EMERGENCY SERVICES FOUNDATION

Advances and Opportunities for the Victorian Emergency Service Sector:

"Identifying capability and capacity opportunities to improve the delivery and development of technology enhanced learning to benefit multi agency training and response at a state and national level."

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INTRODUCTION

Within the Emergency Services sector, our traditional processes and procedures for providing training to our own personnel is being challenged. Competing demands, finite resources along with increasing population growth and community expectations is bearing, and will continue to bear its toll on how we all go about our business. Providing knowledge and support to other response, volunteer and support agencies will also continue to place stress on our services.

Increasingly, we, as a State, are becoming more aware of the need to identify opportunities to increase the capability of all our organisations collectively and in a collaborative manner. We do not work in isolation, without cohesion or reliance on one another. We attend most incidents together and support each other to achieve our goals in prevention, response and rehabilitation. Growth, both independently and together, is imperative to continuously improve the service delivery and capability of our respective services across Victoria.

Safety and resilience in our communities is essential. The significance placed on resilience is clear in all contemporary documentation and recommendations around Emergency Service response, not only in Victoria, but across our nation and internationally.

In June and July of 2013, I was provided the opportunity to travel to the USA, Canada and the United Kingdom to speak with managers of trainers of training organisations or facilities. In every conversation, with each department, area or unit, whether academia, business or law enforcement, the word technology was always used when describing the direction of training. Technology Enhanced Learning, or TEL, on face value, creates a number of solutions to many resourcing, training and development issues. Individual organisations still need to determine the cost / benefit, but through this paper and the research conducted certain benefits in properly structured and delivered learning within the workplace become clear. Safety is one of them, efficiency and effectiveness are others.

The context for this research is framed around the following agenda:

o Is it logical? Why? Why not?

o Is it financially affordable and sustainable?

o Can it improve safety, efficiency or effectiveness?

o Can we do it in Victoria?

The answers I found have been tested overseas and are impacting on the direction and sustainability of large response organisations. Training platforms in TEL can provide an exchange of information that is relevant and accessible to all emergency services both paid and volunteer. One program, built properly by a few, can inform, teach and/or train a million, to keep our people safer and our budgets supporting the front line where it is needed most.

ACKNOWLEDGEMENTS

RECOMMENDATIONS

Recommendation 1
A dedicated Victorian based organisation (or dedicated Emergency Service Organisation identified to manage on behalf of all) is established to deliver Technology Enhanced Learning (TEL) programs and information to all Emergency Service Organisations (including volunteer agencies).

Recommendation 2
An advisory group is established to provide guidance and oversight to training direction to ensure operational need and purpose is identified.

Recommendation 3
A charter for TEL direction is developed to provide parameters for development of courses and information. The charter is to involve and encompass multiple agencies to encourage collaboration and mutual development rather than insular thought.

Recommendation 4
The re-educational programs recommended in this document are implemented as a first stage approach to the programs. An increase in public safety, decline in undesired behaviour and reduction of resource stress within the Emergency Services would be expected.

Recommendation 5
Re-educational programs are provided at a nominal fee with the resultant income utilised to provide training in TEL for all paid and volunteer organisations as per the charter.

Recommendation 6
As part of the charter, TEL programs are utilised as an education tool to connect with schools, institutions and other organisations to increase social awareness and change culture impacting on Emergency Services.

Recommendation 7
Programs adding to the resilience of communities or supporting localised programs be considered for TEL development at no cost to the community.

Recommendation 8
That the individual agencies use TEL to develop their own organisational capability to address local specific need as required.

ORGANISATIONAL OVERVIEW

International Conference on E-Learning in the Workplace (ICELW)

The ICELW was held Columbia University, New York, USA over a three day period in June 2013. In 2008, Dr David Guralnick founded the conference with the goal of bringing the academic world and business world together, in order to further explore and share ways in which technology is used workplaces to improve job performance. In its sixth year:

- 44 countries were represented / 200+ people participated
- Keynote speakers were Dr Will Thalheimer and Jane Hart
- Over 80 sessions were held in a parallel format (3 - 4 sessions held at the same time)

This area of the scholarship was to provide scope on Technology Enhanced Learning (TEL) advancements within the academia and business areas. As academy based training and training in the workplace apply to many of our organisations, ICELW provided valuable insight into cultural change, developing technology and advancements in instructional design.

Specific details of the ICELW conference are contained in Appendix A.

Federal Bureau of Investigation (FBI)

"Know your user, and you are not the user!" Skilor Long, FBI.

The Federal Bureau of Investigation (FBI) is an intelligence driven and threat focused national security organisation with both intelligence and law enforcement responsibilities. The FBI Academy is based in Quantico, Virginia, USA. Donald Mathes is the team leader of the Supervisory Professional Development Specialist Interactive Development Unit, DOJ Simulation, Courseware and Mobile Application Development. At the time of attendance, Mathes was called up for Active Duty with the Marine Corp and unavailable.

I met with Agent Demetrius Jordan, the Simulation Team leader and was introduced to his team. This unit was formed in 2004 and has morphed into its current format of full time employees and contractors. They have designed and developed over 400 TEL courses, training recruits through to surveillance operatives and intelligence analysts.

The major project at the time of attendance was titled "Burden of Proof". This program was developed to support local and national police agencies in the protection and processing of crime scenes.

The statement from Skilor Long is a significant indication of how the FBI go about business. The understanding of the workspace and environments their user is encountering and their considerations is reflected in the design of courses. The research and resources utilised to make programs engaging and specific to the needs of the customer is clearly a major focus.

Specific details of the visit to the FBI are contained in Appendix B.

Canadian Police Knowledge Network (CPKN)

"An estimated $1 billion is consumed annually on police training in Canada. With more collaboration and integration, as much as $300 million in resources might be reallocated to other areas of operation." Sandy Sweet, President and CEO, CPKN.

The Canadian Police Knowledge Network team of designers, developers and managers at the time of attendance.

CPKN are located in Charlottetown, Prince Edward Island, on the east coast of Canada. There are 65,000 police members across Canada in over 200 services. CPKN at the time of visit had over 50,000 students from 130 of these organisations including academy based training. CPKN is not restricted to police officers, developing and providing courses to other government agencies, corrections, passport office, security based private companies and, as of post visit, the real estate sector.

I met CEO and President Sandy Sweet, VP Operations Bill Gibson and VP Client Services Nadine Sutcliffe as well as all other accessible staff members. CPKN were open to all avenues of sharing information and assisting in the development of a strategy for Victorian Emergency Services to increase capability in the TEL area. I also met with Edgar McLeod, one of the founding members of CPKN. Edgar is the CEO of the Atlantic Police Academy on Prince Edward Island.

In September 2013, I returned to Canada to present at "Economics of Policing: Police Education and Learning Summit" co-hosted by CPKN and Public Safety Canada, the Federal body created to ensure co-ordination across all federal departments and agencies responsible for national security and the safety of Canadians. This is a significant shift for CPKN, as being recognised and incorporated into Federal strategic direction opens a number of avenues for this proven organisation.

National Centre for Applied Learning Technology (NCALT)

NCALT, at the time of visit, were in relocation from the College of Policing at Bramshill to Hendon in London. I was able to meet with Chief Inspector Jon Aveling who is the Implementation Manager for NCALT.

Established in 2002, NCALT exists as collaboration between the College of Policing and the Metropolitan Policing Service. There are 300,000 registered users within 43 Home Office Forces, 8 Scottish Police Forces and the Scottish Police Academy. There is 45 staff within NCALT spread across sites in the UK. As of 2012, NCALT recorded 3.5 million eLearning completions since inception. In 2012, as a result of the London Olympics, over 1.3 completions were recorded with 360,000 of those recorded against a specific Olympics eLearning course. NCALT estimates that provided in the traditional training methods, this equates to 50 million pounds being transitioned to other areas of the policing sector.

"Face to face training is as relevant as ever, and it can be enhanced by the introduction of eLearning." Chief Inspector Jon Aveling

Specific details of the visit to NCALT are contained in Appendix D.

LOGIC

Improving efficiency in the way a service can deliver its "nice to know" and "need to know" information takes a certain amount of logic, or common sense. This section of the paper analyses specific information obtained from each of the events or organisations visited to provide understanding and background for the recommendations explained later in this document.

International Conference on eLearning in the Workplace

The International Conference on eLearning in the Workplace was, as the name suggests, always going to be about embracing Technology Enhanced Learning (TEL). It was founded in 2008 by Dr David Guralnick simply to bring people from the academic world and the business world together to explore and share the ways in which technology is used in workplaces to improve job performance. This sums up the conference.

ICELW was held at Columbia University in New York. At the conference there were:
- o approximately 200 participants / attendees
- o 44 countries represented
- o 2 keynote speakers, being Jane Hart and Dr Will Thalheimer
- o Over 80 sessions held in a parallel format (3 - 4 sessions held at the same time)

It was not possible to attend all sessions as there were up to 4 run concurrently. I attended what I saw as most benefit to the ESF Scholarship. The themes that ran through the conference were:

- how they were using technology in their workplace / place of learning
- "social learning" and the context it was used in
- cultural changes and shifts in organisations

The use of "social learning", engagement of the students and the implementation of organisational change were prominent from the business and academia viewpoint and in most cases very innovative and effective. The failure to move forward and remain contemporary was highlighted in others. The ability to filter existing information to ensure the right information was being presented was the challenge in some of these areas.

I have provided notes on each session I attended in the appendix of this document. I will only highlight main points or individual programs where needed.

Social Learning

This was a theme through the conference. It revolves around how people, in business and professional areas learn and develop once inside the workplace. Looking at areas

where contemporary practice was a necessity (medical professionals / responsive and dynamic workplaces) research presented throughout the conference indicated that social learning, in the social media context, allow the individuals to "learn the new" and solve their own problems. In some instances, this was described as learning in spite of our best efforts to prevent it.

Social media such as Twitter, Google and YouTube filled the top three positions on learning resources utilised by staff according to various data points and reflected by keynote speaker Jane Hart[1]. These were also the top three in 2012. Presented with a problem, an employee would reach out to "social networking" to find a solution using their own devices on programs and platforms that they understood. In some cases this was similar to "phone a friend" using these tools to access concise video learning programs on YouTube or similar. This presents dangers when employees access the wrong information but this was acknowledged whenever this was raised. The challenge for some was filtering the good from the bad or identifying and utilising high quality "off the shelf" support.

