated with being a good mentor/mentee. The results from all participants in each sub-group are laid out below in Table 39. This shows that the highest mean score was provided by mentees at Aker Solutions, whilst the lowest was provided by mentors in the same company. The responses between different geographical locations in Tritech were very similar. However, overall there was little absolute difference between any of the sub-groups.

Table 39: On a scale of 1-5, how would you rate your current effectiveness at using the listening skills required to be a good mentor/mentee?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean score	3.88	3.31	3.67	3.65

These results are further broken down below in Figure 26. They show that there was very little difference in the proportions of responses received from Ulverston and Westhill participants in Tritech, whilst in Aker Solutions the proportion of positive responses (i.e. '4' or '5') is twice as large among mentees as among mentors.

Figure 26: On a scale of 1-5, how would you rate your current effectiveness at using the listening skills required to be a good mentor/mentee?

	Mentees	Mentors	Ulverston	Westhill
	Aker Solutions		Tritech	
■ 5 - Extremely effective	29.4%	7.7%	22.2%	15.0%
■ 4	29.4%	23.1%	27.8%	45.0%
■ 3	41.2%	61.5%	44.4%	30.0%
■ 2	0.0%	7.7%	5.6%	10.0%
■ 1 - Not at all effective	0.0%	0.0%	0.0%	0.0%

As outlined above, we used our telephone interviews to gauge whether or not our sample of interviewees had seen any development in their competency in these three key areas following the workshop. We asked them the same question as the one provided in the survey on the day, and then compared the mean scores given in their own survey responses and in their interviews. In relation firstly to their effectiveness at using the listening skills required to be a good mentor/mentee, the results are provided below in Table 40.

The results show that in terms of effectiveness at using the listening skills required to be a good mentor before the workshop and following the bedding-in period, that rather than an improvement in effectiveness, two of the sub-groups (mentors in Aker Solutions and Ulverston participants in Tritech) showed no difference in pre- and post-workshop scores. In the other two sub-groups, self-declared effectiveness decreased. Among Tritech's Westhill participants, there was a slight decline. Among Aker Solutions mentees, the decline was more marked.

Table 40: On a scale of 1-5, how would you rate your current effectiveness at using the listening skills required to be a good mentor/mentee? (Sub-sample)

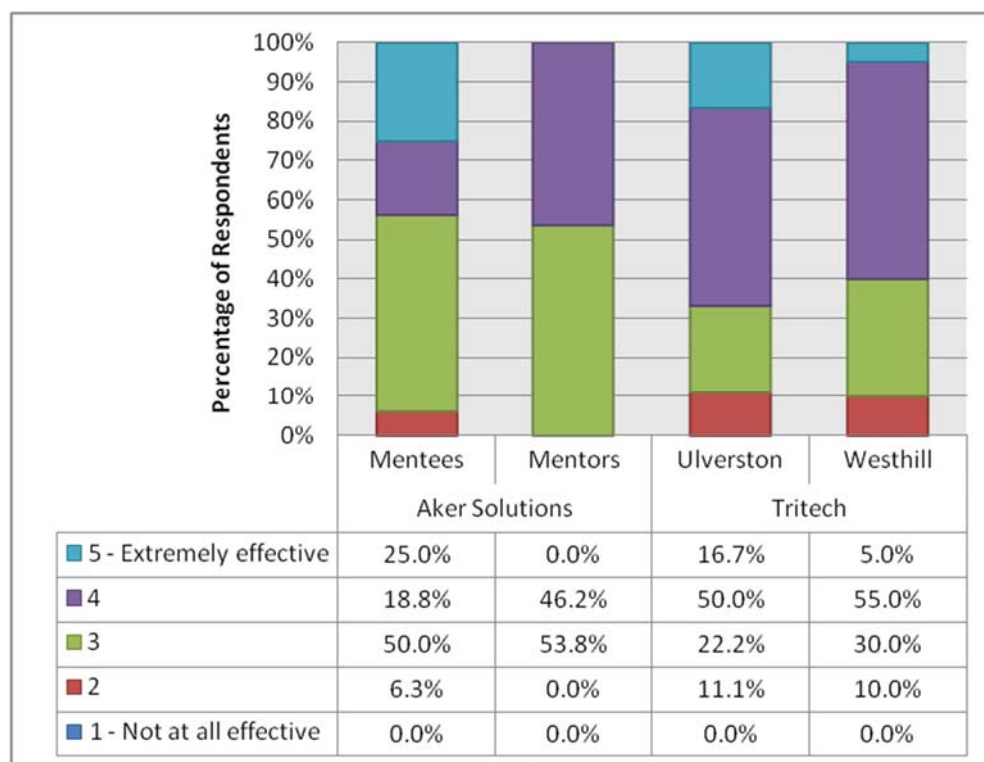|	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean PRE score	4.75	4.33	3.67	4.00
Mean POST score	3.75	4.33	3.33	4.00

The next area considered was the questioning skills required to be a good mentor/mentee. The results of asking all workshop participants this question are provided below in Table 41. Again, there is only slight variation between the different sub-groups. As with listening skills (see Table 40 above), the highest mean levels of effectiveness were reported by Aker Solutions mentees and Tritech Westhill participants, with the lowest mean level of effectiveness reported by Aker Solution mentors.

Table 41: On a scale of 1-5, how would you rate your current effectiveness at using the questioning skills required to be a good mentor/mentee?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean score	3.63	3.46	3.72	3.55

A more detailed breakdown of these results is provided below in Figure 27. There is a much wider spread between sub-groups than was the case in relation to listening skills (see Figure 26 above). Again, very few participants provided a negative response, with the overall proportion of participants providing a positive response (i.e. '4' or '5') highest in the Tritech sub-groups. As with listening skills though, the proportion of participants providing a '5' response was clearly highest among Aker Solutions mentees.

Figure 27: On a scale of 1-5, how would you rate your current effectiveness at using the questioning skills required to be a good mentor/mentee?

	Aker Solutions		Tritech	
	Mentees	Mentors	Ulverston	Westhill
■ 5 - Extremely effective	25.0%	0.0%	16.7%	5.0%
■ 4	18.8%	46.2%	50.0%	55.0%
■ 3	50.0%	53.8%	22.2%	30.0%
■ 2	6.3%	0.0%	11.1%	10.0%
■ 1 - Not at all effective	0.0%	0.0%	0.0%	0.0%

Similar to the question above, Table 42 (below) provides an overview of the mean responses given by our interviewees firstly in their workshop surveys and secondly in their follow-up interviews. The situation appears slightly more positive in relation to questioning skills than listening skills: in this case, self-reported effectiveness increased among Aker Solutions mentors and Tritech Ulverston participants. However, effectiveness appeared to decrease slightly amongst Aker Solutions mentees and Tritech Westhill participants.

Table 42: On a scale of 1-5, how would you rate your current effectiveness at using the questioning skills required to be a good mentor/mentee? (Sub-sample)

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean PRE score	4.67	3.33	3.67	3.50
Mean POST score	4.38	3.83	4.00	3.25

The final set of quantitative results obtained for this level of the Kirkpatrick evaluation model related to the feedback skills required to be a good mentor/mentee. The aggregated results

obtained at the workshops are provided below in Table 43. The results show a slight departure from the previous two areas of mentoring skills covered. In relation to using feedback skills, the lowest mean levels of self-reported effectiveness were found in the Aker Solutions mentee sub-group and the Tritech Westhill sub-group, whilst levels were slightly higher among Aker Solutions mentors and Tritech Ulverston participants.

Table 43: On a scale of 1-5, how would you rate your current effectiveness at using the feedback skills required to be a good mentor/mentee?

