Leading Learning in the Workplace: Who's in Charge?

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ABSTRACT

In 2014 – 16, UK Ministry of Defence (MOD) commissioned a research study into the benefits of embedding a continuous learning culture (CLC), where the whole workforce is actively engaged in promoting and supporting workplace learning. The study identified key benefits associated with a CLC, which related to development of trainer capability, delivery of effective and efficient training, and wider enablement of organisational learning. Leadership of learning was identified as a critical factor in realising these benefits, as it put in place the necessary organisational conditions, mechanisms and hierarchies that enabled a CLC to develop and thrive. The study recommended that roles and responsibilities for leading learning should be made explicit in the workplace, and individuals should be equipped with the right knowledge, skills and resources to be able to engage effectively with these roles.

This paper draws on new research undertaken during 2016 – 17 on behalf of UK MOD by RINA Consulting Defence Ltd (formerly Edif ERA) and the University of Leicester, which followed up on the findings of this earlier research with a focus on developing leadership of learning in the workplace. Literature review and case study research with both military and civilian organisations was used to gather qualitative data on the behaviours used by leaders of learning at different levels of management, from senior manager to work supervisor. Options were then considered for developing leadership of learning behaviours across Defence organisations, using learning pathways which included both formal training interventions and informal workplace learning activities.

The paper describes leadership of learning behaviours and their impact on organisational learning culture, and explains how organisations could develop these behaviours in the workforce using learning pathways which exploit the organisation's existing leadership and management training resources. The findings have applicability for all organisations seeking to develop a learning culture that fosters innovation and organisational competitiveness.

About the Author:

Daisy Mundy is an experienced educational and training specialist who has designed, led and successfully project-managed several research and development projects on behalf of UK Defence. She has led a number of workstrands within the UK Defence Trainer Capability (DTC) Project, advising on training policy, strategy and change management issues. A former British Army Educational and Training Services (ETS) officer with over 25 year's military service, she has a strong background in the design, development, delivery and evaluation of military training. Her research work has also required her to develop a thorough understanding of wider cultural and technical aspects of training and learning approaches, including organisational attitudes to training, concepts of trainer capability, modern training methods, and current media technologies. Daisy presented a paper at IITSEC 2016 on the DTC research into Embedding a Continuous Learning Culture across UK Ministry of Defence.

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INTRODUCTION

There has been a growing awareness over recent years of the role of the workplace as an environment for learning. Increasingly, organisations are beginning to recognise that informal learning activities such as workplace coaching and challenging work experiences can provide powerful and contextualised learning which, when shared across the organisation, grows organisational expertise and gives rise to innovation. Organisations' traditional reliance on formal training courses to develop the workforce is now beginning to shift towards a more blended, self-regulated approach in which workplace learning plays an important part (Jennings, 2013). But in a busy workplace, where the focus is on business outputs rather than training, how do organisations know that their employees are learning and how do they manage that process so that they learn the right things? Good learning doesn't just happen as a consequence of being in the workplace; the right conditions need to be in place and learners need the right resources and support (Mundy et al, 2016). The famous Sidney Harris cartoon at Figure 1 summarises neatly how making assumptions about a system can result in potentially critical gaps. When organisations include workplace learning as part of a training programme, are there clear systems in place to support this or are they expecting '*a miracle to occur*'? Is there a need to be more explicit about who is responsible for ensuring that 'good' learning is happening in the workplace?

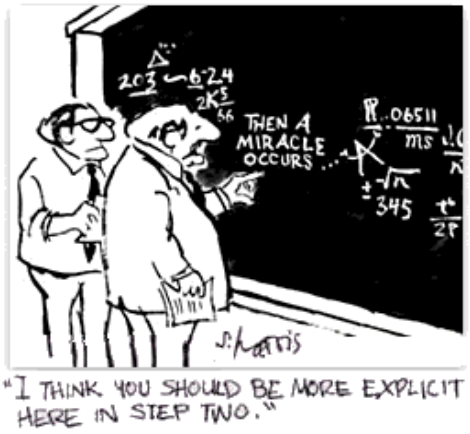

Figure 1: How assumptions can create potential gaps in planned systems. (ScienceCartoonsPlus.com 2017; reprinted with permission)

In 2015, as part of the Defence Trainer Capability (DTC) project, UK Ministry of Defence (MOD) commissioned a one-year research study into the benefits of embedding a continuous learning culture (CLC), where the whole workforce is actively engaged in promoting and supporting workplace learning. This 'CLC study' (Mundy et al, 2016) identified that one of the key benefits associated with a CLC was a strong 'trainer capability', i.e. the organisation's ability to support employee learning in the workplace. Such a culture promotes and supports teaching and learning from each other in the workplace, so that trainer-related knowledge and skills are developed organically in the workforce over time. This benefits both the organisation and the employee, improving communication skills, problem-solving skills, team work and confidence. Having a workforce with the knowledge and skills to be able to teach each other in an effective way also brings other benefits, as it helps to address that potential 'gap' in the training system where learning gained on formal training interventions is transferred to behaviour in the workplace. This in turn supports more effective and efficient training and the wider enablement of organisational learning. The CLC study concluded that these benefits would be very relevant and desirable for UK Defence.