A ranked system was presented with the top 100 social learning tools provided by Jane Hart but was consistent with other research presented. For Victoria Police, Moodle came in at 11 and was the only course management system inside the top 50.

Engaging the Student

Critical to the success of any program, the catch cries of "know your student" were consistent across ICELW and all the organisations visited. Understanding how the student learns, tapping into "post learning institutions" to enhance and direct that learning provided clear benefits for cost driven businesses.

Intellectual property retention and "program support" were important in keeping businesses moving during certain periods of transition or hardship. Program support was described as information that a person did not need to learn, but was simply a process that could be supported and completed without the need to memorise the information or process. It provides a means to bridge a gap in competence. This affected efficiency in business and minimised the employees time on a set function and reduced disruption to other staff.

In some cases, efficiency and effectiveness was ignored to the detriment of the program. It appeared in some instances that the developers were utilising programs simply because they could. The programs made little sense, appeared cumbersome and provided no identified benefit above and beyond practical training. This is a fail safe way to loose the student.

People come to work for 8 hours. In transit and in their home life, they are utilising learning aids to assist in daily functions or grow their own knowledge base. Based on the conference, business and academia are looking at ways to link into or mimic this social learning aspect to provide common tools for the user in the workplace.

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[1] Jane Hart – Top 100 Tools for Learning 2013 http://c4lpt.co.uk/top100tools/

Change Management

This was apparent in most presentations particularly around the business sector. One very good example was "Project Connect" in the presentation titled "Transitioning to a 70-20-10 Learning Structure" presented by Gina Ann Richter. Gina was employed to transition a major human resource (HR) company to a TEL database for information. This was done to supply "a single source of truth through superior technology." This transition was across the entire organisation, which was USA and international based.

To provide the opportunity for a cultural change in the organisation, Richter:

- involved national and international personnel to provide content for the program
- developed a video to explain the changes
- developed an interactive program to navigate to the database site. The employee then had components to complete that guided them through the site. On completion students had navigated site successfully and located required information.
- utilised existing company infrastructure to support change and reinforced support through common sharing points within the organisation such as newsletters and company blogs
- sought regional and global change champions to monitor audience and communicate strategies to support change

This was a very good example of driving a cultural shift within an organisation.

Presentations

There are a number of presentations I attended. They were:

- Social Learning: The changing face of workplace learning – Jane Hart
- Transitioning to a 70-20-10 learning structure – Gina Richter
- Teaching communication skills in a virtual world: An evidence-based research study – Vicki Hochstetler/Kristen Pierson/Josh Bussey
- Combining individual and social aspects of learning in a serious game context: Some reflections from the TARGET Project – Lief Hokstad
- Meta cognition and self regulation via analogue learning and e-Learning – Dr Richard Pircher
- From a research insight to a practical learning innovation – Dr Will Thalheimer
- Think Big – Start Small: Three performance models for creating and implementing low cost, high impact performance support solutions – Hal Christensen
- Video in learning: The new rules – Martin Addison
- What does "E-Learning Design" really mean? Thoughts on creating engaging online experiences – Dr David Guralnick
- Gamify your teaching: using location based games for educational purposes - Kai Erenli and Dr Richard Pircher

- A comparative study of emerging technologies for online courses – Jay Liebowitz
- Moving into a multi device world: Five new ways to reach learners anywhere at any time – Imogen Casebourne / Ruth Haddon
- How to infuse quality in online training programs – Kaoru Matsui
- Any ware, any where: Breaking the limitations of traditional online learning: Diane Brescher
- Rapid delivery and dynamic delivery of role play simulation – Austin Kenney / Prof Vincent Wade
- Assessing the value of Web 2.0 on organisational knowledge management – Paul Hurst
- New strategies for cultivating a learning organisation – Christin Manning

The 'Not so Flash"

TEL is not about using technology for the sake of it. It needs a purpose and benefit. It can get confusing when it is "technology driven" rather than "need and benefit driven." Understanding the student and being able to supplement their learning in a safe and comfortable environment should be the goal. Some appeared to have forgotten or neglected this. In some cases, the training was far more inefficient and much less effective than traditional practical methods. For a majority though this was not the case.

Comments on ICELW

ICELW gave great insight into the direction of business and academia. Looking at how people are "learning by choice" or access information in a day–to–day manner is being translated into platforms used in some workplaces. Filtering and ensuring the information is correct is the aim of the organisations rather than reinventing the entire structure of training.

Developments in cultural change across organisations were significant. TEL is not fully embraced in most cases where fiscal or other pressures cause a shift away from traditional practical training. This is acknowledged and supported through a number of means but is considered when developing most of the programs provided.

Defining what needs to be "memorised" vs "performance support" cuts down training hours required in an organisation. It also provides support for intellectual retention of information and less disruption for administrative processes.

There are a number of ICELW papers attached to this document in Appendix A. To avoid over doing the paper, a number are also held by me which are available at request via email to andrew.mckee@police.vic.gov.au

Federal Bureau of Investigation

The FBI is an intelligence driven and threat focused National Security organisation with both intelligence and law enforcement responsibilities. The FBI Simulation Team was formed in 2004 and has gone through many changes since that time.

The focus of the team is the development of programs for their organisation and support organisations across America. There have been, at the time of writing, 354 web based courses completed for customer use with approximately 130 courses in triage or development.

Programs are designed and developed for a number of areas including:
- o Recruit training
- o Intelligence analysts
- o World Health Organisation training
- o Advanced skills training
- o Surveillance techniques
- o Analytical computer skills training

The programs focus on:
- o new agent training within the FBI;
- o taking training to the field officer; and
- o capability building support agencies

In compliance training, programs are provided to personnel from the FBI and other supporting agencies. The FBI monitors and provides information to a number of enforcement agencies around trend and analysis. An outcome of this monitoring is the "Burden of Proof" program.

Burden of Proof

In a national support role, the FBI processes exhibits collected by other law enforcement agencies across America. This is simply due to the capability the FBI possesses in this area. Exhibits and scenes are processed, in most cases, by the original agency with the exhibits sent to the FBI for further examination.

It was identified that errors with the management and processing of crime scenes affected court outcomes. In other words, mistakes at scenes created issues at court. Costs both financial and in community confidence were significant.

To support capability improvements, the FBI designed an interactive learning program called "Burden of Proof" for over 40,000 enforcement personnel across America.

The program targets crime scene management and evidence recovery. The program works as a "level by level" training tool. The student progresses through the program by making decisions based on sound crime scene practices. Consequence is built into the program. If the student neglects to perform a function correctly then the program will respond accordingly. For example, if the student fails to place crime scene tape

correctly or at all then the scene can be breached and contaminated in some form visual to the student (person enters scene and cleans up evidence).

The program provides scoring, recording and feedback to the student. It culminates with the student in court post crime scene management. Areas of strength and weakness are tested with identified issues or incidents raised in court. If unsuccessful in managing the scene, the court case is unsuccessful.

Logistical Considerations

The question here is: "How else could 40,000 personnel from a wide variety of agencies be trained in contemporary crime scene management to this level?" In a world of finite resources and training budgets, I struggle to find an effective achievable alternative.

Burden of Proof is designed to supplement previous and existing practical training to enhance the skills of the students. Localised practical training instructed in line with FBI standards still applies. It is therefore supported through a blended training approach – part TEL, part practical.

The training can be undertaken at any time as a first time user, refresher training or as a development requirement as a result of an incident. The aim is to get members of the organisation completing the course for fun, and transitioning that knowledge into serious incidents and events. Simple, effective and brilliant.

The FBI is able to influence and manage the standard of practice in crime scene management across America through this program. This effectively reduces the risk of unsuccessful prosecution due to crime scene error. In the authors opinion, it is extremely effective, engaging and state of the art in Technology Enhanced Learning.

Issues and Considerations

Due to a combination of impacting priorities and backlog in training programs, it took over 2 years to develop "Burden of Proof." Looking at the quality of the program, this is reasonable. Considering the numbers catered for and advanced technical applications of the program itself, it is very realistic.

For Victoria, we are not ready for a program on this scale. We are however, able to consider smaller applications that can apply in "game focus" and immersive training where appropriate. Personally, the program is outstanding and achieves a wide range of goals. At this stage though, a simplified eLearning option to build our resources is what is required. Programs to the standard and duration of "Burden of Proof" can be developed later in the cycle post cultural shift and when our capabilities exceed what we currently have. That said, the FBI offer a significant opportunity to move our capability forward through an existing Memorandum of Understanding and the contacts, including the private contractors involved in building "Burden of Proof."

Managing cultural change continues to be addressed by the FBI. This is the same for all organisations including our own. Good communication practices, quality programs provided over a significant time period and a realisation of the operational benefits will address this in most cases. The FBI knows this, and are building program effectively and efficiently to provide a nation wide solution to long standing issues.

There are a number of notes attached to this document in Appendix B in reference to the FBI.

Canadian Police Knowledge Network (CPKN)

Launched in 2002 as the Justice Knowledge Network, CPKN underwent a number of changes in 2004 to partner with Holland College and the Canadian Policing Community to meet the needs of Canadian Law enforcement.

CPKN is a national TEL course provider of over 250 courses with another 40 in development. The organisation is well structured. CEO Sandy Sweet oversees the strategic outlook of CPKN which then branches into "Operations" (technical development of courses) overseen by Bill Gibson and "Client Services" overseen by Nadine Sutcliffe and focusing on the needs and emerging issues from a customer perspective. At the time of visit, staff numbers were at 19 but it is understood this has expanded post attendance.

Board of Directors and the National Advisory Group

CPKN is governed by a Board of Directors that establishes strategic goals and oversees management of the organisation. Board members consist of senior level policing professionals and training institution managers.

A National Advisory Group serves as a steering committee in order to meet organisational objectives set by the Board of Directors. Training direction is heavily influenced at this level with trend and analysis of an operational and environmental nature determined here. With Canada possessing police services of various sizes across a range of geographically diverse environments and cultures, the National Advisory Group is made up of volunteer members from a range of these services.

Involvement from the Board of Directors and National Advisory Group at the least is enthusiastic, with the buy in and focus on CPKN extremely well managed and encouraged. This is reflected in the establishment of "Client Services" at CPKN as the courses and range of service expands. Client services provide a central point of contact, consistency in communication and support. It also has the ability to tap into emerging areas by dealing specifically with the user end.

Structure of CPKN

CPKN is managed by a President / CEO. It then branches into two specific areas:

- Operations and

- Client Based Services.

Neither of these works in isolation with each manager having extensive knowledge of the other. There are 16 additional employees in various positions. The structure of CPKN is attached in appendix C.

