Preparing Kid’s for the Work Environment (without being too brazen)

By Stephen Abram

It is NOT the role of schools to prepare our learners for work alone. We prepare them for LIFE! And that means there we strive to prepare them with the social, cultural, entertainment, thinking and life skills and competencies that will make them successful adults and citizens. That said, a whole lot of our adult lives are spent in work environments. Meaningful work, a strong societal and economic contribution (and no small amount of personal esteem) is based on the contributions we make collaborating with other in common purpose. We know that world of work we’re preparing our learners for is emerging as a quite different paradigm than the one we prepared for (and have adapted to mightily). Knowing some of the changes we’re already seeing are going to grow in both penetration and type, what can we do now to prepare our lessons and school environments to build on a vision of a positive future?

The increasingly digital environment in which corporations and enterprises operate has put increased pressure on employees to learn new skills constantly and adapt to major changes in organizational processes and environments. The combination of increasing corporate employer expectations and a plethora of digital data services, tools, and resources is causing employers re-think their human resource models and shift their strategic directions. The era of too-much-information is driving demand for greater filtering and clarity as well as more value-add to support scanning and insight derivation from massive quantities of news and other information behind the floodgates. If any environment is challenged by the digital information tsunami it is business . . . and it’s there that we see the need for speed quickening.

Indeed one of my major learnings from trend watching in the past few years is it’s not just the fact that new technologies evolve or appear on our radar screens to create new opportunities but that the other side of the coin is that employer expectations are being driven by a plethora of their own insights and behavioral change. User experiences with the consumer web (largely driven by their personal (and only partially business-oriented activities) on such services as Google, Facebook, Amazon, and eBay have fired their imaginations about how these might apply to their workplace setting needs. However, many corporate settings have a very low understanding of the quality, licensing, costs, usage rights, copyright, legal, security and privacy issues associated with applying these services for the business. Although professional librarians allied with information technology professionals offer some talent in dealing with these
issues, all employees need to be content rights literate since risk exposure through misuse can be huge.

The consumer trends in technology, content and data, publishing, payment models, and learning are challenging enterprises to adapt and up their game with respect to meeting employee and market expectations all the while simultaneously managing costs around implementation and development. As the intranet becomes more usable within the workflow context and not just a huge digital storage barn for external and internal information, many corporations are seeking to influence and contribute leadership to more scalable research workflow initiatives in their companies and institutions. Here is a baker’s dozen environments that our learners need to be prepared to engage with:

**Experience Portals**

The creation of scalable and sustainable ‘products’, that serve as stations on the research train is one trend. These range from competitive intelligence tracking, portals of content for news, industries, companies, and topics that align with the strategic needs of the organization. Creating a suite of dashboards or webpage portals that tie these content sets to the business professional’s real goal – learning, analysis or decision-making requires a deeper understanding of the real decision-making needs in the business environment of end-users and teams and not just the view of effectively serving their transactional needs for specific identified information. The user experience has become a real priority for virtual libraries. After moving so much content to the intranet it often became a morass in a world of too-many-files and too-many-interfaces. Some libraries are now focusing on the user experience in the context of their needs and environment and the key decisions they need to make and the key things they need to learn. Understanding the principles of knowledge management and user experience (UX) can move intranet initiatives beyond just information and data transaction storehouses to focus on end-user transformations where greater impact can be measured. Clearly, this is one of the key environments in which our learners will be engaging their critical thinking and decision-making skills.

**Dashboards**

What we used to call alerting services have evolved from traditional print, table-of-contents and e-mail services of the last century to malleable personal dashboards that are iteratively tunable by both the business user and the information professional combining diverse and targeted sources to address the common complaint from end-users about e-mail fatigue, and the fire hose of information. The real challenge of employees is making sure that their information is appropriate and complete for the decisions they are making on behalf of their employers. Hand crafting each and every research task can become expensive on a corporate level and reduce timeliness especially with the reduced staffing we find today. Dynamic, timely, and current dashboards provide valid and timely first steps in serving the top questions of end-users.
Collaboration
Collaboration among co-workers inside and outside your team or organization is the norm. This is increasing supporting by collaboration software that not only shares information and calendars and directories, but also creates meeting rooms, learning environment, and places to work, create, experiment, discuss, and write together. Learners learn some of these behaviours in virtual school classes or in social video gaming environments. It all leads to skills that are necessary already in today’s increasingly global work world.

Streaming Media
Streaming media is a huge thing in the consumer space with Netflix and TiVo and this creates a challenge for all types of enterprises but video is a key tool of the 21st Century to communicate information to employees where video and podcasts and videoconferences of stock market players or company meetings, etc. are common. There are opportunities here for successful employees to time shift the use of these current awareness resources and address the challenge of finding the new tools to index, archive, and search the spoken word. I can also see issues for some enterprises around bandwidth blocking and mobile usage.

