



Adventures in Learning: The Good, the Bad and the Ugly in Professional Education

One person's journey
across the spectrum of
professional development opportunities
with a focus on Informatics and Business Management

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INTRODUCTION

Although this paper is framed as a person journey, the real intention is to explore some of the factors that have contributed to making certain investments in professional development productive and others markedly less so. The protagonist in this adventure, being me, is one who has invested heavily, indeed by most measures too heavily, in professional development over the last 20 years. The pattern of investment was driven by the demands of a career that delved deeply into emerging technologies, featured a series of entrepreneurial ventures and forged working relationships with some of the world's largest organizations. These investments, accordingly, focused on two inter-connected domains: informatics and business management.

Professional development is here being used as a broad category and it applies to the full range of organized educational activities that a working professional can participate *while continuing to work*. This definition distinguishes professional development from personal study or on-the-job learning, although these remain important. Also excluded from this definition will be full-time studies.

The observations that will be of most value will be those that reflect upon the conditions that govern how working professionals can, while juggling a variety of responsibilities, engage in professional development activities that will offer genuine benefits both to them and to their organizations.

Of the programs touched upon within this paper, only those that are classed as “good” will be identified by name. Those that are classed as either “bad”, or worse still “ugly”, are addressed in general terms. This is mostly a personal choice on the editorial policy that should govern widely distributed content. Some of the material that could be classified as negative in fact emerges from critiques submitted to the applicable programs so, for purposes of providing feedback, that function has already been fulfilled. Perhaps sadly, the negative portraits included in this paper will remain fully recognizable, even if generalized, as most programs currently offered to working professionals cannot, in any way, be described as “good” while all too many can be comfortably called “ugly”.

STARTING POINT

So that the recollections that follow can be set into their proper context, in part by situating the protagonist, some background should be provided about the educational foundation onto which these professional development efforts were later added. Illuminating this educational foundation will perhaps explain why certain features in professional development experiences were deemed

advantageous and others not. The three main components of this foundation are one undergraduate university degree, one professional training program and one graduate university degree.

The undergraduate degree was completed at Queen's University in Kingston, Ontario, Canada. The program of study could be fairly described as wide-ranging, encompassing mathematics, history, philosophy and English literature. Most of the courses taken were seminars involving relatively small groups of students. Some of the courses taken featured the stereotypical sprawling lecture hall filled with hundreds of students. How these types of courses can be confused with an education is unfathomable and they were studiously avoided after a couple of encounters. The smaller seminar programs, by contrast, were excellent and facilitated close collaboration with both fellow students and professors. A number of these professors left long-standing and positive impressions.

The professional training program was the officer training program for the Canadian Armed Forces conducted at the Combat Training Center in lovely Gagetown, New Brunswick, Canada. This program was designed to run as an adjunct to the standard university school year and it essentially occupied the summer months for students from the Military College system as well as those studying at other universities who had elected to complete the program in parallel with their studies. Scheduling the training program to coincide with the summer months also ensured that the field exercises would be conducted when the mosquitoes were at their peak in terms of numbers and ferocity (a point that was doubtless counted as a positive from the perspective of the organizers). This program was outstandingly well designed and executed and, not surprisingly, it produces excellent leadership candidates for long term services in the military – something the military has long understood to be of paramount importance for remaining operationally effective.

The graduate university program, a Master's of Philosophy, was undertaken in the somewhat unreal environment of the University of Oxford. Here a number of quite different learning opportunities were encountered. Most striking, and almost unheard of outside of Oxford and Cambridge, is the one-on-one tutorial with academic supervisors. These sessions not infrequently involved sitting by a fireplace and drinking sherry with this invoking the recollection of Stephen Leacock that a graduate from Oxford leaves the university as something akin to a well-cured ham. These sessions always involved the student presenting the results of the last week's research with this usually done by reading a short paper aloud. Discussions followed, criticisms made, pointers to possible sources offered and recommendations given on what other academic supervisors who could be engaged. This is admittedly a very expensive way to facilitate an education and this is one of the observations that

can be made of Oxford in general – the resources and value assembled seems to massively exceed the capacity of the relatively small community of assembled scholars to possibly consume.