Role of each area of Management

President / CEO

Sandy Sweet is the President of CPKN and has been in that role since inception. He is also on the Board of Directors. His role revolves around relationships and strategic direction.

The Client Based Focus – Vice President of Client Services

Existing clients, future clients and partnership services are managed by Nadine Sutcliffe under the title of Vice President - Client Services. Nadine's' role is multi faceted. It includes:

- stabilise relationships with existing clients
- develop relationships with future clients or those interested in CPKN services
- enable smooth access for employees to police based services (SME, training services within organisations etc)
- monitor of existing users trends and analysis
- monitor changes in statistical information and assess impact
- call upon known contacts such as the National Advisory Group to advise on changes and if any action should be taken

Nadine is also closely aligned with Bill Gibson (VP Operations) with weekly official meetings. These meetings discuss course development, identified and emerging issues and any other matters of interest to either party. Information involving client interaction impacting on CPKN products or timelines, sits with client services.

This area of the organisation was initially managed by Sandy Sweet. He identified the need for a specific person to fill that role and Nadine moved in. Prior to this Nadine looked after, amongst other areas, design and development.

The Technical Focus – Vice President of Operations

The technical side of the organisation is managed by Scott Gibson under the title of Vice President of Operations. It is a high level project management role of all the actual course design, build and implementation. His role is:

- to ensure adequate resourcing in IT to meet client and organisational needs
- tracking of projects on a daily basis
- management of workload and stress on employees under him
- prioritising competing work demands in relation to course build
- data management and tracking of results
- providing advice to the Advisory Group and President/CEO
- research for future projects
- research of Learning Management System developments

<u>Comment</u>

The separation of these two areas is significant. To meet the organisational mission "To be the leading provider of eLearning across Canada and internationally" the client focus was essential. Buy in and building the relationships has lead to the successful integration of a majority of the police services across Canada. Allowing a central point to address these issues has increased this success. Assigning dedicated staff to maintain, develop and understand client needs is sometimes overlooked as a specific role. Nadine is essentially smoothing, engaging or developing relationships, gaining acceptance of eLearning programs and opening doors for organisations to embrace TEL. The role indicates the level of importance that this organisation has placed on this side of the business.

<u>Funding of CPKN</u>

CPKN is a not-for-profit service. They have their own financial services, which are responsible for all incoming and outgoing costs to the organisation. Canada has over 200 police services working across the country in the various states and provinces. 120 of those utilise the Canadian Police Knowledge Network. This equates to 50,000 students out of the 65,000 police in Canada. These students pay a fee to access the course, which in most cases would be covered by the organisation. There are three pricing models:

- **Standard Catalogue Pricing Model:** Catalogue prices range from $25 to $200 per learner, though the majority are listed at $25 and $50. In cases where course development has been funded by the Police Sector Council, those courses will be initially offered as free learning events for a 4 month period. After the free Learning & Evaluation period, the majority of PSC-funded courses are listed at $25.
- **Group/Volume Discounts**: services are also eligible for volume-based discounts when a total one-time course purchase exceeds 10% of a service's total sworn officer population.
- **Licensing**: for large services, licensing models are often a more cost-effective means of delivering training to officers. CPKN's licensing option provides unlimited access (including registration, support, and reporting services) to a course for an entire service/organization.

CPKN develops courses in partnership with the existing policing organisations, hosting courses where suitable and sustainable at the national level. Where this is the case, a percentage of the proceeds is returned to the hosted organisation.

All funds received by CPKN for courses are put back into the organisation to stimulate growth and development. This is part of the agreement with Holland College.

The Stanhope Conference

The Stanhope Conference was hosted by CPKN every year from 2007 till 2012. It brought together up to 80 people from all over Canada from multiple services and various ranks to talk about what is happening in TEL, exchange ideas and look at and find solutions to emerging challenges.

Stanhope had some strategies involved including invitations to a balance of those who supported change and those who were adverse or at that time undecided or not engaged. This included:

- identifying influential people who at that time did not understand TEL
- looking for organisations who were insular in thought to open them to outside influences to change culture
- identifying organisations that were not taking advantage of efficiency

The involvement of other influential organisations and areas over time has clearly increased the value and strength of CPKN, and added strategic alignment to a range of organisations.

Originally, planning for the next cycle of training was completed at this conference, but the logistics mainly post conference in bringing subject matter experts and developers together hindered this process. Changes made to align this responsibility with the National Advisory Group led to more flexibility and efficiency in this area.

Involvement of Public Safety Canada

In 2013, "Economics of Policing: Police Education and Learning Summit" was co-hosted by CPKN and Public Safety Canada, the national government body created to ensure co-ordination across all federal departments and agencies responsible for national security and the safety of Canadians. This is a significant shift for CPKN, on a number of levels. Federal involvement provides credible evidence of the importance placed on CPKN. With this, the inefficiencies in supported organisations are being looked at from a federal funding level. Insular organisations are now looking outward at CPKN. Increased budgetary pressures and pending "training budget" questions from those that fund areas of the policing services will influence this process.

Approximately 125 persons attended from the Canadian Government, Law Enforcement / Policing, Interpol and other relevant areas and services across Canada. I was fortunate to attend to present on what is occurring within Victoria Police and outline the role and importance of ESF Scholarships guiding state direction. This was separate to the initial scholarship and at the cost of the Canadian Federal Government.

The key issues from the Summit cannot solely relate to police. Every similarly structured organisation can draw relevance from the outcomes. They included:

- The rising cost of policing in Canada has created some very real challenges for supporting a sustainable sector.
- Training is one of the first areas impacted when budgets are restricted / reduced.

- While technology and innovation was woven throughout themes, there was a clear consensus that it's not about cutting budgets. Rather, it's about making the most of available resources and investing in appropriate tools and relationships to meet growing demand for training and to ensure that all police have the knowledge and skills to do the job safely and effectively.
- In the interests of a sustainable future, there is a need to harness technology enhanced approaches for the benefit of the collective police community.

General Comments on CPKN

I went on the scholarship hoping to find a stable and evolving state and/or national level organisation in the TEL field that could assist us in Victoria. CPKN, as a whole, provides a substantial blueprint of where TEL at this level could take us. Speaking with all management at CPKN, the road has not been easy, short or without frustration. It will continue to be so, and they acknowledge this. They have however, taken an idea that makes financial and operational sense and turned it into a successful support tool for over 200 policing services and 50,000 personnel.

Not all of CPKN specifically relates to Victoria. Funding for instance would be difficult in this format for our areas. There are solutions or alternatives provided within the "Recommendations Explained" section.

Specific notes of the visit to CPKN are contained in Appendix C.

National Centre for Applied Learning Technology

NCALT was instigated in 2002 by the UK Home Office to support a number of policing services across the United Kingdom. Pressures faced at the time that brought about the development of NCALT included:

- Efficiency savings and budget cuts
- Front line abstractions
- A national consistency in course delivery
- Drive for accreditation of qualifications

NCALT focus on specific areas to build their success including:

- Strategic support – Senior Management endorsement to identify and communicate business benefits, cost and efficiency savings and impact to change the existing training culture
- IT infrastructure – providing better than minimum standard to all staff and having administrative control of their IT areas
- Force Training Strategy – identifying where eLearning is appropriate, where gaps can be reduced or removed and programs validated and assisting in gaining qualifications

Since 2007, NCALT student completion rates have moved from 148,000 annually up to 1.33 million completions in 2012. During this period, there have been 3.7 million completions recorded on their system. Considering where most of our services are currently situated with eLearning, these figures are impressive.

In 2012, it is estimated that 50 million pound was transitioned into other areas of the policing services due to NCALT support. This is taking into account traditional practical training at set locations across the UK. The reduction in abstraction was another benefit with more flexibility in the workplace due to more numbers on the frontline rather than in training facilities.

Governance

NCALT is controlled by the Government. Course development and direction is done at this level. Providing control at this level can be problematic as discussed with Chief Insp Aveling. Response to emerging issues and national recognition of those issues can be significantly hampered due to bureaucracy. Flexibility is acknowledged as an issue as governance sitting this high for a dynamic organisation can result in a slower rate of change. The relevance of the courses can also be impacted.

Direction

NCALT are using the simulation systems known as Hydra Minerva, developed by the previous director of NCALT, Jonathan Crego. This system is currently being developed by Victoria Police with support from Jonathan Crego. There are

simulation suites across the UK providing immersive learning opportunities for police services.

NCALT are moving into an area known as NCALT live. This is an area for online training, conferencing or meeting based program. The aim is to increase secure collaboration across agencies and increase the support NCALT can provide to the operational areas. It allows students to be able to access a trainer for support at set periods.

NCALT is also developing mobile technology for "just in time training" that a police officer can access on their own mobile device at a time that they need it. There are security issues around this that are being addressed but the process is not dissimilar to that utilised in private industry. This includes utilising QR (Quick Response) codes on equipment and locations relevant to police. QR codes store information for an item which can include how to use or directional information.

Comments on NCALT

Due to NCALT being in a state of transition, access to other areas of the organisation were not available. It was clear however, that NCALT applications are similar to those from CPKN. The process in NCALT is more government based and controlled. If comparing the two, the CPKN business model appears more suited for Victoria due to the National Advisory Group and the governance processes.

RECOMMENDATIONS EXPLAINED

STATE AND/OR NATIONAL APPROACH

Technology Enhanced Learning (TEL) has been embraced by Canada, UK and the FBI for a number of reasons. The most common theme is financial and logistical cost. In some cases the ability to provide training support is not feasible in any other format due to high volume and ongoing risk.

For example, it would be logistically impossible for the FBI to train the required police numbers to resolve the collection of evidence issues. It would also be ineffective to train only a small few. Face to face practical application would take years to complete. The risks involved in not training the police members were substantial, costly and impacted on community confidence. The solution, although time consuming to one area of their service, provides the ability to significantly reduce the risks by providing standards and consistency of performance through an easily accessible TEL portal in the workplace.

Canada, through CPKN, has taken this further. By pooling their information and learning opportunities to create CPKN, expansion is now beyond the original scope. CPKN are developing courses with qualifications in policing (both operational and within the Academies), fire fighting to international standards, correctional officers, wildlife enforcement, sheriffs and public safety enforcement, the security industry and real estate agents. Clearly, this will continue as efficiency and increasing resource demands on the agencies will push them in the CPKN direction. The Summit on Policing made that point.