Leadership was a key thread throughout the findings of the CLC study (Mundy et al, 2016); it was seen as crucial to embedding a CLC because leaders set the right climate and conditions for learning in the workplace, and drive and incentivise commitment to learning. The typical, mutually supporting characteristics of a CLC, which needed to be in place for associated benefits to be realised, are shown in Figure 2. **Leadership of learning** is highlighted in Figure 2 as it was considered critical to ensuring that all other conditions, mechanisms and hierarchies were in place. In this study, leadership of learning defines the combined functions of the leader/manager roles. The **leader** function (inspiring others to act in ways they might not otherwise have done) addresses workforce attitudes to learning, and the **manager** function (organising the resources, processes and mechanisms which then enables them to act in these ways) then makes it possible for employees to engage effectively with that learning.

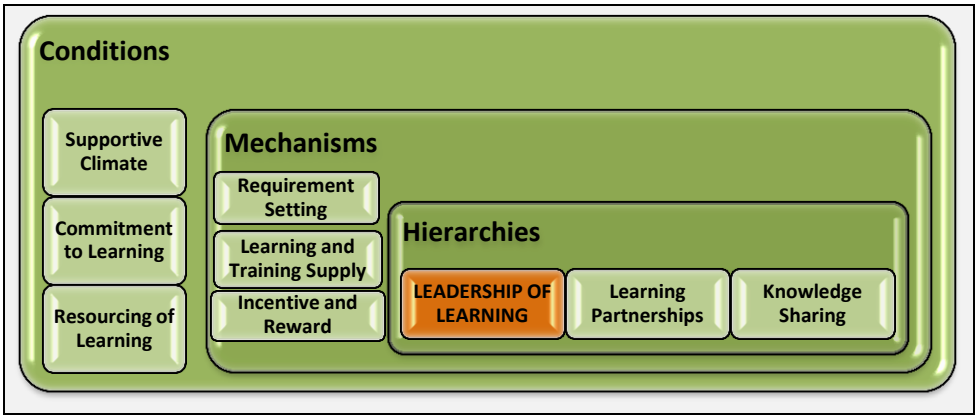

Figure 2: The Typical Characteristics of a Continuous Learning Culture (Mundy et al, 2016: p7)

The CLC study (Mundy et al, 2016) found that not all UK Defence organisations had a CLC, but there was evidence of sufficient related strengths and areas of good practice across the different organisations to indicate that such a culture could be embedded more widely across Defence. In order for this to happen, the study recommended that leadership of learning in the workplace needed to be increased, so that all those involved in leading, managing and supporting learning in the workplace were aware of their role and equipped with the right knowledge, skills and resources to be able to carry it out effectively. Based on the recommendations of the CLC study, the MOD decided to commission further research, aiming to gain a better understanding of the behaviours required of leaders of learning and to determine how to achieve behavioural change in the workplace to increase leadership of learning.

RESEARCH FOCUS

This new research explored evidence for the **behaviours associated with leadership of learning** and **options for developing these behaviours across all Defence organisations**. The overall aim of this DTC research was to support the embedding of a CLC across the whole of UK Defence and so the scope of the study included both Regular and Reserve forces, and all four Services, i.e. Royal Navy/Royal Marines, Army, Royal Air Force, and Civil Service. A research assumption was made that leadership of learning would occur at different levels within the organisation and these different roles for leadership of learning were explored with key DTC stakeholders so that a set of management levels relevant to a Defence CLC (Table 1) within working units or departments could be identified. The levels were defined using a set of generic levels of leader/manager against the standard military rank codes used by the North Atlantic Treaty Organisation (NATO) and equivalent employment grades used by the UK Civil Service.

Table 1: Levels of Leadership of Learning Relevant to a Defence Continuous Learning Culture

Leader/Manager Level	Military (NATO rank code)	UK Civil Service Grade
Senior Manager	Officer (OF) 4 – OF5 (e.g. Unit Commander)	Grade 7 Civil Servant Senior Executive Officer
Middle Manager	OF3 (e.g. Sub-Unit Commander)	Higher Executive Officer
Line Manager	OF 1 – 2 (e.g. Junior Officer) Other Rank (OR) 7 – 9 (e.g. Warrant Officer (WO) or Senior Non-Commissioned Officer (SNCO)	Executive Officer Industrial Skill Zone (SZ) 4
Work Supervisor	OR 3 – 6 (e.g. Junior Non-Commissioned Officer (JNCO) or SNCO)	Administrative Officer Industrial SZ3 Industrial SZ2

This was a detailed study which involved several stages of analysis and a comprehensive set of outputs, including performance analysis charts, learning objectives, learning pathway options, an Action Plan and an Evaluation Plan. As such, the full detail of the study cannot be covered within the constraints of this paper; instead the overall technical approach is summarised, then a more detailed outline of technical approach and findings for each of the two key research objectives is presented in turn, with overall conclusions for the study as a whole. First, the

behaviours associated with leadership of learning are identified and their potential impact on organisational learning culture is discussed. The paper then sets out the different **learning interventions** which were considered optimal to support the development of these behaviours in the workforce, compiling these in terms of learning pathways which include both formal and informal approaches. Finally, the study examines parallels that were found between current Defence leadership and management approaches and leadership of learning behaviours, and draws conclusions on how existing organisational resources might be exploited to support learning pathway implementation.

