Aligning Technology with Workforce and Organizational Development

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INTRODUCTION

Personal development planning, knowledge management and continuing professional development are key strategies for workforce and organizational development. Through the use of educational and online technology, these approaches can help professionals keep up to date with recent developments in their field and, similarly, organizations can continuously learn, evaluate and improve on their delivery of services and enterprises. In most cases, the technological infrastructure will be integral to documenting and reviewing previous work, planning forward endeavors, and in implementing changes for continual improvement. This intertwining of workforce and organizational development – which can be facilitated through the effective use of information science, educational and knowledge management technology – is increasingly becoming essential for any enterprise that is serious about excellence and continuous improvement for service delivery.

This review outlines an integrated case for technological infrastructures in workforce and organizational development, and discusses how the alignment and integration of technology supports personal development planning, learning management and knowledge management. It suggests a workforce journey from graduate through to professional, as well as strategies that organizations can implement to support it. Through the divisions of the workforce and the organization, documented strategies for success in utilizing technology are outlined, challenges and controversies presented, and potential future research directions are suggested. In benefiting personal and organizational development, such workforce strategies may help other organizational leaders to implement the tools and processes for maximizing learning, application and delivery at all workforce levels.

BACKGROUND

The workforce is any organizations most valued asset and the ability of staff to develop and keep their knowledge and skills up to date will help support the delivery of high quality and continuously improving services. Learning that is motivational, self-directed and meaningful to everyday work experiences is respected to individuals and organizations alike – and the processes that are involved in managing and levering this knowledge is the discussion of many books, articles and working papers.

Adult learning theory perhaps offers one foundation for reflecting upon the role and development of organizational learning cultures, staff learning, engagement and quality service delivery. For instance, Knowles (1990) outlined six assumptions of how adults learn: the integration of knowledge and experience, equality and respect, the practical applications of learning, and the autonomous and self-directed nature of adults. So what do these mean for workforce? Reflecting on these and bringing together some ideas from Total Quality Management (TQM) (Roberts & Sergesketter, 1993) and intellectual development (Perry, 1999), the following seven principles for the continuously learning workforce are brought forth:

In cognizance of these seven principles, the continuously learning workforce can utilize and embed the increasing educational and online technological infrastructures to continuously update skills and com-

Table 1. The seven principles for excellence in service delivery by the continuously learning workforce

Principle	Excellence in Service Delivery by the Continuously Learning Workforce
1	**Review Intentions:** Adults are autonomous and self-directed by nature, and will have reasons for engaging in learning endeavors for current and future applications. Such enterprises will benefit adults themselves, the organizations in which they reside, society, the world around them, and future generations. Reviewing intentions allows adults to catalyze the conditions for learning and the application of knowledge and wisdom.
2	**The End Goal:** Once the end goal of the learning endeavor has been realized, the steps required to achieve this is categorized. Likewise, within team collaborations, there is a shared understanding of the specific roles required of individuals in order to meet quality outputs and end goals.
3	**Responsibility for Learning:** Utilizing a variety of sources and formats, adults are responsible for systematically maintaining and keeping up to date with the evidence base, skills and competencies, advances in a field and in exploring the integration and applications of knowledge. Through reflective and metacognitive processes (in solitude or with others), adults will recognize and build upon prior learning and successes, experiment with novel ideas, and review intelligence to meet identified goals. In addition, problem solving and the application of knowledge and wisdom will fill perceived knowledge-practice gaps. Furthermore the organizational culture that respects intellectual freedom, experimentation and creativity will support staff in their learning journeys.
4	**Graded Development:** As adults progress through life, responsibilities tend to increase. Likewise, in the sphere of workplace learning, graded development occurs in a range of domains: knowledge acquisition; assessment; the development of expertise; professionalism; intellectualism; and leadership and management. In this respect, adults move to less structured processes, with increasing strategic leadership and management responsibilities.
5	**Professionalism:** Professional growth is a continuous process over the long term and requires commitment by the individual, and ideally, additionally by the organization. Areas that support learning and development in this domain include moral and ethical judgment, self-awareness, and the attitudes, skills, behaviors and values that are recognized as integral to the profession. As well as excellence in service delivery, generic skills such as collaboration, teamwork and communication, will be taken into account.
6	**Evaluation and Performance:** Evaluation and feedback on learning, assessment and performance are essential in supporting the workforce in reflection, application and progression. It could take a variety of forms, such as formal appraisal, informal feedback, '360 degree' feedback, or simply via self-assessment. One to one feedback will also support learners in overcoming perceived challenges, making the most of opportunities and in supporting progression to upcoming levels.
7	**Ongoing Quality Improvement:** Once 'things' are right, there is the relentless pursuit of continuously improving the quality of outputs, and the delivery of services and enterprises. This philosophy rests upon sustaining and embedding best practices, quantifying improvement, progress and development, and actively embracing the future by reassembling ideas and reinventing processes for better and new outcomes. The ability to select and creatively integrate extant and new foundations will be paramount to imagining, designing and implementing future states. This ongoing process of reinvention meets and improves upon the processes and performance of deliverables and identified end goals.

petencies, meet end goals and improve on outputs and deliverables. The increasing power of technology to transform learning, development and application can potentially be seen in the current plethora and usage of online tools and applications available. Examples include: Massive Open Online Courses (MOOCs); smartphone and tablet technologies; e-Learning and virtual learning platforms; point of care tools; Web 2.0/3.0 and social media technologies.

The electronic infrastructure can effectively support workforce development, and a holistic approach that is supported by the organization will encourage staff to continuously learn, record outputs, and reflect on successes. Furthermore, highly motivated staff will be concerned with excellence in service delivery, further meeting the requirements of clientele groups and the organization itself. The above concepts are discussed in more detail in the following paragraphs.

WORKFORCE AND ORGANIZATIONAL DEVELOPMENT

From Graduate to Practitioner

As graduates embed themselves in working life, reviews with mentors and supervisors would most likely involve personal development planning and needs assessment processes. A shared online framework can be used to

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