Oxford also featured a significant emphasis on lectures although these were done on an occasional basis and as a supplement to the main modes of instruction. Students were essentially free to attend any lecture they wished and, with a little industry, a vast number of interesting speakers and subjects could be unearthed. Many of the lectures were used to present current research as opposed to rehearsing well-worn details and this exhibited the good side of the oft-maligned lecture as a learning opportunity. For one thing, the lectures were always followed by a discussion in large part because the diverse attendance was driven by interest rather than obligation. As a second observation, the model of the short lecture series also encouraged students to attend sessions that were outside their main areas of focus – sometimes wildly so. This had the effect of exposing students to a wider range of influences than would otherwise have been possible and this too counts as a very good thing.

If the objective of an early education is really to learn *how to learn*, then it can be said that the foundation put in place could be deemed sound enough for the learning trajectory that followed. It should be noted that this educational foundation included very little that could be said to apply directly to the world of informatics and business. It follows that everything then relied upon being able to develop the necessary professional competencies while working within environments that expected significant levels of work and adaptation as part of the normal ebb and flow of demands.

VARIATIONS ON PROFESSIONAL DEVELOPMENT

The context in which the initial investments in professional development were made is significant. The field of endeavour was a specific specialty within Informatics that could be classified as a *derivative technology* in that it builds upon many of the technology components that organizations already leverage. This field is variously referred to as *content management*, *electronic publishing* and *hypertext systems*, and with the rise of the World Wide Web during this same time period, these derivative *content technologies* grew from obscurity into prominence almost overnight. One aspect of this technology bears highlighting – it is, by its very nature, a profoundly *inter-disciplinary* field and one that can have significant business impacts upon organizations, for good or ill.

The professional development program to be pursued needed to delve into some of the core technologies underlying content technologies (database technology, security, messaging standards,

storage mechanisms, search tools, publishing devices, and network connectivity), into the standards upon which content technologies relied (SGML, HTML, XML and many others) and into the emerging applications that provided services for creating, managing, and sharing digital multimedia content. Given the nature of content technologies (as for informatics in general), a significant measure of attention also needed to be directed towards enhancing knowledge of such supporting disciplines as project management, requirements engineering, business process modeling, and system design. To complicate matters still further, the rise of these derivative technologies was having the effect of changing many of the disciplines that had been formalized with reference to the previous technology generations where system openness and adaptability were less prevalent. Whatever professional development program was pursued would need to cover a large and changing landscape.

TECHNICAL TRAINING

Given the rudimentary starting point from whence this career trajectory began, an initial emphasis was understandably placed on technical training. This emphasis took the form of a large number of practical hands-on courses covering a bewildering range of technical topics. Over the years, several dozen of such courses were completed. The objective in each case was to acquire a working familiarity with the technology principles and tools that were germane to current projects. In general, many of these training courses were worthwhile although the cost in terms of course fees and time away from work was significant. The value of the training courses was greatest when the courses were followed by an almost immediate application of the knowledge gained to challenges in the work environment. This is a well known phenomenon but these experiences further corroborate the point that unless specific skills are applied within a reasonably short period of time then the value of practical, skills-oriented training becomes very suspect. Many of these courses were in fact coordinated by the projects in question and this model of integrating training into project schedules seems to stand out, in retrospect, as a practice worth remembering.

Also included under this category were courses that addressed more general topics such as project management, business communications, and system analysis and design methodologies. Each of these included a more theoretical aspect to the course content and, interestingly, it has been some of these more theoretical aspects that have survived the test of time even as the specific technologies in use at the time have since vanished into obscurity. In terms of persistent value, these courses, in being infused with a more theoretical focus on principles and an emphasis on general skills such as

planning and communication, seemed to offer a better overall return when compared to the time and money that was invested. These value calculations hold true even though these more general courses tended to be longer in duration and more expensive than their hands-on counterparts.

Technical training, with its clear focus on refining skills, is particularly important, obviously, at the outset of a career and it is the organization for whom an individual works that has the primary interest in seeing the relevant skills acquired and applied in a way delivers immediate value.