OVERALL TECHNICAL APPROACH

The New World Kirkpatrick Model (Figure 3) was considered a robust framework for the overall technical approach for this study because it places a strong emphasis on the link between learning interventions, employee behaviour and organisational business results. This updated version of the Kirkpatrick model (Kirkpatrick et al, 2009) promotes an evaluation process which begins at the training design and development stage rather than waiting until after training has been delivered. Desired Business Outcomes for training are first established along with Leading Indicators (i.e. short-term observations or measures) which will measure progress, or Return on Expectations (RoE), towards these outcomes once training is complete (see Level 4 of the model). The next stage (Level 3 of the model) identifies the key Critical Behaviours that will need to be developed for employees to support the achievement of these Business Outcomes, but importantly also examines the workplace interventions (e.g. on-the-job learning, supervisor support, performance support tools) which will be essential in monitoring, encouraging and reinforcing these behaviours once they have been developed. The Knowledge, Skills and Attitudes (KSA) required to support the development of Critical Behaviours are then identified (see Level 2 of the model); finally the information gathered in Levels 4, 3 and 2 is used develop learning interventions which are engaging, relevant and satisfying for the learner (Level 1 of the model).

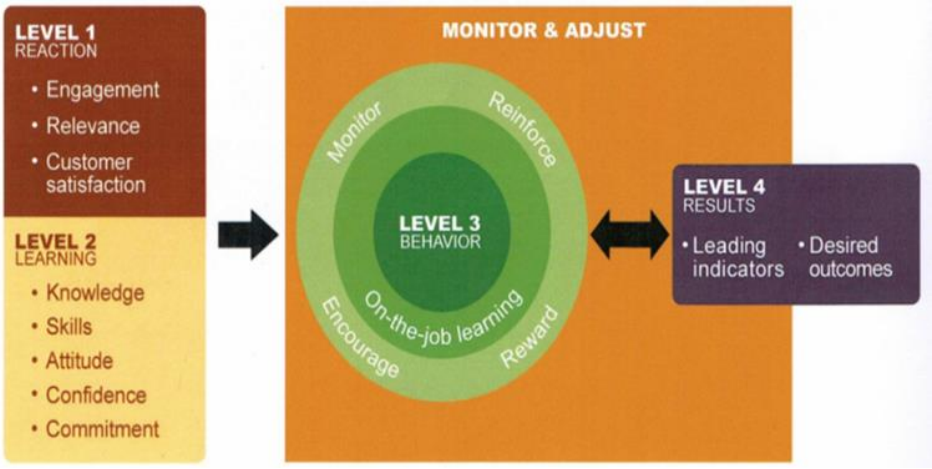

Figure 3: The New World Kirkpatrick Model (© 2010 – 2015 Kirkpatrick Partners: Reprinted with permission)

In order to identify **the behaviours associated with leadership of learning**, Level 4 of the Kirkpatrick model required the research team to first establish with DTC stakeholders the desired Business Outcomes of increasing leadership of learning in the workplace and then to agree Leading Indicators that could be used to measure progress towards these outcomes. Data were then collected on the Behaviours (Level 3 of the Kirkpatrick model) associated with leadership of learning and organised against the Leading Indicators to show how they could be linked directly back to the Business Outcomes.

To identify **options for developing these behaviours across Defence**, the research team focused on Levels 3 and 2 of the Kirkpatrick model. While Level 2 explored the KSA involved in developing the leadership of learning behaviours, Level 3 also required the research team to consider external factors in the workplace which might further develop, reinforce and sustain these behaviours. The combination of these external factors with more formal learning interventions to develop KSA provided the research team with options for learning pathways which used both formal and informal learning approaches. These were then presented as an Action Plan, which included the evaluation of the learning pathways based on Levels 1 – 4 of the Kirkpatrick model (Figure 3).

WHAT ARE THE BEHAVIOURS ASSOCIATED WITH LEADERSHIP OF LEARNING?

During the inaugural project meeting, DTC stakeholders confirmed that the overall Business Outcomes were to increase leadership of learning in the workplace and support the embedding of a CLC across Defence, thus enabling the benefits associated with a CLC to be realised. With these Business Outcomes in mind, it was considered that the Leading Indicators of progress towards embedding a CLC would strongly reflect the characteristics of a CLC shown at Figure 2. These nine characteristics were therefore used by the research team as the basis for organising the data on the Behaviours associated with leadership of learning.

Data were first gathered using a literature review to identify the typical behaviours used by leaders of learning, both across industry and within Defence. Literature sources included existing Defence-sponsored research studies (Mundy et al, 2016; Steele et al, 2016; Jones et al, 2014; Lister et al, 2014) and 22 non-defence empirical research studies, each with a focus on workplace learning, organisational learning or knowledge sharing (these empirical research studies are annotated in the reference section with an asterisk (*) prior to the author's name). Each level of leader/manager (see Table 1) was represented by participants in at least four of the selected empirical studies, although the titles used for management levels in these research studies varied. For ease of reference, titles were interpreted to fit within the generic titles shown at Table 1 (e.g. Chief Executive or Managing Director was interpreted as Senior Manager). In order to balance the findings of the literature review, semi-structured interviews were conducted with managers in two selected Defence organisations, to determine how good practice in leadership of learning was currently conducted in the Defence context. These two organisations were targeted specifically because they had been identified in previous research (Mundy et al, 2016) as examples of good practice in leadership of learning. Five interviews were conducted in total, with participants being selected from three different levels of the organisational hierarchy (senior, middle and line managers).