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean score	3.31	3.38	3.50	3.30

These results are explored in greater depth in Figure 28 below. There was little variation between sub-groups, although it is worth noting that relatively large proportions of two sub-groups (Aker Solutions mentees and Tritech Westhill participants) replied with a negative response (i.e. '1' or '2'). Other than this, the only notable difference was that the only two sub-groups to provide an 'extremely effective' response were Aker Solutions mentees and Tritech Ulverston participants.

Figure 28: On a scale of 1-5, how would you rate your current effectiveness at using the feedback skills required to be a good mentor/mentee?
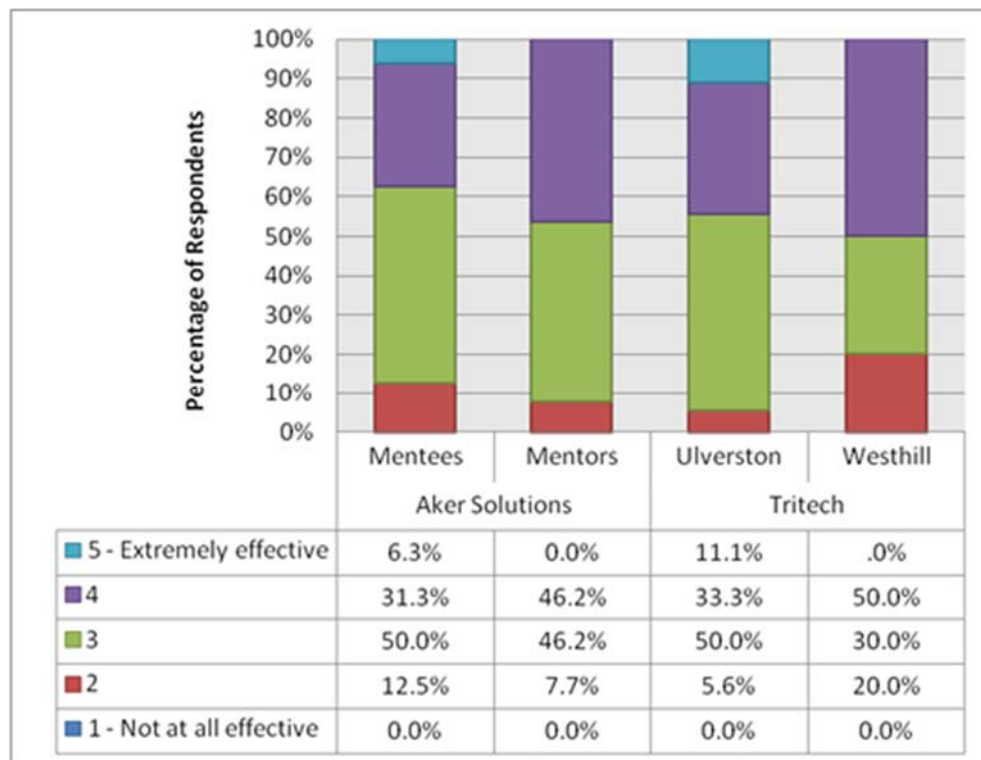
Again, our sample of interviewees was also asked to rate their effectiveness at using the feedback skills required to be a good mentor/mentee. A comparison of the mean responses given by them in their workshop surveys and in the follow-up interviews is provided below in Table 44. Once again, the picture is a mixed one: whilst the mean score increased among Aker Solutions mentors, it remained static among Tritech Ulverston participants and decreased among Tritech Westhill participants and Aker Solutions mentees.

Table 44: On a scale of 1-5, how would you rate your current effectiveness at using the feedback skills required to be a good mentor/mentee? (Sub-sample)

	Aker Solutions		Tritech	
	Mentees	**Mentors**	**Ulverston**	**Westhill**
Mean PRE score	3.33	3.33	3.67	3.50
Mean POST score	2.50	4.00	3.67	3.25

As well as exploring in more general terms the impact of the workshops on the interviewees' behaviour, we sought to consider how to account for these results. However, it is important to

note that these results should be treated with a degree of caution, given that they are based on a small selection of an already small sample of participants from each of the two companies.

The most notable early finding from most interviews was that interviewees had a limited recollection of the workshop. This was true of both Aker Solutions participants (whose workshop had taken place some six months prior to the interviews) and Tritech participants (whose intervention had taken place much more recently, just over a month before the interviews). This was indicative of the wider finding of this level of the Kirkpatrick evaluation; namely, that there was very little evidence of changed behaviour among participants.

> *As far as I can see, nothing has changed since before the session.*
>
> (Aker Solutions mentee)

The participants we interviewed pointed to two key explanatory factors for this: firstly, the nature of the information conveyed to them during the workshop; and secondly, a lack of follow-up to the workshop itself. Both of these factors were identified by interviewees in each of the two companies, although the context in relation to follow-up activity is different in Tritech than in Aker Solutions (more details on this are provided below).

In terms of the information conveyed, our interviewees suggested that because so much of the information was already reasonably familiar to them, it would not be realistic to expect a refresher on existing practice to radically alter people's behaviour. Whilst the refresher had certainly been useful in terms of reminding people about good practice, there was little evidence of significant behavioural changes accruing as a result. Where interviewees felt that things had changed, they struggled to identify particular areas of change or improvement. Among the small number of interviewees who stated that their behaviour had changed, the majority explained that the changes were not specific, but rather that they now give more thought to the way in which they approach their mentoring relationship(s).

> *It certainly has been useful to me […] I'm certainly a different team leader now to what I was three or four months ago. I'm a lot calmer and a lot more patient with people […] Beforehand, I'd say: "Here's something; go away and do it." Whereas now, I actually think: "Hang on a minute, have I actually given them any instruction? Have I actually helped*

them?" So now, I will say: "Do this, but I'm there. If you need me, I'm there. If you've got a problem, come and see me." And I don't criticise them. I criticise the process if something's wrong. I will <u>always</u> look to the process now as opposed to looking to the person. That's been a direct result of learning.

<div align="right">(Tritech Ulverston participant)</div>

There was, however, one area in which a number of interviewees identified real behavioural changes. As described in the previous section on learning, the concept of 'learning styles' (and the appropriate means of dealing with different learning styles) was new to most of our interviewees, and was cited as having had a real impact upon the behaviour of around half of our interviewees. These interviewees explained that they now paid much more attention to the way in which they approach the transfer of knowledge, both in terms of the way in which they seek to receive information and the way in which they seek to transfer it to other people. Broadly, these interviewees found that this aspect of the workshop had been very helpful. Although interviewees from both companies identified this as having been beneficial, the proportion doing so was slightly larger among Tritech participants than Aker Solutions participants.

I thought they were very, very good, actually. I wasn't aware of any of us having certain learning styles. I just thought we were told what to do, and that was it. So yes; I found them very interesting.

<div align="right">(Tritech Westhill participant)</div>

It made you look at things from a different angle […] It showed what sort of person you were. And you don't realise until you do the course! You don't get up every morning and think: "Right, I'm a reflector and I'm going to go and do a reflecting role." You just get up and you come to work and you do your job. So it makes you sit and think about your personality, what you're good at and what you're not good at […] I thought that part of it was quite a bit of an eye opener.

<div align="right">(Tritech Ulverston participant)</div>

However, for most interviewees, the lack of impact upon the way they approach their mentoring relationship(s) was also very much due to a lack of follow-up on the mentoring workshop. This lack of follow-up took a number of forms, but the principal unifying issue among these was that a lack

of reinforcement activity meant that any expectation of behavioural change on the basis of a single workshop was unrealistic. Had there been a greater degree of follow-up, most interviewees believed that the way in which they approach their mentoring relationship(s) and the transfer of knowledge could have been affected for the better.