Of the numerous technical courses that have been undertaken over the years, there was one that stands out as superior to all others. Not too surprisingly, this course was offered by the Massachusetts Institute of Technology (MIT). The particular merits of this one course extended well beyond the venue as it brought together a mixture of elements that combined to provide a powerful learning experience. One element was the academic substance incorporated into what was, at the end of the day, a technical course. The instruction was provided by one MIT professor and one visiting professor from overseas. The core content of the course combined two interesting threads of research. One thread focused on the evolution of a new modeling methodology. The second thread focused on applying this methodology to addressing diverse engineering challenges, and doing so in a way the tackled both business and technical issues simultaneously. The course was therefore grounded in current research. There was also a practical side to the course where the participants learned how to use a modeling and simulation tool and then worked in small teams to model different scenarios. These were compared with similar exercises undertaken by the instructors for real customers.

With this MIT course we see a number of elements that together combined to produce an exemplary learning experience. These elements included highly qualified instructors (whose experience, somewhat unusually, combined academic and professional pursuits of the highest calibre), course participants assembled from all over the world, a challenging theoretical dimension, hands-on technical activities and interesting group work, and a tangible business context that connected the course material to a variety of real world projects. It would be unreasonable to look for all of these factors in all technical courses, including those provided by MIT, but as an exemplary model of what a technical course can achieve, this one week (five day) workshop effectively sets the standard.

INDUSTRY EVENTS

Given the emergent nature of the technology field in which this learning adventure was being conducted, it should come as no surprise that for many of the important topics there were, as yet, no courses available. In some cases, the standards that were being leveraged were themselves either nascent or undergoing rapid change. In order to gain an understanding of these standards and, more importantly, to build an understanding of the goals and constraints forging the standards, the only real alternative was to participate in the relevant industry events. The key word here is “participate” because simple attendance rarely achieves very much.

It is a feature of most industry events that in conjunction with the usual exhibits, networking events, and speaker sessions, there will be meetings convened by the requisite industry groups to work on the standards that are relevant to that industry. Participating in an event fully means partaking in the usual activities, attending any in-depth training sessions provided, joining at least one working group (accepting the types of tasks typically allocated to newer members) and, as quickly as possible, becoming a contributor to the event program as a speaker. Just as it sounds, this is a rather harrowing path to follow and one that definitely entails a significant amount of extra work. But there is no substitute for participating in one’s industry events and working groups because it is here that a genuinely valuable body of knowledge and experience, and network of contacts, will be established.

The importance of industry events varies according to industry and their prominence in the informatics field is well known. Within this field, there are so many such industry events that it is difficult to discern which ones will actually provide legitimate avenues for professional development. Indeed many are little more than exhibitions where vendors promote their products and where a small group of “self-proclaimed experts” harvest consulting clients. One very recent industry event, convened in early 2008 by a leading informatics market research firm, was a shining example of what should be assiduously avoided. Its program and delivery approach were completely driven by what organizations were sponsoring the event and what marketing messages the research firm wanted to promote. The hundreds of people in attendance at the event were there to learn about emerging content technologies but left with only a superficial grasp of the risks to traditional infrastructure that such innovations would bring. The real learning outcome of the event was that attendees needed to engage the market research firm in consulting projects to determine the appropriate strategy. Events of this type actually stand as impediments to learning and care should be taken to evaluate the independence and objectivity of an event before investing any time, energy or money on it.

Assuming that the more negative events can be sidestepped, the one cautionary note that should be struck is that most of these events will entail travel expenses in addition to the time and fees involved. However, it is the workload associated with becoming an active participant that must be considered as it can easily dwarf all other expenses. But for those who have more energy and interest than dollars, this path can still provide substantial long term returns.

After years of conference participation, including years where this participation grew to chairing international events, one series of conferences stands out as providing an example of what a good industry event can achieve. In the early to mid 1990s, the NATO military community, together with its network of allies such as Australia, Japan and Sweden, would convene conferences that explored how standards-based content technologies could be applied to the challenges of reducing the total cost of complex equipment systems. These conferences convened under the somewhat awkward title of “Continuous Acquisition and Lifecycle Support” or CALS. The awkwardness of the title aside, these events placed an emphasis on working group meetings convened around various standards and intensive technical training sessions. The conference program also featured executive level participation in order to set the overall business goals of the initiative and the speaker sessions showcased numerous case studies where projects from across the international community demonstrated their progress or confessed their transgressions. These events also incorporated a vendor exhibition, which is a common enough conference element, but in this case the participating vendors were required to collaborate on staging integrated demonstrations that would showcase how their technology would work with the technology provided by other vendors. These integrated demonstrations were designed by the conference organizers with the objective of illustrating how critical business processes would be improved through the introduction of new technologies. Essentially these CALS conferences created a form of *integration hot-house* in which vendors, sponsoring executives, and participants could all accelerate their knowledge while collectively contributing to the progress of the entire community.