Canadian agencies will increasingly be put under pressure to move towards TEL at a national level. Savings in cost and time were estimated with figures of around $300 million transitioned into other areas of policing at a Federal level.[2] Some agencies remain resistive and focusing inward, but their numbers are dwindling as the Federal Canadian Government gets involved and financial pressures impact on the services.

NCALT is tracking a similar path to CPKN by supporting multiple services across the UK. More involvement by organisations and a steady increase in course completions provide evidence of this. NCALT however is a police based service. It is responsible for the full development of courses rather than the CPKN approach of supporting and endorsing courses created by partnership organisations.

Victorian Context

When looking at Victoria and our response, the benefits of cross organisational training and understanding are significant. By contemplating cross organisational training, we are unique, although CPKN are moving into this area. For Victoria, the Emergency Management Response and recommendations contained in documents

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[2] Summit on Policing – Sandy Sweet CEO of CPKN Appendix 3 XX

such as "Victorian Emergency Management Reform – White Paper"[3] are strengthened through this format. TEL at this level has the ability to provide:

- standardised and consistent information across a range of paid and volunteer organisations
- concise and contemporary information from subject matter experts contained within our organisations on a range of issues – increased knowledge equals increased safety
- intellectual property retention and dissemination vital to the continued growth of our services
- rapid communication of that information across a range of sectors
- cost effective support to volunteer organisations
- streamlined approach to meeting competencies for qualifications
- minimal or reduced interruption to supporting services training staff
- less imposition on volunteer members stimulating more involvement within the volunteer sector thus increasing resilience

A culture of safety, risk management and tactical considerations is relevant to all paid and volunteer response agencies. TEL provides a platform to share information and training across agencies in an effective and efficient format. This approach is strengthened by the CPKN, NCALT and FBI models being significantly different to each other but achieving similar results.

The cost effectiveness of utilising the knowledge within our own organisations to enhance the performance of others who support us is achievable through this platform with minimal cost and disruption. Currently, it is estimated that approximately 10% of all large organisations budget is spent on training. Implementing the recommendations held within this document can move some of that cost back into the operational sphere to enhance our response. The benefit is both the up skilling of our own employees, our support and volunteer services and increasing the safety of our communities.

Recommendation 1

A dedicated Victorian based organisation (or dedicated Emergency Service Organisation identified to manage on behalf of all) is established to deliver Technology Enhanced Learning (TEL) programs and information to all Emergency Service Organisations (including volunteer agencies).

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[3] Victorian Emergency Management Reform – White Paper Dec 2013 recommendations including Action 6 (P14) Action 18 (P34) Action 19 (P36) Action 21 (P37)

CHARTER FOR PROGRAM DIRECTION

A consistent approach to TEL across organisations is necessary for the programs and collaborations to work harmoniously. The importance of collaboration cannot be understated and hence the opportunity to identify the value of the courses to each organisation. Therefore, representation from both paid and volunteer would be essential in fulfilling the purpose of the training programs and ensuring endorsement.

Looking again at CPKN, the National Advisory Group represents a range of organisations across the policing sector. These representatives determine the direction of training, value and priority based on what is occurring within the operational environment. Recommendations for TEL courses are sent via the membership of all 200+ policing agencies within Canada. These are filtered to ensure relevance and to determine whether the training has been covered in other programs. All the programs are put forward to the National Advisory Group with recommendations where applicable. All the organisations determine relevance and priority based on National need and requirements.

In some areas, this is called the triage process, quality assurance or simply vetting. Within this system it provides "common training and operating platforms to ensure better delivery systems for emergency services." [4]

Victorian Context

Within the Victorian context, the parameters to consider would include:

- An advisory group consisting of members from multiple agencies from the Victorian Emergency Services (paid and volunteer) who have the authority to make decisions at this level.
- Relevance to multi agencies whether paid or volunteer (minimum two agency)
- Availability of subject matter experts within the identified field
- Risk assessment considering cultural implications and cross organisational response (misinterpretation of information)
- Reduction of impact on training services within these agencies. For example, a course such as "fire response on water" delivered by one agency (CFA) to another (Lifeguard). By providing theory in TEL format, efficiency is greatly impacted (double qualified within the same period) allowing the trainers to focus on "the doing" rather than the theory.
- Volunteer members – reduction in inconvenience to meet qualifications. To retain and grow this sector and compete with family and life demands, TEL may significantly assist by providing training in the home delivered via the internet.

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[4] Emergency Services Reform – White Paper Page 2 – Points of Agreement

FUNDING AND RE-EDUCATION OPPORTUNITIES WITHIN THE COMMUNITY

FBI and NCALT provide their services as part of the Government budgets. It is estimated that training takes up 10% of the total budgets for these organisations. When looking at Victoria, the figures are comparative and significant.

At CPKN, each course has a set price for enrolment which is met either via the student or the students' organisation. Where we are talking a few hundred to a few thousand students, the financial impact is significant for organisations. Where courseware from a particular agency was utilised, financial return is gained by the particular agency. With CPKN being not for profit, this offsets staffing and development cost and allows expansion in line with student completion rates increasing.

Victorian Context

In Victoria, support and re-education opportunities for the community are significant. Effectively reducing the drain of the finite resources at our disposal while increasing the safety of our communities is a good place to focus.

Impacting on undesired behaviour within our communities was discussed with NCALT and CPKN. Neither has taken significant steps in this direction. With CPKN in particular this is not within their charter. Nevertheless, in Victoria, significant opportunities present to provide support to our communities and to provide funding to support the establishment of a training facility.

Traffic Infringement – Traffic Offences dealt with via Official Warning

All Emergency Services are affected when road trauma incidents occur on Victorian roads. Every paid organisation and some volunteer are involved. Our member and community risks include:

- Urgent duty driving to scenes / locations
- Injury risks at scene

- Post traumatic stress as a result of attending the scene/incident
- Resources tied up causing a reduction in response capability

Our road toll, regardless of its size, is unacceptable. Injury, whether significant or not, has an impact on our community, our health sector and the finite resources within our Emergency Services. Any opportunity to change driver behaviour should be considered.

TEL programs offer a significant opportunity to change our road culture, reduce trauma and provide key messages from all our organisations to specific or broader areas of our communities. In turn, stress on our resources would be reduced and Health, Safety and Wellbeing aspects reduced on our people.

Currently, under Victorian Government Legislation, Victoria Police has the discretion, upon review, to withdraw an infringement notice issued for a traffic offence and issue an official warning in its place. For the 2012 -13 financial year, there were 77,141 official warnings issued for a range of traffic related offences.[5]

There is no re-education of the offending person. Any change in behaviour is not measured, re-education not enforced and an opportunity to engage with the person is missed. The figures are not currently known as to reoffending rates or incidents of trauma where a person previously warned is involved.

Through a maintained eLearning course an opportunity exists to bridge this gap. Funded through a nominal fee, significantly lower than the fine (eg $40 compared to $200 plus for fines) this would offset any build of TEL programs and substantially fund part or all TEL training. **To be clear, the entire training budget of TEL based programs for ALL paid and volunteer organisations could be funded with this change.** Based on the 2012-13 Official Warning figures, the revenue for the 2012 -13 financial year would be:

77,141 official warnings plus course completions @ $40/student	EQUALS	In excess of $3,000,000

The advantages to the community are extensive. Re-education and management of undesired behaviour is an important step in reducing road trauma and in turn the road toll. The option that a person seeks an official warning and is provided that without any level of re – education to reverse that behaviour is interesting. eLearning, presented on a public access platform, allows all emergency services to send required messages into the community and significantly impact on a large number of first time or suitable drivers to address undesired behaviour.

These packages could also be provided to those seeking to obtain their licence on the first occasion and form part of this qualification. Again, this allows a contemporary

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[5] Official Warnings vs Fines – statistics from website
"http://www.camerassavelives.vic.gov.au/home/statistics/fines+by+category/official+warnings+vs+fin es/

message from Emergency Services as a whole on the impacts of offences regulated through an official warning option.

Other traffic based examples, where there appears a gap in re-education includes:

- Traffic Infringement – Loss Due to Demerit Points: those incurring suspension or extension must complete the re-education course to support a change in undesired behaviour.
- Hoon Legislation and the Seizure of Vehicles: those incurring seizure of their vehicle must complete a re-education course to support a change in undesired behaviour (4000 vehicles in 2011 -2012 financial year).

Additional Supporting Programs

In reality, if utilised correctly, the list is significant for adjusting community behaviour and reducing areas that greatly impact on Emergency Services. It is only a matter of identifying what areas should be addressed and the best means to address them. From those discussed with various agencies these include:

- Hoax / nuisance calls – in 2006 there were 5.8 million non genuine calls across Australia, or 21,000 calls per day. Resource and response capability must be affected so any opportunity to re-educate offenders or the public should be pursued.
- Support court processes – where cautions, diversion or other less invasive methods are considered, a re-educational opportunity in this format can present.
- Support Fire Ready Programs – updated programs to suit situational needs.
- Support First Aid Information – pursuant to requirements
- OHS Programs for specific high risk areas (farming etc)

Recommendation 4

The re-educational programs recommended in this document are implemented as a first stage approach to the programs. An increase in public safety, decline in undesired behaviour and reduction of resource stress within the Emergency Services would be expected.

Recommendation 5

Re-educational programs are provided at a nominal fee with the resultant income utilised to provide training in TEL for all paid and volunteer organisations as per the charter.

CONNECTING WITH THE COMMUNITY

For those under 30 years of age, the internet has been ever present in their lives. Our youth are exposed to IT and TEL in prep, primary and secondary school. University qualifications are now obtained on line. The ability for Victorian Emergency Service organisations to enter into those domains to impact on social awareness, modify undesired behaviour (alcohol abuse in youth / assault / driver behaviour) or simply connect with future employees or volunteers is significant.

Victoria's youth and future generations will not be resistant to the IT challenges that we are experiencing. TEL will continue to be an accepted medium of information and training delivery method in their lives. The use of that medium has not been identified and / or utilised to support and assist in these areas where, with minimal impact on our organisations, we can communicate with the next generation of Victorians.

Recommendation 6

As part of the charter, TEL programs are utilised as an education tool to connect with schools, institutions and other organisations to increase social awareness and change culture impacting on Emergency Services.

IMPROVING RESILIENCE IN OUR COMMUNITIES

The Victorian Emergency Management Reform - White Paper focused a Key Principle on the Community of Victoria. That Key Principle is described as "Emergency management founded on community participation, resilience and shared responsibility" [6]

TEL has a substantial opportunity to increase resilience through community awareness programs and education. If the programs can be hosted on the internet, (such as by CPKN) and delivered in the home family environment the benefits are real.