As stated above, this lack of follow-up took a number of forms, some of which were common to both companies and some of which were company-specific. Firstly, across both companies, interviewees expressed surprise that there had been no attempt to try to build on the lessons of the workshops. Even taking into account the fact that much of the information delivered was not seen as being new, it was nevertheless felt that the workshop could have served as a very useful first step or platform on which interviewees' companies could have built. Generally, interviewees were disappointed by this, claiming that despite most of them (including some of the Aker Solutions mentees) being initially very enthusiastic about the prospects of introducing or improving a mentoring scheme to assist with knowledge transfer, this initial impetus quickly wore off as people settled back into the routine of 'business as usual' and forgot about the training. Without any sort of follow-up encouragement, interviewees explained that there was little direct incentive for them to take time out from their day-to-day work to reconsider the way they approach their mentoring relationship(s).

> *Many people go to these things, […] they're all hugs and kisses and: "We'll do this and we'll do that", and then the next day the course has finished and it's business as normal.*
>
> (Aker Solutions mentor)

The type of follow-up expected was one of the areas in which company-specific differences emerged. In Tritech, it was expected by some interviewees that further action would be taken to ensure that communications between the Ulverston and Westhill sites would improve. However, our interviewees indicated that there was no evidence of this taking place. It was also hoped that the capture, storage and transfer of information would improve after the workshop: however, as covered earlier, interviewees felt that this information should have been covered in the workshop.

On the other hand, at Aker Solutions, the lack of follow-up was most frequently associated with the idea of teaming up mentors and mentees. Initially, it had been intended that each mentee would be matched to five different mentors. The mentoring workshop was seen as being a

launchpad for this approach. However, many of the mentees we interviewed were disappointed that no information had been given to them on the day as to who their mentors would be. Many were even more disappointed – annoyed, even – that almost six months on from the workshop they had still not received any information on the identity of their mentors.

However, during the course of our interviews with the strategic representatives of Aker Solutions, it became apparent that there were two main reasons for this. Firstly, there was a problem in identifying the number of mentors required to support the proposed scheme. The individual initially responsible for coordinating the pilot within Aker Solutions was due to leave the company around two months after the workshop and the individual who assumed responsibility for the mentoring pilot after the company's first contact had left explained that the practicalities of the proposed scheme had made it difficult to implement, due partly to a lack of available mentors to choose from within the company. This, coupled with the need to deliver the pilot prior to the deadline, meant that there was a feeling that the ground had not been fully prepared on the company side.

> *[The proposal was that] people would have professional mentors linked to their discipline and then they'd also have business mentors and a senior management team mentor. Now, we hadn't done any communication with the senior management team that they'd be a mentor [and] we hadn't identified mentors that could be the business type mentors. The discipline ones are easy enough [...] but you need your pool of mentors before you can do the matching. So that was the practical piece I didn't feel that had been looked at.*
>
> (Aker Solutions representative)

However, there was also disappointment expressed by the strategic representatives of Aker Solutions, who had expected that there would be some form of follow-up assistance from RGU to help with the process of identifying mentors and matching them with mentees after the workshop.

> *I didn't hear anything after [the workshop]. We got the workbook and everything but I did expect a wee bit more help than that.*
>
> (Aker Solutions representative)

The only follow up that's happened from the RGU side was yourself contacting us […] There was no: "Right, what'll we do next?" or: "should we do something else because that didn't quite work?"

(Aker Solutions representative)

Secondly, there had been a change in strategic focus within Aker Solutions since the workshop. Since the departure of the individual previously responsible for taking forward the mentoring pilot, the company decided to bring in an external consultant to conduct a review of the company's entire Structured Development programme and as a result, the original mentoring model had effectively been put on hold. However, it would appear that this has not been communicated to our interviewees and as a result, many of them still felt as though they had been left in limbo.

I wasn't sure what was supposed to happen after the session […] I think some team members maybe left, so I'm not sure if the drive is gone, or what happened.

(Aker Solutions mentee)

This feeling of being left in limbo added to an already extant issue of 'training fatigue' among some Aker Solutions interviewees. It was explained by some of the mentees that they had been through a number of similarly ambitious and well-meaning ventures in the past, only to see them fall by the wayside through a lack of consolidation or meaningful follow-up. As a result, many mentees were jaded by the idea of training workshops like the one at the heart of this pilot. In addition to providing a context for the lack of follow-up within the company, this may also be a very helpful device for understanding the relatively high levels of scepticism among Aker Solutions mentees towards the intervention as a whole.

I do think that the idea of a mentoring scheme is a really positive idea and I think that if they target the early graduate intake people that weren't already cynical about everything that Aker tried to do, […] they would be much more successful. And if they carried on and followed up with all the actions that they intended to on the day, then it would definitely be a success.

(Aker Solutions mentee)

When it doesn't get followed up, it just reiterates to people that there wasn't a point in going in the first place, really.

(Aker Solutions mentee)

I think it's partly tarnished by the fact that we've been to a lot of these sessions in the past, and nothing has ever come out of them. So we are going into it already partly cynical. And then obviously when nothing comes out of it, you are just, you think: "Oh well, it's the same as all the other ones".

(Aker Solutions mentee)

This was also identified as a factor by the pilot delivery team.

There was a real frustration… "We've heard all this before, the company said they are going to do this previously and nothing's happened, so what's changed? Why is this intervention going to be any different? And is anybody going to take responsibility to take it forward?"

(Pilot Delivery Team)

Participants within both companies also explained that they had been surprised to learn that there was to be no further follow-up from the RGU delivery team. The delivery team had prepared a set of training materials to be provided to participants shortly after the workshop, with the intention being that participants could continue to work on the type of skills and techniques associated with good mentoring. However, when the interviews were conducted, none of the participants were aware of these materials having been distributed within their company. We explored this in our interviews with the different strategic representatives of the companies we interviewed. Again, the picture in the two companies was very different. In Aker Solutions, one of our strategic interviewees explained that there was a sense of disappointment at how participants (particularly mentees) had responded to the workshop and as such, the release of the materials had been held back in order to allow for further work to be done in terms of 'selling' the concept of mentoring to the workforce before asking them to work their way through more advanced materials.

I think timing is very important […] If you want somebody to do a workbook, there has to be a reason for them to do it, and I don't think it's sufficiently there in that respect.

(Aker Solutions representative)

However, the other strategic interviewee within Aker Solutions later explained that due to the entire concept of mentoring being re-examined within the company, meaning that there were no longer any definite plans to release the additional materials on the company intranet.

The situation was slightly different with Tritech, whose workshops had been held much more recently than the Aker Solutions session. Whereas the proposed mentoring approach had been put to one side by Aker Solutions, our interviews with Tritech's strategic representatives suggested that the materials would definitely be released as part of their bigger plan to ensure that the lessons from the workshop were not lost. It was mentioned that a more structured induction process, including more of a focus on mentoring and knowledge transfer, would be implemented for new inductees to the company.

> *The information is handy. We've actually taken the information that was given to us and we've put it onto our intranet. So we're planning to try and get new starts run through that. We're going to put it in as part of our induction process.*
>
> *(Tritech representative)*

The idea of some kind of follow-up was seen as crucial among interviewees within both companies. A small number of interviewees within Tritech explained that because not everybody in the company had attended the session, it was equally important for non-attenders of the workshop to have access to the materials if behavioural changes were to be mainstreamed across the company. We see no reason why this point should not also apply equally to Aker Solutions.

In addition, similar to Aker Solutions, there was also a lack of certainty within Tritech in terms of whether or not there would be further input from RGU after the workshop. The strategic representatives we interviewed suggested that this would have been very useful, particularly in terms of moving from theory to practice.