Evidence for Critical Behaviours and Sub-Behaviours

Based on the findings from the literature review and the review of good practice in Defence, thematic analysis was conducted by individual researchers and then refined in a whole team workshop to identify the behaviour-based performances required of leaders of learning at each level of leader/manager. Using the themes that emerged from the analysis of data, three common 'Critical Behaviours' were defined that needed to be performed consistently in the workplace by each level of leader/manager in order to ensure effective leadership of learning:

- **Promote Commitment to Learning** i.e. influence positive attitudes to learning in the workplace;
- **Encourage Engagement with Workplace Learning (WL)** i.e. ensure learning activities are taking place in the workplace; and
- **Enable Effective Engagement with WL** i.e. ensure that the learning activities are relevant, meaningful and productive.

Each of these Critical Behaviours was then refined to show more detailed sub-behaviours for each level of management by drawing on the detail of the earlier thematic analysis work. The sub-behaviours differed in their detail according to roles and levels of responsibility, but generally followed common themes across all four levels. These common behaviour themes and their potential impact on organisational learning culture are summarised in Table 2 to Table 4 against each of the Critical Behaviours, with supporting evidence from the literature review and good practice case studies provided in the subsequent paragraphs.

Table 2: Common Sub-Behaviour Themes for Promoting Commitment to Learning

Critical Behaviour: Promote Commitment to Learning	
Common Sub-Behaviour Themes	**Potential Impact on Learning Culture**
Set an organisational vision of WL.	• Employees recognise the personal and organisational benefits of learning in the workplace. • Organisational attitudes to learning are positive and proactive. • Employees are committed to supporting others' learning as well as their own.
Champion the value of WL.	
Lead commitment to learning by example.	
Champion the value of Workplace Trainer roles.	

Evidence across the literature and good practice case studies indicated that organisational attitudes to learning had a very strong influence on workforce commitment to learning. Senior and middle leader/managers therefore need to clearly communicate the importance and value of WL by making clear links between learning in the workplace, continuous improvement (CI) and organisational excellence (Mavin et al, 2010). Viitala (2004: p533) identifies the vision and goals of an organisation as important guidelines for learning and describes a process of '*orienteering of learning*' in which "*leaders show and help others to see a direction of learning*." This vision for learning which is set at senior management level needs to be shared at lower management levels and reinforced through leader/manager actions. Popper (2000) describes a major channel of influence which leader/managers have when they allocate precious 'manager time' and 'manager attention' to engaging with learning activities in the workplace. This conveys an unmistakable message to the workforce regarding the value that the organisation places on continuous learning. One senior manager in the good practice case studies from Defence explained that much of this depended on mind-set and attitude, "*just like anything else there is a time investment but it's worth it. We need to sell the benefits. It's not an indulgence, it's a necessity*." There were clear examples in the good practice case studies of this type of behaviour, for example, one line manager explained, "*Mandatory training comes to us and within a team our [senior manager] then gives additional training on the job*." This reinforcement of learning by a senior manager in the workplace allocates 'manager time' and 'manager attention' to training, which in turn promotes commitment to learning. This approach also enhanced what might once have been a single training intervention in an external classroom into a more continuous and contextualised approach to mandatory training, increasing its relevance and encouraging workforce engagement.

The importance of learning in the workplace is also communicated by the actions of leader/managers; they "*…lead learning and knowledge through their own example. To be credible, leaders themselves have to learn and constantly develop their capabilities*," (Viitala, 2004: p536). Role modelling was consistently identified in the good practice case studies as an essential tool for influencing attitudes to training and learning. The line managers in particular highlighted their own and others' development activities as an example to their subordinates; "*they are continuously learning from senior colleagues setting an example. I also go on training myself so they can see what I am doing and the reasons behind it. They are able to see my development to aspire to their own goals as well*." Middle and senior managers also identified the importance of being a role model: "*I'm very honest about my own time for personal development and tell them what I'm doing when, and discuss it when I come back*."

Openly valuing and resourcing the development of trainer-related skills in the workplace also sends a clear message that the organisation values WL (Mundy et al, 2016); the literature identified lack of recognition for those supporting WL as a potential barrier: "*staff often feel that their training role is added to a full time job without proper recognition or time to do it*." (Tamkin and Bowyer, 2013: p27). Research by the Institute for Employment Studies identified a number of factors which hindered development in the workplace, which included "*lack of recognition for managers who put a real emphasis on staff development*," (Hirsh et al, 2004: p6). Commitment to learning must therefore be fostered in those who support learning in the workplace as well as in the learners themselves (Steele et al, 2016).

Table 3: Common Sub-Behaviour Themes for Encouraging Engagement with Workplace Learning

Critical Behaviour – Encourage Engagement with Workplace Learning (WL)	
Common Sub-Behaviour Themes	**Potential Impact on Learning Culture**
Create a climate of psychological safety and trust. Set expectations for both formal and informal WL. Recognise and support development of trainer-related skills and knowledge.	• Employees are empowered to learn from their mistakes, which in turn enables self-efficacy in learning and self-regulated learning. • There is increased propensity for employees to ask for and offer help and advice in the workplace. • Learning at work becomes the first port of call when new knowledge or skills are required.