Victorian Context

Supporting communities through the development of programs specific to their needs provides the opportunity for members of those communities to identify and mitigate risk, plan responses and implement those plans during specific periods. Training and information could be provided to the home family environment through an easily navigated portal, in the one simple format. Allowing community members to help themselves and providing key information is the first step in this process.

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[6] Victorian Emergency Management Reform – White Paper Dec 2013 P3 – Vision, Principles and Strategic Priorities

For example, when people move into a fire prone area, the local government, upon welcoming them can also direct them to these courses/information sites and allow risk identification and mitigation information to be generated to their needs. Refresher through to more advanced or specific information can be supplied as required.

"Strong relationships made before an emergency will improve the overall quality of the response, relief and recovery activities." [7] Preparation does not start when the incident is upon us. It is done well in advance and embedded to provide a smooth and succinct opportunity to perform. TEL provides that opportunity to our community by allowing direct communication specific to local needs in consultation with localised resources.

Recommendation 7

Programs adding to the resilience of communities or supporting localised programs be considered for TEL development at no cost to the community.

INDIVIDUAL ORGANISATIONAL TEL

Individual organisational needs may not be specifically met through this process and nor does the implementation of any of these recommendations reduce the need for individual agency capability. Courses can be provided through the same portal and accessed by single agency only as required. Individual organisational TEL should not be reduced as a result of the implementation of any of these recommendations.

Recommendation 8

That the individual agencies use TEL to develop their own organisational capability to address local specific need as required.

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[7] Victorian Emergency Management Reform – White Paper Dec 2013 P15

Conclusion

TEL has been integrated in a range of organisations both nationally and internationally. It is an area that is continuing to grow and develop at a rapid rate. Moving forward in this area together, harmoniously and collaboratively offers a range of benefits that would increase the capability and capacity of each of our services. It is timely to consider moving, as a state, in this direction as we can capture the full extent of:

- Capability and capacity "lessons learnt" from other organisations
- Enhance capability in this area together
- Strengthen other supporting areas of Emergency Service response in Victoria
- Strengthen our communities through education and knowledge platforms
- Build volunteer services through supporting programs in TEL formats
- Reduce resource impacts through re-education programs
- Reduce training cost by implementing low cost re-education programs

Police have the capability to pass information to fire and ambulance officers on situational awareness, managing people and safety that may not be currently considered. Fire officers have the capability to pass information to police and ambulance officers on fire safety, confined spaces and hazard materials beyond current considerations. Ambulance officers have the capability to pass information to fire and police officers on injury, first aid or medical emergency exceeding the current considerations. Working together, sharing relevant information to build a safer working environment for all our organisations is the expected outcome. Adding the vast volunteer network adds yet another layer to the possibilities.

We have seen our members subject to incidents outside their scope and expertise. In recent times, significant injury or exposure has resulted. Gaps in our training can be filled through this format to create more resilient, effective people and resources at our disposal. TEL has the distinct advantage of increasing the safety of our people by providing one message from our experts to all our people across Victoria.

TEL can provide a significant change for Victorian Emergency Services as it doing for those working with CPKN, NCALT and the FBI. It is time we investigated and implemented programs in this format. The path is laid by these organisations to follow, all we need to do is determine when to go.

Appendix A- ICELW

Notes from conference relevant to study

Opening Keynote Address
"Social Learning: The Changing Face of Workplace Learning"
Jane Hart, Social Learning & Collaboration Advisor, Centre for Learning and Performance Technologies, UK

Jane Harts presentation focused on three areas:

- What is social learning?
- How is it changing the workplace?
- How can we offer learning and development support for those changes?

Went through the top 100 learning tools for those in the workplace. Most are social based programs such as YouTube, Twitter etc where reach out to trusted sources to find answers to information as required. These tools are being used to build networks of trusted friends and colleagues to ask relevant questions, exchange ideas and resources and brainstorm to solve problems. This keeps people contemporary in thought and they learn more from each other.

According to her statistics, 25% of doctors in the USA use social media to remain contemporary. It does not replace training but adds to it at this time. It allows people to "learn the new" where it was once inaccessible and solve their own problems.

Programs such as SCREENR, Learnist, MOOCS, Coursera discussed.

Use of own devices and learning in transit to and from work bypassing LRS and moving straight into learning tools in most cases. Hart states that training does not meet the characteristics of a majority of workers needs and how they like to learn which she states is:

- Socially
- Autonomously
- Immediately
- In the work flow
- Continuously

HART examines teams with access to social media who together build their own resources to assist in efficiency within the work flow. A shift in the roles of the Learning Design area from building programs to "scaffolding" programs in that filtering the good and the bad and bring the desirable into the organisation.

Employees are developing their own "Personal Knowledge Management" in a three step process:

- Seek the information: to solve their own problems
- Sense the information; Filtering, validating and customising information to suit their workflow
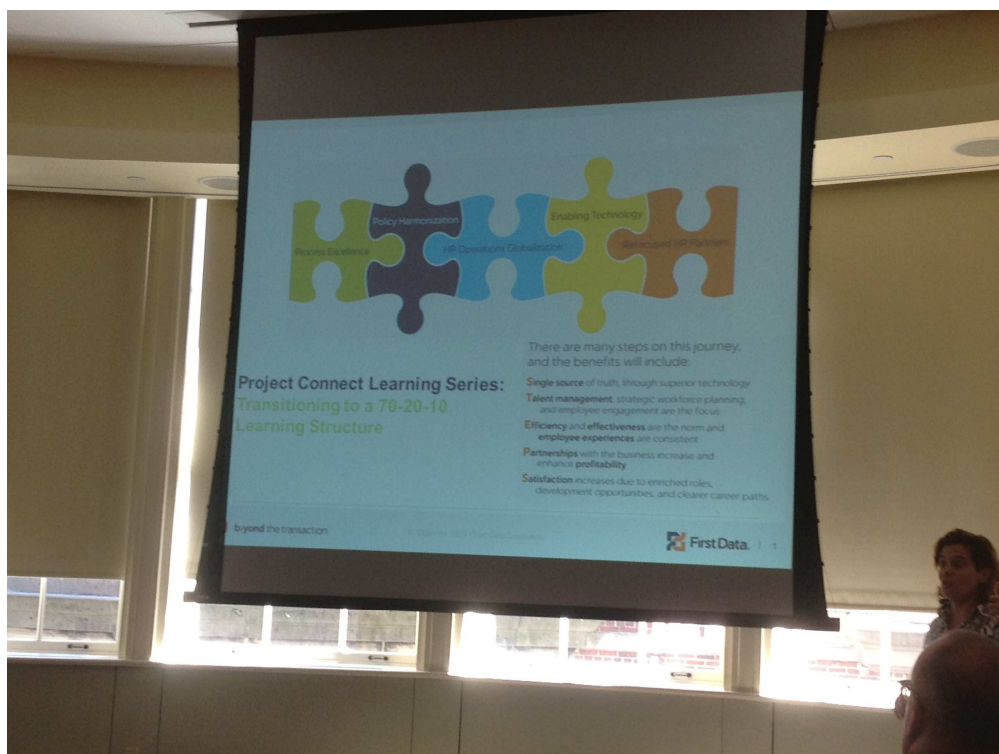
- Share the information: where it works sharing the information so the workspace learns socially

The measuring of success was in the business sense not the educational sense. Building stronger social networks, mentoring and supporting that process and allowing that to impact on culture and health of a business. Stops in place to ensure QA and risk mitigation addressed.

Websites / Contacts
http://www.c4lpt.co.uk

Transitioning to a 70-20-10 Learning Structure
Gina Ann Richter, First Data Corp., Melville, New York, USA

Gina Ann Richter has a Ph.D. in Instructional Design with a specialisation in Online Learning from Capella University. The 70-20-10 Learning Structure relates to how people learn in the work environment, in that:
- 70% is done through development experiences
- 20% is done through informal training such as you tube instructions or colleague guidance
- 10% is through formal training.

Ran a project called "Project Connect" for a major HR company. The projects philosophy was developed using the acronym "STEPS":
- Single source – of truth through superior technology
- Talent Management – strategic workplace planning and employee engagement are the focus
- Efficiency and effectiveness are the norm and employee experiences are

consistent
- Partnerships with the business increase and enhance profitability
- Satisfaction increases due to enriched roles, development opportunity & cleaner career paths

The project was completed in 3 months from L&D to roll out. It was developed in 5 distinct areas some that the participants were to complete with others to support the process, being:
- A Video - showing what the required learning was
- Information Search and Survey
- Connecting the Dots
- Global Change Champions
- Employee testimonials and Doodle Videos

Video showing what the required learning was.
Professionally shot using rich media. Scripted passages developed with structural design to achieve the learning outcomes. Duration approximately 20 minutes. Created the opportunity for all those involved to be provided one message in relation to the direction of the company policy. Had 100% completion rate within a month for this area of HR within the company – 300+ employees.

Information Search and Survey
Brought all available resources relating to the information to one location within the company. Identified the social learning opportunities (blog / you tube / google / twitter / wiki) and brought them into a portfolio. It was important that this area was in line with the social learning systems that the students were using in their own time. The did not have to learn how to navigate as main stream information was used. This

information was filtered and identified as correct. It was brought into the search area where it could be easily located. This was new to the company. Within the video above, the students were required to answer a series of questions where the answers could only be found within the search and survey. Made it not dissimilar to a game where the students were expected to enjoy the process. The training was clearly serious in the sense of learning outcomes but the process was fun. The result was that the students had to navigate to this area and get used to using it as it was subtly forced upon them.

The survey component related to feedback on the course and the learning. The feedback was flexible and designed to achieve results both in student satisfaction, learning options used and ease of the system as well as design and development input. The students were made to feel valued as feedback was responded to where required. They were asked to complete it rather than directed and if the students completed the feedback they were given access to a bloopers reel of the managers from the video – feedback made fun and rewarding. This resulted in 60% plus feedback participation which in the corporate world is extremely good.

The feedback was not used to pat themselves on the back or to identify their job was done. It was to listen to the students and make them feel valued. This sense of ownership is important in any program and often overlooked. It was an analysis to see what they needed and how the program could be continuously developed.

Both these processes were simple but clever in design and of great value to the project. Both should be considered by ESF members. It allows us, within our closed networks to provide contemporary knowledge in a format people are already using. It also provides the opportunity for an increase in real feedback that is flexible and designed to achieve a goal.