> *We weren't sure if there was anything further to come [...] It kind of stopped, and then [...] we weren't actually too sure whether there was to be more or not.*
>
> (Tritech representative)

We got the presentation, the information was passed on and shared, but how do you then take it forward? Someone's obviously shared their knowledge, but what's the next stage? I think that is probably a part of something that's missing […] I think the presentation was good, but maybe at the end of that, straight away at the end: "These are the steps you can take," or maybe some practical at the end.

(Tritech representative)

There's a lot more information that does need to flow around, and I sincerely hope that this system, what we learnt, would improve it […] If we had something more than just a presentation, maybe that would help.

(Tritech representative)

Outcomes

The final level of the Kirkpatrick evaluation framework is outcomes. In this level, the focus is very much on moving from the individual to the collective level. The purpose is the identification of any business performance improvement and long-term changes made to organisational structures. Unlike previous sections, the only source of evidence for this section was the interviews conducted with participants and, more pertinently, with the strategic leads for the mentoring pilot within each of the participant companies. Some supporting evidence was also obtained from the project lead within Robert Gordon University, whose mentoring expertise and close involvement with the two companies provided a solid perspective to consider the outcomes of the pilot.

On the basis that the previous section established that a) there has been little follow-up to the mentoring workshops, and b) that there has not been any major impact upon participants' behaviour, it was not entirely surprising to find that there was little evidence in our interviews of outcomes in terms of performance (both personal and collective) and organisational structures. It was clear that other than cases of isolated individuals making minor changes to their mentoring approach, there was no evidence of substantive changes having been made in either company, or of any consistent performance improvement. It should, of course, be borne in mind that this is not entirely surprising in either case, given the short space of time which had elapsed between the Tritech workshops and the evaluation interviews, and the change in strategic focus in Aker Solutions. We now consider these two aspects, dealing firstly with evidence of organisational

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change on a company-specific basis, before turning to consider the evidence relating to business performance improvement in both companies.

We first consider Aker Solutions. In relation to organisational change, there was a strong belief among some Aker Solutions participants that organisational structures were crucial to delivering the type of outcomes for which the company and the pilot delivery team had hoped prior to the workshop. These interviewees recognised that despite apparently strong commitment from senior management to the idea of improving mentoring (including a Vice President of Aker Solutions who attended the workshop), there needed to be institutional structures in place to clarify people's roles and to make the processes less discretionary. These interviewees believed that without this type of reinforcing structure, the goodwill and momentum among mentors and senior management would eventually fade away.

> *The impact of that particular session was good: it got people thinking again – enthusiastic again – about taking on a mentee. But without the follow up, it was a waste of time, sadly.*
>
> (Aker Solutions mentor)

> *There are people that I know […] that are at the corporate level, who were really serious about it, that were there on the day and were really interested in making it work. But I think it has to be driven by some sort of organised structure […] They are willing to invest their time and do the work; it's just that no one's actually told them what they need to do. Whoever's driving it really needs to take charge of it a bit more.*
>
> (Aker Solutions mentee)

Interviewees were unable to point to any real evidence of organisational changes being put in place to reinforce the learning from the workshop. Although they also identified issues in relation to the novelty of the information conveyed during the workshop, it was felt that the lack of follow up was a far more profound problem. Indeed, the biggest issue for most mentors and mentees related to the most fundamental organisational change which would be required to make a mentoring relationship work; namely, the identification of mentors for the mentees involved. Some interviewees explained that without establishing links between mentors and mentees, any potential for behavioural changes resulting from the workshop would simply be lost. Without an opportunity to practice or put in place the skills and techniques taught (or at least reinforced) in

the workshop, it was felt that not only would the desired behavioural changes fail to take root, but as a result of this it would be very unlikely that any business performance improvement would be seen. Indeed, a number of the interviewees were very critical of the approach taken by Aker Solutions in terms of a lack of follow up, suggesting that this was directly responsible for any lack of outcomes.

Until we're assigned mentors it's not going to have any effect [...] If we were assigned mentors on the day, or within one to two weeks afterwards, it probably would have taken a lot more effect, or even if we were assigned the mentors beforehand.

(Aker Solutions mentee)

It's a shame [...] It's a one sided affair. It wasn't unsuccessful because of anything RGU did on the presentation. The whole concept of the presentation was first class. If it fails, it's at the Aker Solutions end.

(Aker Solutions mentor)

One of the Aker Solutions strategic representatives we interviewed also acknowledged this, suggesting that the cultural context within Aker Solutions presented challenges in terms of awareness and recognition of the existence and value of mentoring within the company.

The [mentors'] initial reaction – level one, level two [of the Kirkpatrick evaluation model] – was pretty positive. Beyond that, we've seen signs that we haven't quite made the turn that we hoped we would, but that's partly to do with culture that it's come into [...] Culturally, it's been very challenging to do this here, and that's played a massive part in it [...] They don't see how much mentoring is going on. It's clearly happening, but they don't feel that it's happening.

(Aker Solutions representative)

Of course, the reasons for not having taken this step became apparent to the evaluation team during the course of the interviews with the strategic representatives of Aker Solutions. The loss of key personnel and the decision to bring in an external consultant to conduct a review of the Structured Development programme means that following up on the workshop has been set to one side for the time being.

In addition, the structural/procedural recommendations made by the pilot delivery team on the basis of the initial survey (e.g. providing incentives for employees to work towards chartered status, paying mentors for their time etc.) have also been passed to the consultant to be included in the review of Structured Development.

> *The [survey] recommendations are part of our reasoning why we're going for a whole review of the [Structured Development] programme, if that makes sense. There's no point trying to fix [just] mentoring because we've got everything else that comes with it.*
>
> (Aker Solutions representative)

Turning to consider Tritech, we again found that there were issues in relation to organisational changes. In short, little had been done in terms of organisational change since the workshop. Indeed, some interviewees questioned the initial premise that the evaluation team should even be looking for changes to organisational structures. This was based on an understanding that Tritech did not want radical structural change, but rather wanted a suite of tools to allow them to better capture and transfer existing knowledge within the company. However, even in terms of new approaches and tools being used, interviewees found it difficult to point to any evidence of organisational change at this stage. Of course, this is largely explained by the fact that so little time had elapsed between the Tritech workshops and the evaluation interviews, making meaningful organisational change difficult within such a timescale. However, unlike at Aker Solutions (where any organisational change in relation to the mentoring workshop seems unlikely in the short term), the interviews with Tritech participants suggested that although nothing has happened yet, plans are in place to make changes based around the recommendations of the mentoring workshop. These interviewees explained that the coming weeks and months were crucial for the embedding of the lessons from the mentoring workshop, and that positive outcomes may well follow in due course if the correct type of follow-up is put in place.

In terms of concrete follow-up activity, at the time of doing the interviews, the only follow-up had been placing the accompanying materials on the company intranet, and very few interviewees were actually aware of this. However, despite participants feeling that little had been done to follow up on the session, the interviews with Tritech's strategic representatives revealed that they were all too aware of the need to act upon the lessons from the workshops speedily.

We're already aware that we don't let too long go before we try and get something working otherwise people forget what it's about and we'll force them to go through the online stuff again.

<div align="right">(Tritech representative)</div>

There have been a few questions: "Okay, so how are we progressing with it?" […] So as far as they're concerned, they're looking forward to something coming out of it and actually getting something to use.

<div align="right">(Tritech representative)</div>

These interviews also revealed that plans were in place to build upon the learning from the sessions. This was likely to take a number of forms. As outlined earlier, the first major change was that the learning materials from the session would be used with all new starters in the company to ensure that the mentoring culture is embedded from the outset with new employees. In addition, the company is intending to mainstream the idea of mentoring in its annual Personal Development Reviews (PDRs).