Evidence from the literature review showed the role of senior leader/managers as critical in creating organisational conditions that can support or suppress the facilitation of learning (Kyndt et al, 2009; Margaryan et al, 2013; Lancaster et al, 2013, Viitala, 2004). An essential element of this is psychological safety, i.e. *"a state in which*

people feel safe in honestly discussing their mistakes and what they think, and how they feel," (Popper, 2000: p140). Jones et al (2014: p23) identified a lack of tolerance for errors as a major barrier to learning, "*because without error tolerance, people are reluctant to take the risks required for learning*." Lister et al (2014: p46) note that "*errors provide a type of feedback that is a necessary prerequisite for learning and can be used productively in the training process*." Learning from mistakes was not evidenced in the good practice case studies, but line managers spoke extensively about building mutual trust, loyalty and confidence with their subordinates. In particular, they discussed the importance of trust when giving subordinates time to engage with learning: "*trust is a key issue…if a member of staff is taking time out for learning; you need to trust that they will do it."* They described setting up informal agreements, in which the manager and subordinate established boundaries and terms for when and where the learning would take place. One of the roles for leaders of learning, therefore, is to eliminate fear of failure from the workplace and develop a climate of trust, so that individuals feel able to identify knowledge and skills gaps to the chain of command, thus encouraging them to self-regulate their learning.

The need for adopting a balanced approach to formal and informal learning in the workplace was evidenced across the literature and case studies, with senior and middle managers setting expectations for an organisational culture in which WL is the first port of call for learning (Beattie, 2006). One line manager in the good practice case studies observed that there was now a "*greater focus on the informal, but not just because people don't have access to the formal. My mantra is to get people to think about what they can learn at work first before a course.*" In the literature, the work supervisor was identified as being in a key position to create informal learning opportunities in the workplace, "*scaffolding workers to higher levels of performance*" (Margaryan et al, 2013: p249), adjusting the division of labour and re-organising individuals' work so that the organisation of work forms a 'workplace curriculum' with the main objective of aiding skills formation (Warhurst, 2013). The literature also identified "*…specific supervisor behaviours that assist in the training transfer process*," which include setting expectations for learning prior to a training intervention by making links with individual, team and organisational goals. Equally important is to provide situational cues (Holton, 1997) after training that serve to remind individuals of what they have learned and provide them with an opportunity to use the learning in their work, or provide consequences that affect individuals' further use of their learning, e.g. positive feedback on successful application of learning, or negative feedback on failure to apply learning in the workplace. Lancaster et al (2013: p15) found in their research that "*Participants reported being 'demotivated' and disappointed by supervisors who showed no interest in their attempts to implement new work practice."* In the good practice case studies, one line manager gave several examples of work-integrated learning opportunities that had been employed, including delegation of tasks, project based learning; presentation of findings to peers on problem solving activities; reflective practice as a team following a planning and organising activity. In each case, developmental feedback from superiors and peers was an integral part of the learning. These were seen as activities which developed self-efficacy, confidence and independent learning, thus encouraging individuals to take ownership of their learning and to self-regulate it.

The literature also showed that managers must reward those who support learning in the workplace, by recognising, developing and exploiting the trainer-related skills acquired (Steele et al, 2016; Mundy et al, 2016). This recognises and rewards managers that "*put a real emphasis on staff development*," (Hirsh et al, 2004: p6) and demonstrates that those with aptitude for training are highly valued by the organisation (Steele et al, 2016). In the good practice case studies, managers described rewarding good performance as workplace trainers within the appraisal system, either by supporting individuals in setting new goals to develop their trainer skills further, or by recommending promotion based on good performance. It was suggested by one line manager that engagement with WL should be a key part of the appraisal for all managers, i.e. "*how do people support their peers and their team*?"

Table 4: Common Sub-Behaviour Themes for Enabling Effective Engagement with Workplace Learning

Critical Behaviour - Enable Effective Engagement with Workplace Learning (WL)	
Common Sub-Behaviour Themes	**Potential Impact on Learning Culture**
Resource engagement in WL.	• Time and location are not barriers to learning in the workplace. • Employees are empowered to engage in self-regulated learning and to support others' learning. • Knowledge is shared, preserved and exploited across the organisation.
Address barriers to engagement in WL.	
Provide appropriate mechanisms for sharing learning.	