Connecting the Dots
This area was around information sharing points within the organisation. Newsletters were tied into the programs and blogs built within the company to share information. The blogs were relatively flexible but directed in some cases to topics. Involvement of the SME was essential to keep people involved in the information and it was kept active and interesting. This continued to brand the training and put it to the forefront of the students minds.

This area provides the opportunity to link aspects of the entire organisation to the desired learning outcomes and is very effective in sending the right messages.

Global Change Champions (GCC)
GCC are people in positions to tell you the truth about what is going on. RICHTER used a trusted network of people within the organisation to seek honest feedback when there was a change in any area of the data or information coming in. RICHTER monitored all feed points for information (hits on the sites / feedback / blogs etc) and when these dropped off or indicated issues within this scope the GCC either made contact or were contacted to provide essential information. These people constantly maintained the feedback and fed into the system. Bi -monthly contact was held with GCC where all aspects of the 5 areas were looked at to ensure the organisational changes were understood at a local level.

Employee Testimonials and Doodle Videos
RICHTER identified stories of validating the training with good outcomes. She contacted those involved, worked through a scrip with them (series of directed questions). She made them feel valued and allowed the employees to send the message. RICHTER, once participation was organised would then simply send a video camera in the mail to the participants. They would film their own testimonial with someone at their location (cost effective and comfortable environment). RICHTER would later edit. The videos were rough but effective in the sense that they built on the message and strengthened the company position. This had an impact on company culture as students were hearing the advantages from the students.

The Doodle videos were easy animated videos that were well designed. RICHTER, with no previous exposure to the program, made them in a couple of hours. Examples and the program can be found at http://www.sparkol.com/home.php
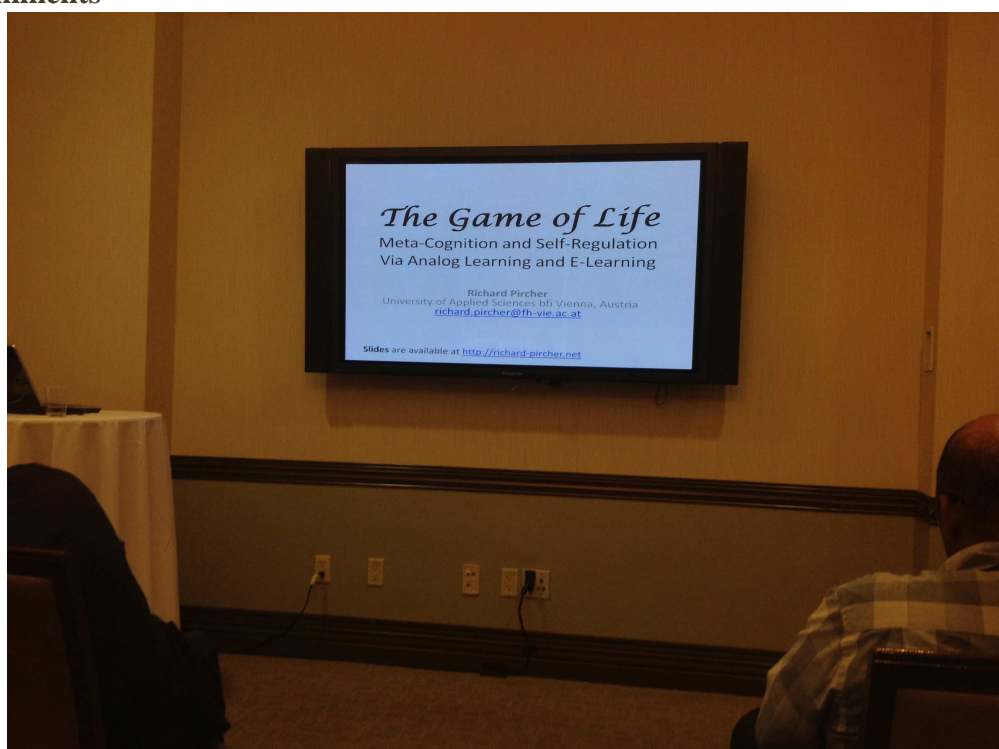
Comments
This was an extremely good example of long term planning and changing culture. RICHTER, in my opinion clearly saw the needs of the organisation and developed a long term solution that could be managed and maintained fairly easily. Student participation and a flexible program allowed her to achieve the objects. The performance objectives of the program were tied to the individual further strengthening the learning-and-performance. Excellent presentation.

Web Sites / Contact.
http://www.sparkol.com/home.php
www.gina.richter@firstdata.com

Meta-Cognition and Self-Regulation Via Analog Learning and E-Learning
Dr Richard Pircher, University of Applied Sciences Vienna, Austria

Comments

Meta cognition is "knowing the knowing", or recognising what is important in the learning and filtering that information. Self regulation refers to taking control and regulating ones' own behaviour. What was interesting was the results relating to the relationship between self regulation and a number of anti social type behaviours contained in the New Zealand study.

Question: If the impact of this type of behavioural modification could be implemented in early intervention of offenders to teach them self control would this result in young people not coming into contact with authority? Also, the implication that this can be applied across an adult network with similar results. Is this accurate?

Could the recidivist offender type personality be influenced by self control intervention within the justice system? What impact could this have to areas such as drug use, recidivist offending and suicide IF we were able to provide a platform to deliver this to people entering our criminal justice systems? Could this in turn reduce the resource impact on Emergency Services through resultant intervention options relating to self control applications?

Questions from the presentation which were unable to answered related to what happens to a subject when the impacting environments occur in combination. I would expect that these impacts would not occur in isolation and thus could have greater intensity in certain circumstances.

Contact with Richard via email established if further require further. Requested powerpoint or copy of presentation.

Web site
http://richard-pircher.net
http://www.pnas.org/content/108/7/2693.full – referred New Zealand study
http://www.youtube.com/watch?v=QX_oy9614HQ – Marshmallow Test
http://www.znl-fex.de – a game developed for kids to impact self regulating – in Dutch
http://www.wehrfritz.de – a game developed for kids to impact self regulating – in Dutch

Think Big - Start Small: Three Models for Creating and Implementing Low-Cost, High-Impact Performance Support Solutions
Hal Christensen, Christensen/Roberts Solutions, New York, New York, USA

Hal Christensen is a consultant with Christensen/Roberts solutions. He came from Academia and moved into the business area when he saw a clear need for some of his work.

Christensen focused on three main areas in his presentation being:
- What is performance support?
- Why do we need it now?
- Some performance support models.

What is performance support?
Performance support is applications, information or programs that can assist an employee to effectively and efficiently perform a new task without having to seek assistance. This creates a more effective work place as other staff is not taken away from their core functions and the employee has an answer two clicks away.

Hal spoke about a number of underlying assumptions of formal training are that workers will:
Learn all the need to know in their training courses
Store in memory all they have learned
Retrieve all they need to know at the Point of Performance
Continue to rely on the same knowledge over time.

Why do we need it now?
Training cannot bridge all the gaps in competence. Managers of decision makers need to ask the question: Do they need to memorise this? Can we achieve better results by applying a "need it now" reference. It is performance without memorisation. This reduces the impact on an organisation in a number of areas including training time reduction for individual employees through to less disruption within the workplace. Building the programs effectively for the "need it now" applications is the challenge for the L&D professionals. It is also stated by Christensen that training cannot supply enough in the current work environment to satisfy the training needs. Good performance support can fill this void.

Christensen questioned whether simple courses of instruction any longer need that instruction or simply support through available information. Closed networks, whose employees cannot access mainstream information sources (You Tube / Facebook etc) would have a clear benefit from this. This is the application of support vs training. He does have a point with the sheer volume of tasks people are required to complete and also the intellectual property that often disappears from organisations in cycles.

Some performance support models
Christensen, as many L&D experts do, used ADDIE for the instructional design of the programs which is:
- Analysis
- Design
- Development
- Implementation
- Evaluation

He provided examples in Instructional Design using templates to guide people in how to lay out course development and use courseware.

Provided examples of non frequently used programs or methods that could be held in performance support rather than taught with the knowledge dissipating.

The applications were not to replace critical training, emergency response etc. They may assist in lightening the load of training required by students in some areas in the more menial non urgent tasks.

Comments
Whatever the performance support tool is, it must have a number of key attributes which are:
- Accessible
- Contextual
- Actionable
- Current

Two clicks or 10 seconds, otherwise those who need it will not use it.

Video in Learning: The New Rules
Martin Addison, Video Arts, London, UK

"People learn nothing when they are asleep and very little when they are bored."
John Cleese

With these opening lines we were introduced to Martin Addison, the CEO of Video Arts which was founded by John Clease a few decades ago. He uses video to both entertain and educate. His aim is to have the student gain some emotional involvement in the program in order to connect with the learning. Addison outlined that video content is changing with more of a "video snacking" approach influenced by "You Tube". A lot of video learning content is now user created, mobile, searchable and in the online world.

Statistics on You Tube were that there were 140 hits for every person on the planet, and that around 50% of people watch these videos on their smart phones.
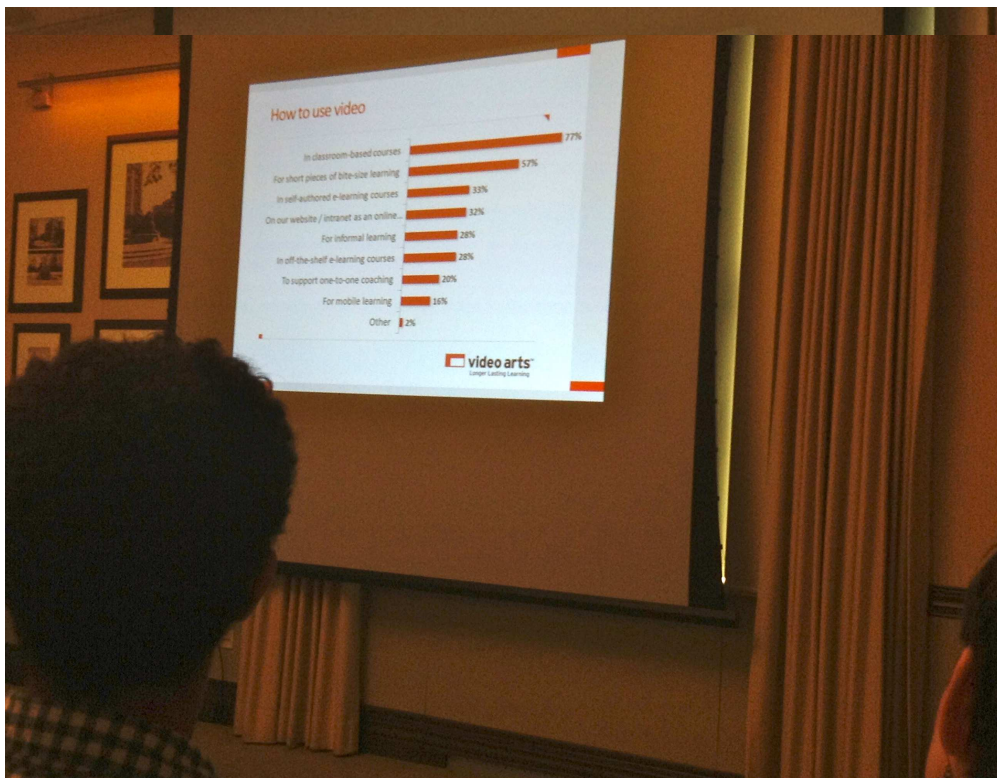
ADDISON focused on 5 key areas in his presentation:
- The explosion of video in education
- Why video works in learning
- Why we like funny videos
- When you should make your own video and when you should not
- Using video to reach more learners

The explosion of video in education / why video works in learning.
This has come about as people are now empowered to search for their own learning requirements via social media / social learning points. People are used to it and figures indicate that people retain far more from video format than they do in all other forms or education apart from doing the process. (Source – Edgar Dale's Cone of Learning). Videos allow the instructor to demonstrate the training or training need, apply it in practice to a set standard and the student to view it.