These CALS conferences were a little unusual and reproducing this level of intensity would be difficult without access to the resources of a community like NATO. Nevertheless, the value of these events as learning venues can be traced to a number of key elements. A strong business context established why certain technologies were needed and what benefits were being sought. The deeply technical focus of the working groups collaborating on the advancement of standards and the detailed training workshops provided opportunities for participants to *get their hands dirty*. The international attendance at the event was also valuable in that it ensured that many different perspectives would be

encountered during the course of the conference. Finally, the development efforts that preceded the event, with vendors and attendees collaborating on integrated demonstrations, ensured that the conference provided a chance for all participants to learn something genuinely new. The amount of effort that had to be invested in preparing for, and then participating in, one of these events was analogous to training for and then running in a marathon. The total costs extended well beyond the usual travel and attendance fees to be measured in many long hours of work. But these costs were very much worth the investment as the learning that such events facilitated would be difficult to match and, where the business and technical landscape was in such a state of flux, there really were no alternatives to this type of *hot-house* engagement.

EXECUTIVE PROGRAMS

For many years now, most universities have offered a variety of open-enrolment *executive programs* designed to provide participants, usually within very compressed timeframes, opportunities to learn new business methods and refine the types of skills needed to guide organizations. Depending upon the university, these offerings will usually cover the core business functions and may extend into areas of collateral interest. The typical formats include short two or three day courses, one week seminars and slightly longer “management development” programs. Among the attributes that designate an offering as an *executive* program would be the inflated price tag.

Over the years, a number of such programs have been sampled with most being reasonably well run but perhaps unremarkable in terms of their quality or lasting effect. One serious problem with this format is that both the material being introduced and the skills being refined take substantially more time to address than can be afforded in a short format program. In a manner comparable to the technical courses addressed above, these programs can be useful in accelerating someone’s familiarity with a particular business function. The value of this acceleration, however, should not be overstated and the additional expense associated with these programs should be carefully assessed.

Two examples can serve to illustrate the landscape of executive programs. One will provide a less than ideal example – one that might even be termed “bad”. The other example will exhibit many of the elements that can be associated with “good” learning experiences.

This first example will illustrate many of the challenges of the executive program format. This offering was run over a week and it was held at a relatively prestigious university, indeed one whose

executive business programs have been rated amongst the best in the world. The format used saw a series of instructors assume responsibility for a day of instruction with each setting out to address a dimension of the topic. In this case, the topic was corporate strategy. The instructors were staff from the university's school of business and all were engaged in a measure of consulting work as one way to establish a link between their areas of specialization and the real world of business.

The primary challenge facing the program was that the material being addressed was not genuinely amenable to being compressed into a week-long short format and especially one that also consciously avoided placing too many demands upon the executive participants. Perhaps as a consequence of compression into the short format, or perhaps as a consequence of the nature of most academic business material itself, the course left the impression of being impractical when compared to the harsh realities faced by many of the course participants. Interestingly, many of the instructors seemed aware of this dichotomy and would work overtime to salt their presentations with short references to their consulting engagements in order to ground the material in reality, or at least to provide that impression. Some instructors even made selective use of expletives to again create the impression that their experience extended into the front lines of the work world although these attempts tended to showcase that the reverse was, in fact, more true.

This particular experience could be rated as a negative one largely because the material presented amounted to little more than selections from material used in courses that would normally be run over several months. Superficiality was the inescapable outcome. Another outcome was the fact that the attempt to cover such a wide topic in such a short period of time made it impossible for the program attendees to participate in any meaning way. The significant cost of the program cannot, therefore, be balanced against the learning that might have been facilitated, even if the food was pretty good.