The way we're looking at going forward with this is we're trying to run a small project. We're going to look at changing our development review for personnel basically to try and include a way of identifying what mentoring we could possibly offer internally to develop their education, their familiarisation with the products, and try and use the documents or parts of the documents within our record system […] <u>Everyone</u> is part of that review process I was talking about, so everyone will have some interaction with it at some point or other.

<div align="right">(Tritech representative)</div>

What's been planned is we'll try and use some of the materials that we were given after the presentations to walk people through the idea of the networking. It will then be part of their annual review process where we'll obviously be looking at: "Have they used this process? Have they done anything with it? Is there anything we can do to help them?"

<div align="right">(Tritech representative)</div>

This plan includes a proposal to ask one of their recent graduate inductees to dedicate a proportion of their time to the development of processes and procedures for mainstreaming these aspects of the mentoring workshop in company activity.

> *We're hoping to put a resource onto it who's coming up to be available shortly.*
>
> (Tritech representative)

> *One of the people who is fairly new to the company wants to try and do something else. We're actually going to try and task this person with the project management of trying to get these new processes rolled out.*
>
> (Tritech representative)

In addition, the company's approach to the development of new inductees looks likely to change. Rather than taking a reactive approach to the identification and transfer of key knowledge, the company is keen to take a proactive approach which will see inductees spending time a greater amount of time working in each of the company's departments, finding out how things work and trying to appropriate some of the knowledge which is currently kept in such 'silos'.

> *We're instigating a new project as well. We're looking at taking inductees in and rather than having them spend an hour in with each department to get an idea of what goes on in each department, we're going to try and introduce a process where every new employee will spend a day a week – maybe two days a week – in another department.*
>
> (Tritech representative)

On this basis, it is clear that there is real potential for the mentoring intervention to have an impact upon the organisational structures which relate to knowledge transfer and mentoring within the company.

We now turn to consider the issue of business performance improvement within the two companies. Again, this is an area of impact which is expected to emerge as a result of a successful intervention. As the vast majority of interviewees stated that the intervention had not had a significant impact upon their personal behaviour or organisational structures, it was unsurprising to note that no interviewees whatsoever were able to point to any evidence of improved business

performance. However, this is not only unsurprising in the context of a lack of impact in the earlier stages of the intervention, but also in terms of timescale: even where an extremely successful intervention had taken place, being able to point to solid quantitative evidence of this within less than six months is extremely unlikely. As such, the evaluation sought to identify in more qualitative terms whether there had been any organisational performance improvement in relation to the two key concepts behind this pilot (better knowledge transfer and better skills utilisation). On the assumption that an improvement in these would a) be more immediate, and b) hopefully feed through to an increase in overall business performance over a longer timescale, we asked our interviewees for any evidence of improved outcomes in relation to better knowledge transfer and/or skills utilisation. Although there was a small amount of evidence showing a slight increase among a very small number of interviewees, there was very limited evidence of change overall.

A very small minority of respondents felt that knowledge transfer and skills utilisation had improved. This was typically found among those interviewees who had earlier highlighted learning styles as being a very useful component of the workshop. These interviewees felt that a better appreciation of their learning style and the learning styles of their colleagues mean that they were much more able to play to each other's strengths when trying to transfer knowledge. They also believed that giving them a better understanding of these different learning styles meant a better awareness of one's own strengths and weaknesses (and those of their colleagues) and hence an improved ability to focus on their strongest learning and knowledge dissemination skills.

Beyond this, though, the evidence was very limited. No other interviewees felt that knowledge transfer or skills utilisation had really been affected as a result. For example, when asked about whether levels of skills utilisation and knowledge transfer had increased as a result of the workshop, the following excerpts are representative of the views of Tritech's strategic representatives specifically, and of the company more generally.

> *Not that wasn't already ongoing at the time […] So I'll say, on the whole, no.*
>
> (Tritech representative)

I would say honestly, at the moment, no. A wee bit maybe perhaps in some of the younger ones, the ones who are new to the company, are here to learn. They are making more of an effort to come and see people [...] But on the whole, no.

(Tritech representative)

Similar sentiments were expressed within Aker Solutions, with interviewees explaining that progress in these key respects depended upon the correct follow-up taking place.

Without being assigned a mentor, no [...] That's the stumbling block: until we're assigned mentors, it's not going to have any effect [...] I think it's been six months already, so if it goes to the case where it's a year, nobody will remember what was even said on the day.

(Aker Solutions mentee)

However, despite the fact that there is no great evidence of business performance improvement in either organisation, it must again be added that the situation for the future appeared more positive within Tritech than within Aker Solutions. Whereas the Aker Solutions interviewees were very much of the opinion that the workshop had come and gone without much impact, many Tritech interviewees (including their strategic representatives) felt that there was real potential for business performance improvement in future, providing that the aforementioned follow-up and organisational changes are indeed implemented.

Other Issues of Note

As with the other pilot, we also used our interviews to explore a number of other relevant issues. The first additional aspect was the nature and role of the working relationship between RGU and the organisations involved in the pilot. By and large, the strategic representatives of the two companies were happy with most aspects of their relationship with the RGU pilot delivery team. Both companies praised the strength of the relationships and stated that they had been crucial in getting the pilots to the point of completion, particularly given the timing issues faced in trying to do so.

The relationship was strong, and I think it was very positive. That went well.

(Aker Solutions representative)

I think that went well. I do think that went well. We probably confused it as Aker Solutions with having [name removed] and me both involved. I think it would have been better if it was just one person the whole way through. I think that would have helped both sides, and probably helped it be embedded more as well from an ownership point of view.

(Aker Solutions representative)

They got a good feel for what we were wanting to get out of it, and obviously we were able to talk about that at a fairly high level with them to make sure we were getting what we were after.

(Tritech representative)

We have worked occasionally with bits and pieces of RGU in the past and, again, I have no issue with anyone at RGU.

(Tritech representative)

Not only were the relationships seen as being strong qualitatively, but the volume of support given by RGU at crucial points of the process was also praised.

It would appear that they tried very hard to resource it; very, very hard to resource it. Probably much harder than you could reasonably expect!

(Aker Solutions representative)

In our interviews with the Aker Solutions strategic representatives, it did become clear that there had been some difficulties to work through shortly before the workshop. One strategic representative made it clear in their interview that they had very strong opinions on how the intervention should look and what its focus should be. This had led to some tensions over the contents of the workshop a week before its delivery. However, representatives of both the company and the pilot delivery team identified the personal relationships as an important factor in overcoming this.

We had a conversation a week before the intervention, and had it been a commercial provider, I would have stopped [the pilot]. I communicated that to the RGU team […] They did throw resource at it when they needed to, and that was a good response.

(Aker Solutions representative)

When we had some difficult questions that we were asking of one of the companies and trying to resolve that, I think it was very much down to the personal relationships that we were able to get a resolution […] The ability – having established those relationships – to pick up the phone or send emails to request, ask and get support is very, very important.

(Pilot Delivery Team)

Another important aspect we wanted to explore was whether different financing arrangements would have had an impact upon the pilot. In particular, we wanted to establish what difference it would have made if the companies involved were required to pay for the services obtained through the pilot. We discussed this aspect with the strategic representatives of each company and found the responses from the two companies to be considerably different.

Within Tritech, there was a feeling that if the project was not funded, it may not have taken place at all, given the funding constraints on supply chain companies of Tritech's scale.

It might not have occurred if we'd had to foot the bill […] It's not to say we wouldn't have gone down the road, but it might have had more trouble getting off the starting blocks. Because there were no issues: it was a case of: "Look they're coming in here, they're being funded. We're going to get something out of this at the end of the day." It's a win-win for everyone. You get what you're looking for. We get what we're looking for hopefully.