The literature found that how the organisation resources workplace learning mechanisms and activities has a strong influence on employee perceptions regarding its value. Leadership of learning occurs on different levels within an organisation and so there is a requirement for senior managers to take ownership of the primary role and ensure that middle and line managers are given the necessary resources and the authority to empower learning at the next level down (Jönsson et al, 2013). One of the main barriers to learning identified in the CLC study (Mundy et al, 2016) was the time pressures associated with the work environment, leading to a perception that formal, mandatory workplace training was a burden to be tackled and overcome, rather than an opportunity to be engaged with in a meaningful and productive way. The good practice case studies provided evidence that by establishing a vision and clear strategy for workplace learning, senior managers empower middle managers to allocate and protect time for learning, which in turn empowers those at lower management levels to do the same. Managers adopted a pragmatic approach to balancing work priorities with time for learning activities, noting that, above all, there was a need to plan ahead and to be flexible and approachable: "*A lot depends on line managers and time they see available for workplace learning. Give them the support for it. I make it very clear that they know they can come to me and ask for time or resources. There are no barriers to them approaching me*." A key factor here for the middle and line managers was the understanding that they had the authority from their superiors to allocate time to WL: "*The chain of command…they give me permission as middle manager to make authorisations for CPD* [Continuing Professional Development] *and WL activities, and this is very supportive of innovative ideas for workplace learning.*" The literature also highlighted the importance of giving time and resource to managers to be able to develop themselves. Recent research from the Chartered Institute for Personnel and Development (CIPD, 2013) found that while workplace learning programmes and coaching by line managers consistently ranked among organisations as the most effective WL activities over the last five years, coaching/mentoring staff was seen as one of the main areas in which leaders lacked skills. Equally important is the commitment to learning gained through professional development: "*managers who themselves have received little education and training are less likely to recognise or approve the need for investment in the training of their subordinates,*" (Mavin et al, 2010: p19).

Managers in both of the Defence case studies recognised that time was frequently cited as a reason for not engaging with learning, but noted that this was often self-imposed because of feelings of guilt. One line manager observed that often individuals felt unable to commit to time for learning and development, fearing that busy colleagues would have to cover their duties, describing a "*genuine feeling of guilt….leaving people to pick up the slack*." In this case, it was important for the manager to confirm the importance the organisation placed on employee development, even when it meant accepting gaps in staffing for a period of time. Following up training activities with a line manager or team discussion was considered a good way to identify the benefits to the individual and to the organisation: "*Encouraging them to reflect on why their activity is important and not just because it means they get a week out of the office*!" Both case study organisations were making good use of technology as a resource for learning; virtual learning environments provided online resources that could be accessed by all individuals, anywhere and at any time. This was considered a real strength of the system, since it supported individuals in self-regulating their learning and meant that time for learning could be managed more flexibly, although managers emphasised that this should not be in the individual's own time. The physical environment was also identified as an important factor for online learning; often the work environment was too busy and distracting to be suitable, and so managers were prepared to support learning from home or find a more suitable environment elsewhere in the workplace.

Leaders should continually look for opportunities to learn (Jones et al, 2014), and so senior and middle managers need to develop cross-organisational knowledge sharing mechanisms, fostering communities of practice which "*come to know more than the sum of their members' knowledge*," (Warhurst, 2013: p43). Line managers must then develop the social climate in the workplace so that new knowledge can be created through a culture of openness, trust, and knowledge sharing that is promoted and maintained by line managers, reinforced by work supervisors, and embraced by subordinates (Mundy et al, 2016). In the good practice case studies, knowledge sharing took place across the hierarchy: "*It is not always top down; we are sideways as well…talking between colleagues is workplace learning*!" One line manager observed the benefits that come from this type of knowledge sharing: "*Learning from others helps you to see the style and approach that has been successful in the past in this organisation*."

HOW CAN LEADERSHIP OF LEARNING BEHAVIOURS BE DEVELOPED ACROSS DEFENCE?

Having identified the behaviour-based performances required of leaders of learning, the research team now focused on Levels 3 and 2 of the Kirkpatrick model (Figure 3), to establish both the KSA involved in developing these

behaviours and the external factors in the workplace which might further develop, reinforce and sustain them. A model of behavioural change, the Capability, Opportunity, Motivation – Behaviour (COM-B) model (Figure 4), was used to analyse the different factors on which the development of these behaviours was dependent. This model was chosen because it links behaviour to three elements which align closely with Levels 3 and 2 of the Kirkpatrick model:

- **Capability (Physical or Psychological)** – this element focuses on the **knowledge** and **skills** required to perform the behaviour;
- **Motivation (Automatic or Reflective)** – this element focuses on the **attitudes** and beliefs which drive the behaviour;
- **Opportunity (Physical or Social)** – this element focuses on **external factors** which make the behaviour possible.

Each of the Behaviours identified in the first stage of research was analysed in a team workshop against the COM-B model for each level of leader/manager. The Capability and Motivation elements identified the KSA needed for each Behaviour and the Opportunity element identified external factors which would be required for the Behaviour to develop and be maintained.

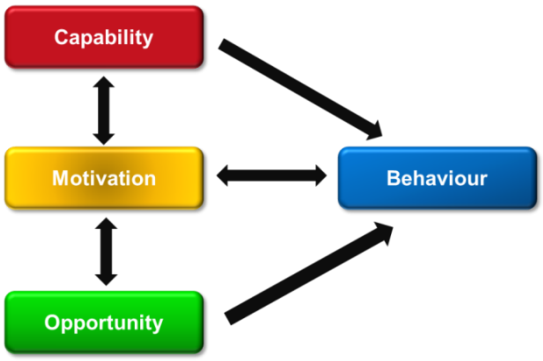

Figure 4: The COM-B Model of Behaviour and Behaviour Change (Source: The COM-B System: a Framework for Understanding Behaviour © Michie et al; licensee BioMed Central Ltd. 2011. Reprinted under CC by 2.0)

Based on this greater understanding of the Behaviours, the research team applied a second framework from within the COM-B system (the Behavioural Change Wheel (BCW)) in order to systematically identify appropriate intervention functions which could be used to promote the development of the Behaviour. A supporting BCW matrix indicated the optimum types of intervention for the corresponding COM-B elements, e.g. Physical Capability is best developed using interventions of Training and/or Education. Table 5 shows the range of interventions that were identified as relevant to the development of leadership of learning from the BCW matrix.