Humour
ADDISON outlined that where possible, they use humour to connect with the student. Their research indicated that the two most desirable traits for leaders today is that they have a strong work ethic and a sense of humour. The videos shown were effective and in line with this philosophy.

When you should make your own and when you should not
As important as this is, Addison did not really take the conversation here. His productions are more at the rich media focus and worked well in that format. Scripted training to the standard that Addison showed would be at a loss in unprofessional hands using this format.

Using video to reach more learners
ADDISON simply outlined that video is engaging and productive. It can be shown to 10 or 10,000 and the same learning outcomes can be achieved. Spend the time on the quality of the product and L&D and you will get the rewards. He also returned to the informal learning people are also undertaking and linking into those products / processes (understanding the users).

Comments
Good presentation confirming what Vicpol are already aware of. The presentation was short and to the point, much like John Cleese. The rules for making video are always flexible based on the topic. The good ideas shown only move to reinforce what we already know – that video is one of if not the most effective ways of training people in an eLearning format. The website is a good guide to where this organisation is going.

Web Site / Contacts
http://www.videoarts.com
www.maddison@videoarts.co.uk

Papers from ICELW

Contact andrew.mckee@police.vic.gov.au if require copies of same

Gamify Your Teaching - Using Location-Based Games for Educational Purposes

Multi-User Virtual Environments and Serious Games for Team Building in Organizations
Birgul Kutlu and Aysun Bozanta, Bogazici University, Istanbul, Turkey; and Nuket Nowlan, 3D Virtual Crafting, Ottawa, Canada

Organization of Students' Self-Study to Build Competences in the Workplace
Tetyana Lepeyko and Oleksandr Puskhar, Kharkiv National University of Economics, Kharkiv, Ukraine

Knowledge and Learning Management (KALM) for Enhancing Academic Staff Online Training Methodologies for Quality Graduates
Melody Modebelu, Duvie Adanma, Kalu-uche Nnennaya, and Ike-Eucharia Ada, Michael Okpara University of Agriculture Umudike/Agricultural and Science Education, Umuahia, Abia, Nigeria

Online Language Learning in the Workplace: Maximizing Efficiency, Effectiveness, and Time-on-Task
Katharine Nielson, Voxy, New York, New York, USA

Sentiment Analysis Use in Satisfaction Evaluation for Maritime Education
Dimitrios Papachristos, Konstantinos Alafodimos, and Katherine Kikilia, TEI Piraeus, Aigaleo, Greece; and Nikitas Nikitakos, University of Aegean, Chios, Greece

Designing a Specific Tool for Measuring Students' and Tutors' Mutual Expectations from Each Other in an E-Learning Platform
Morteza Rezaei-Zadeh and John O'Reilly, University of Limerick, Limerick, Ireland; Michael Hogan, National University of Ireland (NUI), Galway, Ireland; Brendan Cleary, University of Victoria, Canada; and Eamonn Murphy, University of Limerick, Limerick, Ireland

Web 2.0 in Education: Developing Teachers' Digital Competencies through Blended Learning
Line Skov Hansen, University of Aalborg, Aalborg, Denmark

Knowledge Sharing Cultures in Finance and Insurance Companies – Needs to Improve Informal Collaborative e-Learning
Erika Tanhua-Piiroinen and Johanna Sommers-Piiroinen, University of Tampere, Tampere, Finland

Maximizing the Blended Learning Curriculum by Using the "Flipped Classroom" Approach in the Workplace
Charlotte Thoms, Rochester Institute of Technology/National Technical Institute for the Deaf, Rochester, New York, USA

A Virtual Collaboration Platform to Enhance Scientific Performance within Transdisciplinary Research Networks
Tobias Vaegs, Claudia Jooss, Ingo Leisten, Anja Richert, and Sabina Jesckhe, IMA/ZLW & IfU, RWTH Aachen University, Aachen, Germany

An Empirical Study: Using Off-the-Shelf Authoring Software to Create an Online Decision-Making Job Aid

Kasa Wahl, Daniel Hill, and Deborah McGuire, Professional Development Program of Rockefeller College of the University at Albany, Albany, New York, USA

Appendix B – FBI

Notes from meeting with FBI at Quantico Virginia

With Demetrius Jordan

Met with:
- Demetrius Jordan
- Skilor Long
- Jon Day
- Stacey
- Brett

Key points:
- Know your student and the working environment
- Do not be technology driven ie new toys / programs do not always lead to good education platforms etc
- If building for mobile, build mobile first and then expand the information outward (must know / nice to know)
- Take training to the field officer but understand the environment they work in so what they have to encounter to do the training
- Train more than 40,000 in compliance alone

Who they train
Recruits
Intel analyst
World Health Org
Advanced Training
Surveillance
Computer analysts

Who are they?
The Interactive Learning Development Unit (ILDU) is a dedicated team of creative professionals with technical expertise in the areas of online course design, interactive simulation, virtual representation, video, and other training platforms. ILDU can assist in transforming nearly any content into world class training. The developed product can be delivered online and in everyday classroom settings. ILDU is passionate about creating relevant and engaging training through compelling visual effects and story lines.

Mobile
Plan for mobile first and foremost. Cut to the core of the content and make it fast and accessible. 2 clicks to get to where you need in under 10 seconds. Mobile is new to the FBI and they continue to address security issues. Released a few within Academy based training. Access via private web site using Web HTML5. Let them play philosophy where aiming to have student completing training voluntarily.

Performance Support
Clarke Aldridge based program support ideals and design.
Buy it rather than skill it if you can – half the heartache.

Design and development
Has an oversite learning committee looking at curriculum management, what is needed to train, prioritising system, grading system and problem solving.
400+ courses
296+ courses in development
Triage no just complete to priorities.
Triage process may be of benefit to FBI in similar format to ours but different management and rotation of same causing some SOP type issues.
Ratios of 1 instructional designer to 1 multi media

Staffing
Simulation Team 6+1
Courseware 13
Contractors 18
Video 5
Some cross skilling
Separate area is Instructional Designers with numbers from 17 up to 30.

Training Development Process
ADDIE for development
Analysis – Project acceptance, project plan, analysis summary
Design – design summary
Development – testing plan, evaluation plan, marketing plan, status
Testing – testing results, marketing documents, implementation
Implementation – customer survey, best practice
Evaluation – project completion, evaluation summary, closure
Life Cycle Management Process

FBI Training Development Process

Presentation Package
Very high end and sophisticated. Impressive in format and design and in what it is trying to achieve through Burden of Proof. Request for copy of same with answer pending.

Staff turnover and stress
Minimal staff turnover. Have 130 jobs in queue but addressed as priorities change. Some wastage where developing a program that is then shelved. Communication and direction has some issues (common in large organisation). Management constantly changing and thus changing direction – continually justify existence but successfully doing so due to program quality and volume/s. Training all aspects of FBI services in some manner.

Quality Assurance for Simulation Programs
Undertaken every 2 weeks
Peer review / QA then SME review
Revamp of courses every 12 months and all links etc checked

On completion manager review then legal review and meridian global review. Requests for changes come direct from SME on review

Baseline worked out from program so knew parameters to work under early in development. SCORM packages in most cases.

Integrity of programs
Randomise questions but each student must get same questions by law.

Have a sign on that is basically do not cheat!

Run report to see any discrepancies

Cater for all aspects of society as you are not the user – you want them to learn not get frustrated.

Can add to career paths and continue to build in this area as provides more substance to courses / unit.

Evaluation unit will evaluate course for effectiveness using a range of methods including Kirkpatrick feedback method.

Funding

Funding comes from National level (government) to support police development. Resultant is expected to be the better handling of evidence response leading to higher conviction rate and less issues / complexities within court process. Very big project by our standards (over 2 years) but successful for FBI due to volume and nation wide aspects.

No funding comes from user end (ie no payment for services.) Total project is run by around 30 people. No cost to the user for accessing programs therefore programs built much like Vicpol ie cover wages etc by developer.

Relationships

Share with Canada both formally and informally RCMP and intel areas.

Use conferencing where invite attendees to facility or attend at other as required or of interest.

Canada and United States Simulation Group – CUSSG

MOU where of value

jasonseabaugh@gmail.com – Jason Seabaugh played a big part in developing Burden of Proof – contact provide and some interest in assisting in development of a similar program if we have the opportunity to do do.

Appendix C

Notes from meeting with Canadian Police Knowledge Network (CPKN)

Met with:
- Sandy Sweet (CEO)
- Nadine Sutcliffe (VP Client Services)
- Bill Gibson (VP Operations)
- All available staff

Key points:
- In 2004/05 had 252 completions recorded
- In 2012/13 recorded 280,508 completions for the year
- In the G20 year had 775936 completions recorded – only way to effectively train that many people in that short time frame.
- To September 2013 have 1,991,246 completions since 2004.
- Mission : To be the leading provider of eLearning in Canada and International.
- They could just about pull off the international with Worksafe Australia now having courses completed by CPKN – they are on the world stage.