(Tritech representative)

In Aker Solutions, the resourcing issue was not seen as being an automatic barrier to the pilot. Rather, the strategic representatives there emphasised that they would simply have treated the pilot differently if they had been financing it. In particular, they stated that they would want a more hands-on role all the way through the development of the intervention. However, they made it clear that this was not necessarily to be taken as a criticism of the process which <u>had</u> been

followed, but rather that an investment of this scale would require a more prominent role at all stages of the process.

> *If it's being paid for, I think we as a business are probably more focused on the timelines and the "what are we getting for it; what's the value in it?" […] We'd have to justify the spend, so yes, I think there is that different mindset.*
>
> (Aker Solutions representative)

> *[We would want] more visible project management and gate reviews […] Don't get me wrong: that's the same as our projects – we're running £20-£30 million projects, maybe bigger, and they could do with more visible gate reviews and quality milestones as well! So, you know, whilst this might not be in that ballpark, it's the same challenge that we face.*
>
> (Aker Solutions representative)

This was contrasted with the review of the Structured Development programme, which is being conducted by an external consultant and is being funded by Aker Solutions. In contrast with the knowledge transfer pilot, senior management within Aker Solutions are more aware of the consultant's review, and it features upon company business plans.

> *[The] reality is I'm not sure how much the management team knew what we were doing […] It wasn't on any business plans or anything like that, where I think – for example – the Structured Development program review is on the 2012 business plan for HR. So, I think then it might have been given a bit more credibility, or maybe sold slightly different.*
>
> (Aker Solutions representative)

The level of commitment from senior management was also identified by the pilot delivery team, who were of the understanding that several members of the senior management team would be in attendance on the day.

> *We had been almost promised [that] various senior personnel were going to be there on the day, and it didn't materialise.*
>
> (Pilot Delivery Team)

This is a very interesting point to note for similar joint working in the future. At Tritech, senior management was clearly committed to the pilot from the outset. Despite high-level interest and engagement within Aker Solutions, there does not appear to have been the same level of commitment from senior management to the pilot. In addition, the interviews we conducted with the strategic representatives of Aker Solutions suggested that within larger companies, the <u>cost</u> to the company of an intervention may play a strong role in determining the company's perception of the <u>value</u> of the intervention. As such, any similar research in future should give consideration to the need for senior management commitment to an intervention, as well as the funding model to be used.

The final additional issue raised by interviewees during our interviews related to the pace of the work undertaken. The same type of issue was raised by representatives of both companies; namely, that the deadline put in place for each of the interventions led to some degree of compromise in terms of the quality of the intervention.

Rather than try and deliver on <u>time</u>, let's deliver <u>quality</u>. And I think that's probably what we suffered from, which is a shame.

(Aker Solutions representative)

We should have all been grown up enough to say: "No, we can't deliver it well enough in the deadline; just give us another extra couple of weeks to go back and do things slightly differently."

(Aker Solutions representative)

I think we're just perhaps not ambitious enough on content, but far too ambitious on timeline, which is kind of normal in Aberdeen for engineering projects!

(Aker Solutions representative)

We had all sorts of issues with time running out and all the rest of it which is a wee bit frustrating, and that wasn't necessarily anyone's particular fault. It was just the way the workload went.

(Tritech representative)

This issue was also acknowledged by the pilot delivery team, although it was emphasised that this was not a case of preparation being left until the last minute, but rather an example of the difficulty which can arise when working with such a high pressure industry. In this respect, the finding is very similar to one of the findings of the Team Leadership pilot.

> *I think that's a reality of operational requirements taking priority and precedence over anything else. We were engaged in conversations about next stages, potential delivery dates [and] how we were going to accomplish that well in advance of the actual physical delivery dates. Just getting hold of people; really, really challenging to get hold of people. [...] In the client companies, it's not because they weren't on board or enthusiastic about it; it's just the reality of their day-to-day job versus what we were trying to do with them.*
>
> (Pilot Delivery Team)

Although this was not raised in an acrimonious sense, the strategic representatives of the two companies felt that a different timeline (either extending the timescale or trying to load less work into the final stages of the timescale) could have led to a higher quality of intervention. This appears to chime with our earlier findings that participants would have preferred to see a series of shorter interventions rather than one half-day workshop.

> *I think we could have maybe introduced it a little bit slower, a little bit more time spent presenting it. And perhaps some follow-up to it being put into place as well to make sure that we then move forward with it perhaps a bit sooner than we're going to. And that might have had a bigger buy-in effect than what we've currently got.*
>
> (Tritech representative)

> *The sessions were actually very good, I would have said. They were a little bit hurried inasmuch as we were struggling for time at the tail-end of it. But then that was the funding issues that kind of pushed things.*
>
> (Tritech representative)

Summary

This short concluding section will provide an overview of the key points from each of the sub-sections within this chapter.

In terms of the first level of the Kirkpatrick evaluation model, our inquiry found that overall, the general reaction to the workshops was very positive. Participants had typically found them to be enjoyable, relevant and useful. The notable exception to this was the sub-group of mentees in Aker Solutions, who were much less positive in their reaction to their workshop than the mentors and Tritech participants were to theirs. A number of possible explanations were identified. The internal diversity of the mentee sub-group made it difficult to deal with them as a coherent group, with some participants also raising concerns in relation to the level of generality and the pitch of the session. Finally, the degree to which attendance was compulsory appeared to play some loose correlational effect on enjoyment of the session: we suggest that whilst compelling people to come along may have succeeded in increasing attendance, it may also have resulted in a dilution of the proportion of attendees with a genuine interest in the area.

Moving on to the second level of Kirkpatrick, we found clear evidence of learning as a result of the intervention in every sub-group. Having established this quantitatively, our interviews surprisingly revealed that many participants had found the session to be much more of a refresher of existing knowledge and/or practice than an introduction to new knowledge and/or practice (with one clear exception – learning styles). Despite this, our interviewees explained that the refresher was nevertheless beneficial. However, a number of others felt that the learning could have been better tailored to their company's needs and circumstances.

When moving to consider changes to behaviour – the third level of the Kirkpatrick evaluation model – we find much more limited evidence of impact. Our pre/post comparison suggested that there had been very little positive impact in the effective behavioural performance of participants in relation to the small number of key mentoring skills we considered. This was due in large part to two factors. Firstly, the fact that participants did not feel that they had learned much in the way of new tools or techniques meant that there was limited opportunity for meaningful changes in behaviour to emerge. Secondly, the lack of follow-up to the session was thought to be responsible for the tailing off of interest among participants. This was particularly true for Aker Solutions interviewees, but most Tritech interviewees also expressed concern that there had not been

enough in the way of visible follow-up from the company. This points to an issue which we have explored elsewhere; namely, that oil and gas companies often struggle with their willingness or ability to implement change deriving from learning-based interventions.

In addition, a number of interviewees and strategic representatives of both companies felt that further follow-up from RGU would have been very helpful: in Aker, it was felt that further assistance could have been given with the matching process, whilst in Tritech, the interview evidence showed that the company would have welcomed further assistance with the practicalities of capturing, recording and transferring knowledge within the company.

Given the limited evidence of impact in relation to behaviour, the final stage of the Kirkpatrick evaluation model – outcomes (in the sense of structural impact and business performance improvement) – also yielded only limited proof of impact. In terms of business performance improvements, none of our interviewees felt that they were performing more productively, and only a small number said that the knowledge transfer component of their mentoring relationships was now working differently. Where interviewees did claim this, it was largely driven by the very popular 'learning styles' component of the workshop, which had prompted some participants to give greater consideration to the way in which they and their colleagues prefer to absorb and disseminate knowledge. In terms of the overarching theme of skills utilisation, there was very little evidence of an increase. However, similar to the Team Leadership pilot, the confidence which derives from having a refresher on familiar mentoring skills is likely to feed into workplace confidence, which in turn is a key component of effective skills utilisation.