Table 5: Description of Behavioural Change Wheel (BCW) Intervention Types Relevant to Leadership of Learning (Source: The COM-B System: a Framework for Understanding Behaviour © Michie et al; licensee BioMed Central Ltd. 2011. Adapted under CC by 2.0)

BCW Intervention Type	Description	Optimum for COM-B Element
Education	Increasing knowledge or understanding.	Capability Motivation
Persuasion	Using communication to induce positive or negative feelings to stimulate action.	Motivation
Incentivisation	Creating an expectation of reward.	Motivation
Training	Imparting skills.	Capability
Modelling	Providing an example for people to aspire to or imitate.	Capability Motivation
Enablement	Increasing means/reducing barriers to increase capability (beyond education and training) or opportunity (beyond environmental restructuring).	Opportunity

Learning Pathways

Using this set of optimum interventions identified for each element of the COM-B model, the research team interpreted these into formal and informal learning activities to be built into a learning pathway for each level of leader/manager. This learning pathway approach aligned with Level 3 of the New World Kirkpatrick model (Figure 3), in which formal learning is subsequently reinforced, monitored, encouraged and rewarded on the job. Each pathway considered the optimum combination of formal and informal learning activities, as well as activities which might be implemented by the chain of command to reinforce the vision and underpinning concepts of a CLC.

The KSA which could be targeted using Education and Training interventions (Figure 5) were used as the basis for developing a list of Learning Objectives (LO) and subordinate Enabling Objectives (EO) for each leader/manager level. These were then compared against existing leadership and management (L&M) training courses across Defence to establish those LOs that were already included, either wholly or in part, in existing courses, and those that were likely to be completely new to the Defence L&M curriculum. A review of two Defence competency frameworks (the Defence Trainer Competency Framework (DTCF) and the Civil Service Competency Framework (CSCF)), and a review of Service-specific leadership concepts was also conducted, to see whether these could be used to define the standards for the LOs. The findings were then used to support the analysis of options for delivering the LOs.

The study found that there were a number of LOs which were covered in part, or which were implicit in existing LOs within existing L&M courses; these related mainly to coaching, team development and role modelling. There were some key gaps relating to: the importance of WL; performance management; assurance of formal WL; self-regulated learning; barriers to learning; recognising and rewarding learning; continuous improvement and knowledge sharing. It was considered that there was potential for the inclusion of some additional knowledge-based EOs into existing LOs, to develop the link between existing LOs and CLC concepts, or to extend the knowledge and skills required in this topic area.

The focus of the learning content in the LOs was on promoting and enabling learning in the workplace. Opportunities for performance support systems in the workplace and for supported WL and self-directed learning were therefore considered within the options for the learning pathways, in order to model and encourage good practice in WL. It was considered that supported WL (i.e. learning with support from individual's own superiors) would be appropriate at work supervisor and line manager levels, and that this could occur both before, in place of, and/or after formal training. Options for exploiting learning technologies to deliver learning content online were also identified. The Defence Learning Environment and the Civil Service Learning (CSL) Portal both provided access to relevant learning content, which could be exploited as a resource for formal training, WL or performance support. In particular, the CSL Portal had a good range of online content relating to the LOs for leadership of learning which were potentially exploitable across all Services.

A particularly interesting finding from the analysis was the alignment of existing Defence vision statements, leadership concepts and standards documents with the behaviours associated with leadership of learning. All four Services already had a clear strategy for communicating Service-specific leadership; all of these were underpinned by themes of workforce development, talent management, continuous improvement and innovation culture. Many of the leadership of learning behaviours were also found to be aligned with standards set out by Defence in their existing competency frameworks for Defence Trainers and for Civil Service employees. This suggested that the key concepts which underpin leadership of learning were already accepted and advocated at senior management levels across Defence. A good example was seen in the Defence 'Thinking to Win' (T2W) leadership initiative, which had been described to the research team by one senior manager during the good practice case studies. This initiative aims to "*create a culture of innovation*," setting the vision of a culture in which "*It's OK to make mistakes – that's part of learning lessons*," and where leaders should, "*Promote diverse thinking and encourage innovation from others. A good challenge should be met with a good response*," (MOD, 2016: p7).

These high-level leadership concepts and standards clearly offered a vision for continuous learning and their alignment with existing approaches offered an opportunity to signpost leadership of learning behaviours using existing standards and communications for leadership in the Services, rather than inventing new ones, at the same time gaining buy-in at more senior levels of management. One senior manager in the good practice case studies, however, also noted the importance of enabling leaders of learning to share such vision at lower levels: "*We need a toolkit, not just directives… it gets to a certain level and there are posters, but no details as to how to implement it…and no requirement to do it*." This example clearly highlights the importance of empowering leader/managers at lower levels of the organisational hierarchy to reinforce high-level vision by ensuring that they have the knowledge, skills and resources to make it relevant and meaningful to their subordinates so that it becomes a shared vision followed up with changed behaviour and actions.