The second example, happily, is quite a positive one. This example is a variation on the theme of the executive program in that it was framed more as an executive symposium focusing on a specific topic – that of re-engineering government services. This symposium was convened at the John F Kennedy School of Government at Harvard University and it assembled attendees from all over the world. As a measure of the international quality of the program, the core set of case studies that were used for breakout groups were based on the experiences of the government of Singapore in embracing the latest advances in e-commerce technology. A delegation from the government of Singapore – the very people who had been profiled in the case studies – were on hand to participate which was especially illuminating when it came time to compare what the working groups thought was

advisable with what actually happened. The cases each focused on different aspects of how the emergent technologies could be leveraged in conjunction with business process changes to yield sometimes dramatic improvements. The program featured a variety of speakers, some drawn from within Harvard and others from other institutions, and, as mentioned, a generous use was made of the “case study method” that has become synonymous with Harvard. The program also included a number of additional activities that actually contributed to opportunities for attendees to network and, somehow, the after-hours discussions actually hovered around the topics being raised in the program.

The elements that made this second example such a positive learning experience are now becoming familiar: a strong theoretical dimension; the participation of a number of academics each addressing a particular perspective and presenting recent research; an internationally diverse community of attendees with many of these being senior executives from both the public and private sectors; and, a practical approach to engaging participants in working sessions that tested theory against practice.

RECURRENT THEMES

A quick review of the positive examples cited in each of the preceding sections (technical training, industry events and executive programs) highlights some recurrent themes. For example, each of the positive programs featured a measure of theoretical substance which ensured that at least some of the lessons learned could be applied in a variety of contexts. In many cases, this theoretical dimension was addressed by academics conducting research into, or by specialists responsible for advancing, the technologies, standards or concepts that were applicable to the given topic. The quality of the instructors was a consistent factor in making programs effective with, in the best cases, these instructors being able to marshal, sometimes as a team, a powerful combination that joined *academic rigour and objectivity* to a subjective perspective on practical implementation as gained from *real experience*. Each of the positive examples also incorporated practical activities which typically took the form of group projects with these incorporating hands-on tasks in the more technical courses. These served to reinforce the theory by facilitating immediate application to different scenarios, and to exercise communication skills within a team of people working together without the benefit of prior acquaintance. Notably the program attendees were assembled from around the world and this made the overall experiences far more interesting. Finally, each of the positive examples connected the theories and practices being introduced into concrete business contexts where these ideas would encounter the domain where products are produced, services are delivered and dollars are spent.

UNIVERSITY EDUCATION FOR PROFESSIONALS

In and around 2004, circumstances arose that provided an annual education budget that, for all practical purposes, *had* to be spent. This coincided with a growing recognition that many years had passed since any formal educational investments had been made. It was clear that the cycle had proceeded from one extreme to another and whereas a working career had begun with too much education and not enough experience, the reverse was threatening to become true. While this view may fly in the face of some others, it was felt that an over-abundance of experience can become misleading, with recurrent patterns coming to possess a disproportionate influence over future judgment. So to redress this potential weakness, a series of education programs were undertaken through a couple of universities. These efforts were consciously undertaken as a way to measure, or benchmark, the lessons of experience against those of academic research, the experiences of other practitioners or the bodies of knowledge assembled by various industry associations. These efforts were also undertaken, quite consciously, as an exploration of the types of formal education opportunities that were available to working professionals who were sustaining a significant level of work and travel. And so it was that three “graduate certificate” programs were undertaken in 2004 and 2005. Graduate certificates, as a phenomenon, were themselves relatively novel instruments and, as the experience confirmed, the concept held very different meanings for different institutions.

A TALE OF THREE GRADUATE CERTIFICATES

As mentioned, three graduate certificate programs were completed in 2004 and 2005 with these touching upon three areas of interest that had emerged as important over fifteen years of work experience: project management, business analysis, and knowledge management. Of these three experiences, one can be classified as good, bordering upon outstanding. Of the remaining two, one could be classed as “bad”, although a more generous assessment might give it a “fair” grading, and one could definitely be classed as “ugly”, and it might be less generously branded “grotesque”. Given that the programs were partly undertaken to assess the types of opportunities available to working professionals, even the ugliest of possible programs could yield merits even if those merits were strictly those of a post mortem.