It is also extremely important to note that key exogenous factors also played a part in restricting the impact of the pilot in terms of outcomes. Within Tritech, just over a month had elapsed between the intervention and our participant interviews. From the outset, the evaluation team made it clear that the timescale of the pilot was probably too short to allow for meaningful long-term business improvement and structural change to emerge. This is particularly true when trying to evaluate an intervention just over a month after its delivery, so it is important to note that the evaluation does not conclude that there will be no change in Tritech, but rather that none has yet taken place. Indeed, the evidence from the strategic representatives suggest that the company is committed to making structural changes as a result of this pilot, but the timetable for this falls outside the evaluation period for this project.

Within Aker Solutions, the situation was more clear-cut. Since the intervention, the company has effectively suspended its intake of new mentees and the development of its mentoring approach, pending a review of its Structured Development programme by an external consultant. It may be that this review produces recommendations which overlap with those of the RGU delivery team, but again the results of this process will only be known after the evaluation period for this pilot has concluded. However, the decision to review the Structured Development programme has meant that any notion of structural change on the basis of the knowledge transfer workshop has been put on hold.

Finally, we also considered a number of additional issues which emerged from our evaluation. We established that the relationships built up by the RGU delivery team with between the participant companies were strong, particularly in the case of Tritech. Although there were issues which had to be addressed in the development and delivery of the Aker Solutions workshop, the personal relationship between the company and the delivery team was identified as an important factor in overcoming these difficulties.

We also explored the impact of having an external funding solution in place for the pilot. It was clear that for both companies, the pilot would have run very differently had this funding not been in place. For Tritech, the pilot may never have taken place at all. Within Aker Solutions, it was felt that the pilot would have worked very differently had the company been paying for the intervention: in particular, issues of project management and gated review were raised, with a recognition that the company itself (and not just RGU) would also have had to perform differently in these respects. In addition, an interesting comparison was made with the ongoing review of their Structured Development programme: as the knowledge transfer pilot was externally funded, there was less oversight from senior management, with the pilot not appearing on any of the company business plans. In comparison, the review of Structured Development appears to have attracted much more attention and support from senior management.

Finally, the pace of the work was raised as an issue by both companies. In particular, the rigid nature of the deadline at Aker Solutions was felt by the company's strategic representatives to have possibly led to a compromise in the quality of the intervention. Although it was recognised that such judgements were very easy to make in retrospect, the company nevertheless felt that

the pilot would have been better served by taking slightly more time to deliver a better workshop. In Tritech, the deadline for the pilot <u>was</u> extended (from end October 2011 to end January 2012), but it was still felt that slightly more time would have been helpful, although it would appear that this related more to ensuring better attendance and proper follow-up, rather than improving the workshop itself in a qualitative sense.

SUMMARY / CONCLUSIONS

In this section, we will summarise the findings of the evaluation. In addition, we will consider these in the context of the original project brief for each pilot, and will also consider the findings within the broader context of skills utilisation.

The first of the two pilots we considered related to Team Leadership. This pilot was based upon the finding from the Interim Research Report that many team leads within the industry are promoted to this type of position on the basis of their technical proficiency and without any real consideration of their leadership and/or management (particularly people management) skills. However, without any background or training in team leadership and the differences between being a team member and a team leader, many employees promoted in this way struggle to adjust to their new role. In addition, the project-based nature of the industry (particularly in the supply chain) means that team leads may be required on a temporary or ad hoc basis. Our interim research report found that some companies believed that if team members had a basic grounding in leadership skills, this process of temporary or ad hoc promotion would be greatly facilitated.

As a result, the Project Steering Group decided to pursue a short course in Team Leadership, to be delivered through Aberdeen College and offered to a small number of employees in a small number of companies. A call for participants was circulated by the industry members of the project's External Advisory Group, and as a result, three companies – EnerMech, PSN (subsequently Wood Group PSN) and Weatherford decided that they wished to participate. Each of these companies proposed five participants, and company-specific inception meetings were held with all of the proposed candidates and strategic representatives of their company.

As the course got underway, a number of dropouts on the one hand and a lack of progress on the other appeared to suggest that the course was not running as smoothly as had been hoped. Whilst the pilot originally proposed that a total of fifteen candidates should take part, only five of them finished, with the remainder either dropping out or failing to complete the requisite coursework within the time available (even when a two month extension was made available to those who were close to finishing when the original deadline expired). Even if the candidates who dropped out are discounted, the completion rate still fell well below the usual expected completion rate (estimated at about 90% in our interviews with members of Aberdeen College's pilot delivery team). As such, our evaluation was very clearly informed not only by the need to consider the

impact of the pilot on those who had completed, but also to investigate the reasons why non-completers had either dropped out or had not completed the required coursework.

In terms of investigating the impact, we used a standard Kirkpatrick evaluation model, which aims to consider the impact of an intervention at a number of different levels, from immediate reaction through participant learning and behavioural changes, to concrete outcomes. Although the general reaction to the pilot was broadly benevolent among the participants (completers and non-completers) and company representatives we interviewed and surveyed, our evaluation found that in most cases, there was a mismatch between the intended target audience and the candidates actually proposed by their companies. It became apparent that in most cases, the participants were not new or aspiring team leaders, but rather were established team leaders, some of whom were leading teams with dozens of employees and accounts worth millions of pounds. As the course was intended for new or aspiring team leaders, much of the learning in the course was already familiar to candidates with this degree of prior experience. As such, the general reaction to the course was more muted among these candidates than it was among the participants we interviewed who <u>did</u> more closely match the original target audience of new or aspiring team leads.

Given this familiarity with large parts of the course contents, most participants felt that the course had not offered them much in terms of new learning. All of the course completers were drawn from this group. On the other hand, the non-completers we interviewed suggested that much more of the course was new to them. However, a number of barriers prevented them from completing the course, including some difficulty responding to the coursework questions, which – paradoxically – were reported as requiring prior team leadership experience in order to answer. As such, interviewees suggested that the course appeal was somewhat confusing: intended for new or aspiring team leaders on the one hand, but requiring prior leadership experience to answer the questions on the other.

As with any intervention, its impact on behaviour and outcomes is contingent upon its impact at the earlier stages (i.e. the extent to which participants learned new knowledge, skills or techniques). Given that completers reported learning relatively little and non-completers were not engaged with the full range of course material, we found very little evidence of quantifiable behavioural change in the participants we surveyed and interviewed.

Participants (completers and non-completers) explained that the most prominent behavioural change had been an anecdotal increase in personal confidence. As such, the potential for significant outcomes (in the form of business performance and organisational change) was limited. To an extent, we discounted the organisational aspect typically associated with outcome measurement in the Kirkpatrick model, due to the individual focus of this particular intervention. When focussing solely on business performance improvement though, the quantitative results we obtained (on team productivity, team confidence, team motivation and team skills utilisation) suggested that in aggregate, there had been no clear impact on individual performance or team performance as a result of participating. Again, this was largely confirmed by our interviews, in which we found no real evidence of business performance improvement, other than anecdotal evidence of teams running slightly more smoothly, and a general belief that the level of skills utilisation within their teams had increased.