Figure 5 shows how the research team interpreted the recommended interventions at Table 5 into formal and informal learning activities which could be built into a learning pathway for each level of leader/manager.

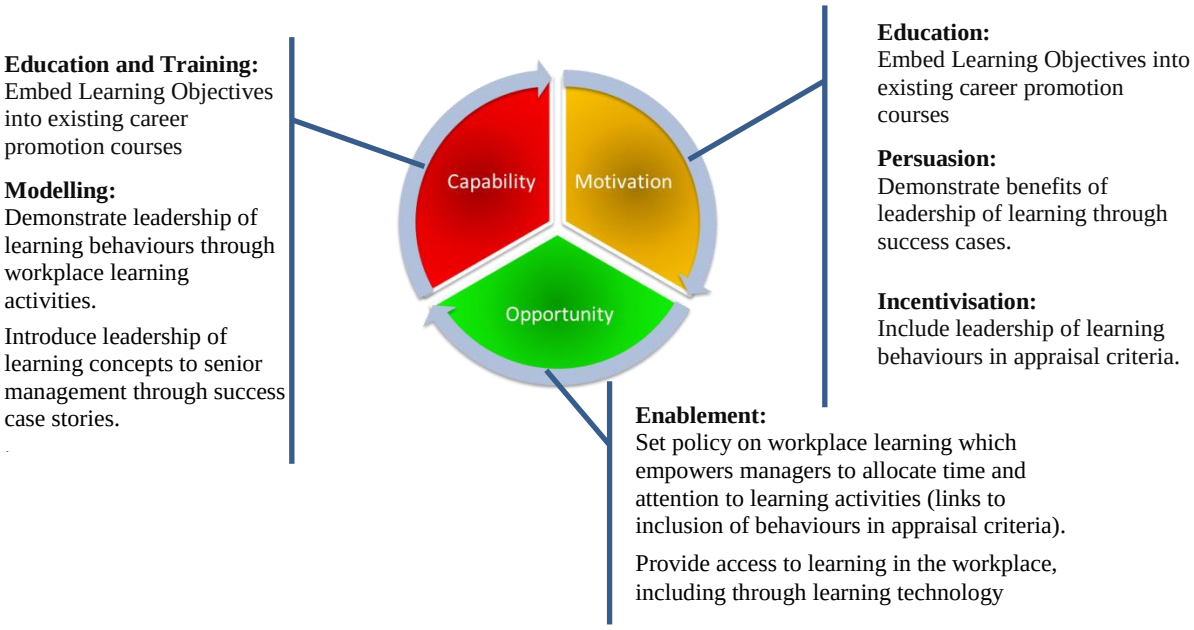

Figure 5: Combining Behavioural Change Wheel (BCW) Interventions to Create a Learning Pathway

CONCLUSIONS

The leadership of learning behaviours identified in this study are underpinned by concepts of workforce development, talent management, continuous improvement and innovation culture. As such, they are highly desirable behaviours for Defence organisations to cultivate in their management hierarchy and this is reflected in the close alignment of existing vision statements, leadership concepts and competency statements relating to Defence leadership and management. However, the evidence both from this study and the CLC study indicates that organisations do need to be more explicit (see Figure 1) in the way they allocate and resource the roles and responsibilities of leader/managers in developing and supporting a CLC. Once the strategic vision has been set and the operational requirements articulated through leadership concepts and competency statements, leader/managers need to be equipped with the KSA and resources to achieve the competencies and carry through the vision. Otherwise, organisations may well be waiting for '*a miracle to occur*.'

The findings of this study supported the use of targeted learning interventions in Defence to ensure that roles and responsibilities for leadership of learning in the workplace are made explicit and that individuals are prepared to engage effectively with these roles. Existing L&M courses in Defence already covered some of the KSA required to develop leadership of learning and there was potential to make limited changes to existing LOs to meet the full requirement. However, formal training is only the start of the journey for leaders of learning. It is in the workplace that the real progress on developing behaviours and embedding culture takes place; the learning pathways recommended by the research team reflected this and included interventions which closely model desired behaviours, e.g. supported WL to create opportunities to practice leadership of learning, and reinforcement activities to influence attitudes and provide motivation. The inclusion of appraisal as a resource in learning pathways was considered particularly important as it ensures holding to account for leadership of learning at all levels and supports unit self-assessment of progress towards better leadership of learning. Again, the study showed that the implementation of these learning pathways could be underpinned by standards from existing competency frameworks with some limited revision and these standards would then be reflected in training design and delivery, and the setting of workplace objectives and recognition of achievement through appraisal.

Most importantly, the study highlights the mutual dependence between the different levels of leadership of learning. Each of the 'actors' supports and reinforces the leadership actions of those at levels above and below, e.g. senior and middle managers need to empower line managers and work supervisors so that they can allocate and protect time for learning; work supervisors and line managers need to monitor barriers to learning in the workplace and feedback to senior and middle managers so that these can be addressed. This mutual dependence gives rise to potential for constraints, and so it is important that all managers understand the different roles involved in WL and take ownership of their own role to deliver the leadership of learning required to enable a CLC to develop and thrive.

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Note:
* preceding the author's name indicates a reference that was selected as an empirical research study in Stage one of the research.

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