Mobile Devices
Smartphones and tablets are now commonplace, ubiquitous and dominate as the primary end-user access point for business users for content in all formats and beyond text. This challenges corporate library intranet operations if they have a closed framework or overly restrict access and usability (e.g. PDF delivery can often be difficult since the format isn’t fluid and usability is varies radically between tablets and phones). Corporate intranet testing procedures are being challenged to adapt old content conversions to new end-user form factors. Using the mobile device as a primary business tool can’t just be left to random teen texting as a learning mode.

Cloud computing
The cloud is boundary breaking. The boundaries of service, the boundaries of geography are changing due to cloud computing. No longer do corporations need to house server farms. But, while software in the cloud is reducing cost of ownership for organizations, it is simultaneously raising concerns about privacy. The cloud has three aspects of corporate interest to information professionals – the cloud of content, the cloud of metadata, and cloud-based software applications that remove the difficulties of updating the software and offering a uniform and up-to-date platform to users. Again there is a risk that corporate end-users will migrate behaviours to free commercial cloud providers and create maverick parallel systems, with the attendant confidentiality, security, and privacy issues, if the internal intranet doesn’t adapt. Teaching the right attitudes and cautions around privacy and security is a key skill.

Discovery Systems
Discovery, knowing where to search, versus native database search is a big trend in information systems. Historically, to successfully research a topic, you
had to first know where to look. Now, already, there are too many sources and digital islands of content. Learners need to know the difference between search, known item retrieval and discovery. Discovery systems can be used as a way to navigate through the myriad of information resources available – as selected by information professionals – and find, serendipitously and by design, more content than they were previously successful on their own. Tie this to such key technological innovations as OpenURL resolvers we can see that the graying of the boundaries between database silos and vendor silos is starting. This holds the potential to deal with the corporate Holy Grail of better integration between internal and external information.

**New Search Tools**

Search is changing and traditional algorithmic and Boolean search protocols are being joined by a group of innovations around such things as facial and image recognition for image search; spoken word searching; semantic search (adding context to remove ambiguity from search results); sentiment search (displaying and detecting bias and point of view in search results); tiled search (displaying results across multiple contexts in tiles), and taxonomic search (offering additional search improvements based on the internal architecture of the database or from the taxonomy). Visualization has taken display of results to a new level – beyond just word clouds and into tools that provide auto-summarization and mind mapping to derive insights in large sets of data and information. Encouraging user-generated tagging, originally known as folksonomies, to support teamwork and manage content can create a major wealth of targeted content aligned with specific project or research needs. All of these tools can be applied in the workflow oriented intranet.

**Social Media as a Content Source**

Searching and developing skills to interpret and add value to social media monitoring are becoming part of the skill set of some corporate libraries. Folding free social networking/collaboration tools into services (RSS, Twitter, Wikis, blogs, YouTube, Tumblr, Instagram, Facebook, LinkedIn, Pinterest, etc.) or using librarian competencies to separate the signal from the noise can be a high value-add for those who monitor news, competitors, industries, trademarks, and more. Social media has moved from being just a consumer social environment to one with real business purpose – and one which supports collaboration, engagement, sales, and learning.

**Expertise Databases**

Corporate libraries with large user populations and multiple staff find that the building of expertise databases can assist in sustainably serving these populations. By collecting information (sometimes in collaboration with internal HR systems (HRIS) and metadata such as demographic data like location, role and hierarchy, and tying this to information to specific projects, questions, and alerts, the library can amass enough data to start to track and predict trends as
well as to scalably position the right staff resource on the file and target the user training and needs. Closely tied to and built on expertise databases is the adoption of software whereby the traditional reference question tracking systems are upgraded to model the sales relationship models of vendors of all types. Trends and relationships can be identified and services targeted to the team and not just the individual requestor. Purchasing and developing “behind the firewall” social networking community sites can be enhanced by leadership or involvement from the library. Monitoring team discussions or pushing content to teams as a recommendation through internal, private social networks can adding value and position corporate information professionals as a valued member of the team. This means that learners must be able to describe themselves beyond their resume and adapt to the corporate expertise and LinkedIn style marketplace!

Archival Digitization and Born-Digital Internal Documents
In the corporate space digitizing specialized content and information, especially internal reports and archives that are tied to strategic priorities or competitive advantage is a key intranet product. Learners need to know how to deeply manage their personal creations - documents, slides, art, and more – in terms of their life-cycle. Skills around personal information management and storage are becoming critical in the enterprise space at the employee level in enterprise knowledge management systems.

E-learning
The world of continuous learning and professional development is now the norm. Organizations continue to grapple with how best to develop employee competencies, particularly regarding technologies, applications and changes in workflow. E-learning is the major force in professional and continuing education that allows for scalable, repeatable training. MOOC’s (Massive Open Online Courses) are disrupting the market for e-learning and information vendors. The future of MOOCs is uncertain, but at present they exist for nearly any organizational goal – from consumer investment skills, technology training, through management competencies. E-learning is also emerging as an opportunity for enterprises to build sustainable talent, adapt to change and even to advance the causes of information literacy to advance corporate goals for training, orientation and competitive advantage.

There are a lot more that these learners will hit as they meet their workplaces, but this list is a good start to prepare for today and tomorrow. It’s not that different from what they’ll see in higher education institutions as they arrive there too!

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