Our exploration of the barriers faced by participants (both completers and non-completers) shed further light on problems faced by participants. The most prominent reasons we found for a lack of impact and completion were the original mismatch between the intended level of candidates sought and the actual level of participants put forward, difficulties with the IT systems used to support the course, and a lack of time (particularly in respect of protected time, rather than the course duration – which was felt to be adequate). In a small number of cases, personal issues (such as motivation and illness) also seem to have played a strong role, a contention which is supported by the funding that successful completers were driven to finish the course largely as a result of personal determination. Clearly, not all of the barriers above will apply to every participant, or even to all three companies involved, but they nevertheless emerged qualitatively as the greatest barriers across our aggregated interviews.

On this basis, it would appear that the pilot has not had the original desired effect, both in terms of completion rate and in terms of impact upon completers. The course seems to have acted as a useful refresher for most participants (including all of the completers) but has not produced any notable consistent impact upon completers or their teams. It is unfortunate that so few of the participants who most closely matched the original person specification (new or aspiring team lead) engaged either with the course or with the evaluation process, as their experiences would have been particularly relevant to the pilot. This therefore somewhat skews one of the final

findings we reported, which is that the companies' responses to the prospect of recommending or paying for this course were greatly mixed. Interestingly, the company whose participants most closely matched the original person specification was by far the most positive in respect of pursuing this course again in future, whilst the two companies who put forward far more experienced team leads were noticeably more lukewarm in this respect.

Our evaluation therefore suggests that whilst this course may well be an appropriate solution to the original research problem, a number of issues make it very difficult to draw any such conclusion firmly. Even where the course is targeted appropriately and appears to be welcomed by companies and participants, systemic issues within the industry (most notably its time-pressured nature) mean that it is very unlikely to be the type of ready-made solution desired by companies. If it is to be successful, it appears that greater support (in terms of managerial buy-in and protected time) is required within companies unless, of course, the expectation is that participants should do this entirely in their own time. In addition, the high intensity of the industry (and the resultant sporadic access patterns of participants to their course materials) means that it is hugely important for the IT systems underpinning distance learning of this nature to be reliable and consistent.

We now turn to consider the second pilot, which related to the idea of better knowledge transfer within the industry. Again, this pilot derives strongly from one of the main findings of our interim research report, which found that knowledge transfer within the industry is a problem for many companies. This is particularly true when considering the skewing of the age demographic within the industry towards both ends of the spectrum. Many companies were concerned by the lack of effective mechanisms for transferring valuable knowledge between older/more experienced employees to younger/less experienced employees, particularly given that many of their most experienced and knowledgeable staff are approaching retirement age. A clear preference for doing this through mentoring was expressed, but again there was a recognition that mentoring does not work well at present within the industry, and the cycle of ineffective mentoring creating ineffective future mentors was seen as one which had to be broken.

As such, the project Steering Group engaged the Department of Human Resource Management at RGU to deliver an intervention based upon the idea of achieving better knowledge transfer through mentoring techniques with two companies. One company (Tritech) with no experience of

mentoring (but an interest in improving its knowledge transfer) was selected, whilst the other (Aker Solutions) was a company which had tried to introduce better knowledge transfer through mentoring techniques previously, but had struggled in doing so. In each case, the Department of HRM worked alongside the companies to deliver a 'current practice' mentoring survey, before using the results of these surveys to inform the delivery of a company-specific session or workshop, which would aim to address any issues identified in the survey and introduce elements of best practice to the two companies.

Again, we used a Kirkpatrick model to evaluate the impact of the interventions. At the first level (reaction), the intervention was generally received very positively, with most participants in the mentoring sessions saying that they had found them to be relevant and enjoyable. However, this was not true when considering the case of Aker Solutions' mentees, who were much less positive in their reaction, with some feeling that they had been patronised and that the level of the session had not been appropriate. This seemed linked to two main factors: firstly, the internal diversity of the mentees group (in terms of experience and educational attainment) meant that it proved challenging to deliver a session which was meaningful for every participant; and secondly, the fact that attendance was compulsory within this group may also have meant that some participants had no real desire to be there, whilst this was likely to be far less of a problem among Aker Solutions' mentors and both groups within Tritech, in which attendance was encouraged but ultimately discretionary.

Unlike the Team Leadership pilot, when we moved to consider the impact of the learning from the mentoring sessions, we found clear quantitative evidence of new learning in both companies. This even held true within the group of mentees at Aker Solutions, who had provided a relatively negative verdict on their general reaction to the session. However, when we discussed this with our interviewees, there was relatively little recall of this learning, with one exception. The topic of learning styles was identified by many interviewees as one which had been memorable. Beyond this, most interviewees claimed that the session had really just been a useful refresher on existing knowledge for them, suggesting that the quantitative evidence we found of learning was possibly more related to participants becoming more assured of existing knowledge, rather than having learned considerable new knowledge.

As a result, we again found very little evidence of behavioural impact in our follow-up interviews. This was seen by interviewees as being due to two main factors: firstly, the lack of new knowledge conveyed during the sessions; and secondly, a lack of follow-up in terms of building upon the momentum generated by the workshops. Whilst this was particularly acute in Aker Solutions (in which some six months had elapsed between the workshop and the evaluation interviews), a similar response also emerged in relation to Tritech (in which around six weeks had elapsed between the workshop and the evaluation interviews), although it appeared from our interviews with strategic level staff in Tritech that work to build on the sessions was ongoing behind the scenes. Additionally, interviewees from both companies suggested that they had expected more in terms of follow-up from RGU. Many participants were genuinely surprised to find out that no more sessions with the RGU staff were planned, as they were expecting further, more detailed workshops to build on the general knowledge delivered at the original session. The pilot delivery team did provide each company with follow-up material for participants to work through, but in Aker Solutions this has not been released to participants, whilst in Tritech the interviews showed that there was virtually no awareness of the materials being available on the company intranet. In addition, the two companies said that they would have welcomed and – to a lesser extent – expected more support in terms of the practicalities of their mentoring requirements: in Aker Solutions, this related to the process of matching mentors and mentees; whilst in Tritech this related to the practicalities of capturing, storing and transferring knowledge.

This being the case, there was also very little evidence found in relation to the final level of the Kirkpatrick model: outcomes. In terms of business performance improvement, none of our interviewees felt that they were more productive as a result of the session, and only a very small number said that it had had any discernible impact upon their mentoring relationship. In addition, there was similarly little evidence of increased skills utilisation, although it could reasonably be hoped that the increased confidence reported by interviewees might feed through to better skills utilisation in time.

In terms of organisational change impacts, we also found little evidence that the companies involved had made changes to their practices based upon the intervention. In the case of Tritech though, this was due largely to the very short space of time between the sessions taking place and the evaluation team having to begin its work. In the course of the interviews with Tritech, it became apparent that although changes have not yet been made, plans are in place to ensure that

some of the lessons from the mentoring sessions are embedded in company practice (although the timescale for this lies beyond the timescale of this project).

In the case of Aker Solutions, any prospect of making organisational changes based on the mentoring sessions has been called into question, firstly as a result of the departure of the individual who previously led on the concept of mentoring, and secondly as a result of a decision by the company to employ a consultant to conduct a review of their entire Structured Development programme (of which mentoring is only one part). Whilst there may be organisational change which is informed by the HRM mentoring sessions, this is by no means certain and again lies outwith the timescale of this project.

As such, in terms of delivering upon the original research brief, the evaluation of this pilot draws mixed conclusions. Whilst the response to the intervention was generally very positive, there is little in the way of concrete evidence at this stage to demonstrate a successful outcome. On the basis that there appeared to be little new learning, many interviewees felt that the workshop fell short, but to our mind the real verdict can only be delivered after this project has come to a close: namely, if/when Tritech make the organisational changes currently being proposed, and when the review of Aker Solutions' Structured Development programme concludes. To this end, the evaluation team has arranged to remain in communication with representatives of both companies, and will pass any pertinent information to the Chair of the project Steering Group in due course.

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