Who they train
Police Service – 65000 police across Canada: CPKN involved with 50,000 students from these services.
Government Agencies involved in enforcement
Corrections
Passport office
Private Security to meet requirements
Real Estate compliance

Who are they?
Aligned with Holland College in 2003 and formed from the Justice Knowledge Network and policing support programs. Not for profit organisation which was an

initiative of Holland College along with some key policing personnel who drove the development of CPKN including Sandy Sweet and Edgar McLeod.

Board of Directors / National Advisory Group
These are explained in length within the main document.

Design and development
See attached templates. Extensive experience in this sector.

Maintenance of courses
Every 12 months or when legislation changes are made
Changes are validated by SME and the relevant services will id a suitable SME if required.

Feedback
Monitored and plotted for each course
Depending on level of severity of feedback will make changes where required (rare if ever)
Annual review of all courses with SME and edits determined
Survey levels for Kirkpatrick up to three

Private Security Training Network (PSTN)
Movement in this sector as private security needed a new approach to standardise training across Canada.
Separate from police and other sites.
Standardised basic security training to meet govt requirements
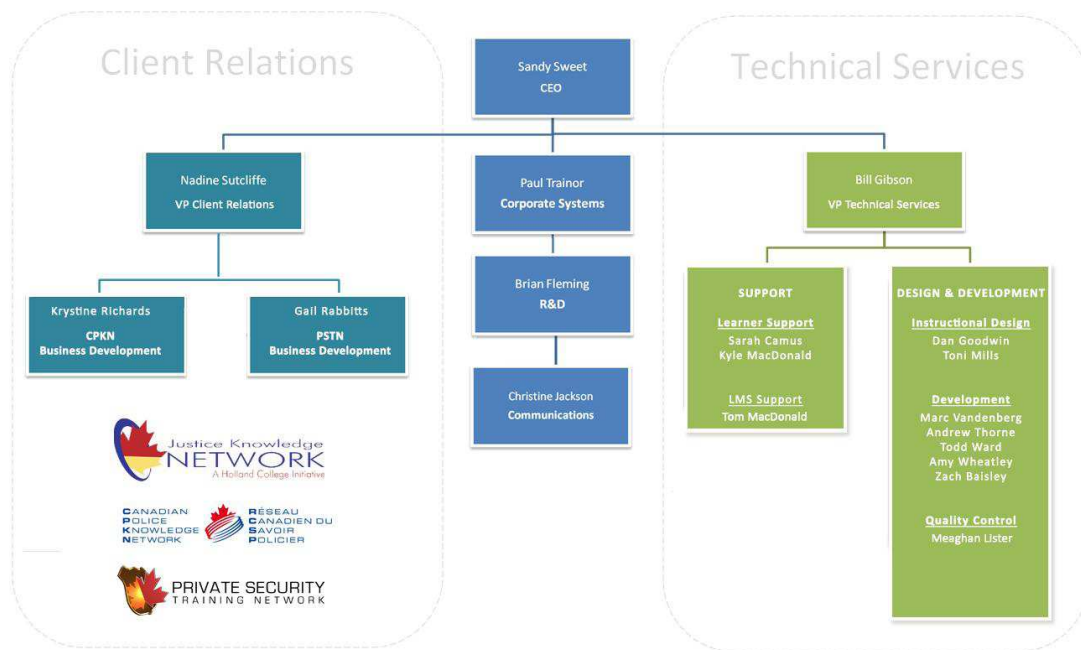Many financial benefits

Staff
19 in total (increases expected)
3 managers
Finance – Paul
Client Services CPKN – Krystine
Client Services PSTN (Private Security Training Network) – Gayle
Corporate Communications – Christine

Roles of staff

Nadine Sutcliffe – VP Client Services Quote "Work with people and organisations who get it and share the rewards."

Client based focus in helping these organisations accept the cultural changes that eLearning can bring. Buy in to the process and seeing the benefits. In order to meet the mission of the CPKN (Be the leading provider of eLearning for Canada and International agencies), the focus on customer needs is not under estimated. Consistent and central contact points form an essential part of CPKN success and the buy in results reflect this. Nadines' role is clearly outlined in the main parts of the document.

Bill Gibson – VP Operations
Running of CPKN in a tech sense. Ensuring they have adequate IT resources to meet the organisations needs. Tracks projects on a daily basis and looks and stress and workload on employees to ensure OHS met. Re-prioritises work as required. Controls HR and skill set management to ensure capability needs are met. Has the higher level of the program management including assisting the advisory group and board as required. Researches future projects and LMS developments to ensure CPKN remain contemporary. Weekly reporting with Nadine to Sandy. Bills' role is clearly defined in the main parts of the document.

Krystine Richards– Manager of Business Development. Quote "Leave your views at the door and get on with building the relationships."

2010 CPKN required person with good people skills to develop business and send a common message with a common point of contact. Kristine identified and filled role. Previous person in similar space but organisation too young and did not work. Sandy filled this role but then expanded beyond his time commitments and moved across.

Role is to understand the customer and what is happening in the operational world. Overseen by Nadine Sutcliffe who deals directly with the big customers. Kristine talks about courses, developments and portals and is a common voice with Nadine. Focus is on user engagement. Kristine has strong communication skills, interpersonal skills and very business savvy. She has a Masters in Business.

Andrew Thorne – Quiz Manager/Maker Quote – "All you want is for learning to happen"

Work to the lowest denominator and then up. A lot of what happens in this area is determined or limited by the customer. Andrew overseas the process and provides input to third party courses to align with CPKN. Codes in HTML, HTML5, XML, Java, Flash, Action Script 1 and 2.

Amy – Flash Developer and Graphic Designer

Looks at the first content review and provides input in relation to suitable interactive. Try to add 1 interactive per lesson. Average of 5 to 6 lessons per course. Instructional designer determines where interactive sits and if it works. Client reviews interactive suggestions and they talk it out. Storyboard and review the functionality and layout to ensure they can actually build it. Use a library of graphics. Build is via the developers with a QA of the entire course by developers along the way and on completion. QA (Meaghan) then reviews and changes made. QA (Meaghan) then reviews again to ensure all good. SME then review with changes as required. On completion one last QA prior to "pilot launch"

Meaghan Lister – Quality Control

QA of all courses. Completes functionality tests and compares course to storyboards and learning outcomes etc. Assesses how the course looks, feels and works. Reviews at completion of process and signs off on same. It is then sent to SME where client reviews and edits done. Role is all about meeting the standards. Meaghan does a number of other roles where required.

Integrity of programs
User name and password held by student only
Check box to accept terms and conditions
Exam – designed as rotating questions and answers. Pool of questions and randomisation where suitable.
Exam – there are mandatory questions that all must answer
Courses without exams – have the oath of the badge – thou shall not cheat
Updates of courses as required – version control
Tracking where feasible of attempts and times
Lock out process – supervisors advised and must request further attempts through supervisor who completes request to CPKN. Keeps tabs on students who are struggling at a local level and managers remain informed.
Blended – some organisations test at local level where practical elements involved.

Staffing Opportunities

Opportunities through Holland College to develop staff including course access to develop skill sets

Continuing education fund: Application via staff for initiatives that will improve the workplace and skill set

Library of online courses: similar to Linda and other support courses

If short on a skill set – find courses and train staff in same or identify talent and employ. Alternative Holland College supply students to learn workplace and if suitable opportunity to employ (Amy)

Local conference opportunity for staff

Some shadowing but no exchanges to date (willing to come to Australia!!)

Gaming development – in partnership and learning contemporary methods.

Staff turnover and stress
Minimal staff turnover.

Funding
Not for profit as per agreement with Holland College. Charge students for access to courses which varies in rates depending on course. All excess put back into the organisation to grow and expand to meet the needs of emerging areas.

Student Benefits
Varies from workplace to workplace
Some mandatory courses in some organisations or considered self development.
CPKN allow the organisations to determine this criteria. Benefits do include:

- Continued Education Credit: complete a set amount of training and learning and receive a pay increase
- Set period training: within a set time frame (5 years mentioned) and complete a set amount of courses to receive a pay increase
- Promotion: courses to complete to meet criteria
- Cadet programs with mandatory completion for entry
- Specialist qualification – held within CPKN for some organisations

Edgar McLeod – Atlantic Police Academy

The Atlantic Police Academy (APA) is on Prince Edward Island (PEI). APA is one of 5 main police training facilities in Canada with the remaining being:

- Royal Canadian Mounted Police
- Ontario Police Academy
- Quebec Police Academy
- Justice Institute in British Colombia

APA is a pre employment academy which means that students pay up to $27,000 Canadian to receive the training. The Canadian Policing sector saw this as a sustainable economic model to provide training to potential employees. From APA, the students join services across Canada with the exception of Ontario and some areas within British Colombia. The training provided and academy functioning is supported by Holland College. There are 60 to 80 students per course with normally 3 to 4 courses per year.

CPKN courses form part of the curriculum for APA. They have found this creates a more rounded student with courses done in their own time and tested inside the training. The key that they have found is that the right courses for eLearning are identified and delivered at the right time in the curriculum. Blended training is the preferred approach. The curriculum is certified through Holland College and then delivered by qualified trainers in the areas of expertise.

Training in this form conducted with:
- Police cadets
- Fire Fighters (to international standards)
- Correctional Officers
- Wildlife enforcement

Appendix D

Official Warnings vs Fines 2012 – 2013 Financial Year

(July 2012 to June 2013)

Fines issuing agency	Number of infringements issued	Official warnings issued
Police issued on-the-spot	250,292	7,222
Fixed and mobile camera	1,292,991	56,685
Tolling	1,566,541	13,234
TOTAL	**3,109,824**	**77,141**

Infringements for Police issued on-the-spot and Fixed and mobile camera are recorded at the offence date.

Infringements for Tolling are recorded at the issue date of the infringement. Unpaid tolls only become infringements after the tolling authority has unsuccessfully attempted to recover the toll. The infringement issued date may occur several months after the offence date, depending on the tolling authority.

Official warnings are issued when infringements are withdrawn following internal review processes.

Official warnings may not relate to the infringements issued in the same financial year.

The number of infringements issued by Victoria Police on-the-spot only includes speeding, red-light and unregistered vehicle offences; it does not include other on-the-spot offences such as failing to wear a seatbelt.

The number of infringements issued may be subject to variation over time as infringements can be withdrawn or reissued.

The number of official warnings may be subject to variation over time as infringements can be withdrawn, revoked, cancelled or suspended.

End
of
Report