PROJECT MANAGEMENT

The graduate certificate undertaken in the field of project management was a program structured around in-class instruction and group work. The program encompassed approximately twenty such days of instruction and it was spread over several months with sessions typically straddling a Friday and a Saturday. The idea behind this model, and it is one with some merit, was that the programs would essentially extract an equal number of days from participants' professional and private lives. Where, as was often the case, it was the attendee's organization that was paying the fees, this meant that the attendee was contributing personal time as well. This model however had the consequence of limiting the range of attendees to the immediate vicinity of the education facility hosting the program. For attendees who regularly travelled, this model could pose challenges and missed sessions had to be made up at a later date and in another serial.

In the case of the project management certificate, the program benefitted from the availability of a widely accepted reference resource, the Project Management Institute's Project Management Body of Knowledge (PMBoK). The existence of this reference resource proved to be quite valuable as it provided a "core text", and one that is quite good even when measured against a significant amount of experience in project management. This is not too surprising because the PMBoK is itself the product of decades of collaboration by working project managers and it provides a strong mixture of recommended structure and practical flexibility. The course sessions essentially mapped to the different domains, or knowledge areas, of the PMBoK, which effectively make-up the curriculum.

The certificate program also benefited from an experienced collection of instructors, all of whom were cognizant of the PMBoK and several of whom were genuine experts in their respective domains (such as procurement or quality). This highlighted one aspect of the program that was appreciated by the working professionals participating in the program. Instructors with substantial experience were able to embellish the curriculum with engaging case studies, drawn from their own background, and it is remarkable how some of those stories are remembered long after other details have receded from memory. The mixture of a formal body of knowledge with practical experience can produce powerful learning experiences for people interested in improving their professional practice.

So this particular program was not without merit. But it had limitations as well. Project management, as a discipline, does encompass a significant range of skills that are best exercised in face-to-face group experiences. This program featured a number quite entertaining group exercises that did a good job of driving home some key learning points. However, project management is also discipline where

a respectable amount of theoretical material has grown up and a number of skills, such as those surrounding estimation and measurement, draw heavily on these more general resources. These areas are much less well suited to a delivery model that emphasizes in-class instruction and interaction. Despite this fact, the program made little to no effort to supplement the in-class sessions with reading or research activities that would have substantially improved the educational content of the program. This failure, given the particular nature of the project management discipline, greatly undermined the utility of the program and this, in turn, makes it questionable as to how the program came to be associated with a university let alone becoming a university endorsed certificate.

It is true that, unlike other specialized educational terms, little or nothing can be extracted from the nebulous word “certificate”. This particular program even aspired to the grossly misleading title of “Master’s Certificate”. It’s being offered by a university while also being an open enrolment program (meaning that there are no admission requirements beyond payment) simply added to the confusion. It turns out that the program itself was not developed by members of the university but rather by a group of consultants who offer the same program through a number of university venues. None of the consultants contributing to the program possessed a background in university teaching or research which meant that what strength the curriculum had was derived, almost exclusively, from the primary reference resource, the Project Management Institute (PMI) PMBoK.

As mentioned above, this program succeeded better than could have been expected and it did offer many real benefits to the participants. These benefits can be traced back to the structural foundation provided by the PMBoK, the extensive practical experience of many of the instructors, and the value of the various group exercises that helped to refine genuinely important skills for project managers. The failure to address any of the theoretical elements behind the discipline of project management and the complete absence of any formal assessment activities meant that the program should really be reclassified as an extended form of “technical training” as opposed to any type of formal education.

The tenuous connection of the program to the university through which it was offered, or indeed any university, can be identified as one clear source for the shortcomings in the program. It must then be asked what would happen if such a program did not have the benefit of a widely known and reasonably credible body of knowledge on which to ground the curriculum or did not have access to a cadre of experienced and effective instructors. The next graduate certificate program illustrates, graphically, this foreboding prospect.

BUSINESS ANALYSIS

Project management focuses, to a great extent, on managing project scope, effectively controlling the boundaries of the work to be undertaken. Business analysis, by contrast, directs attention towards the primary determinant of project scope – namely the definition of *product* scope, the description of what the project will seek to achieve. The activity of *business analysis* has been slowly emerging as a discipline whose purpose is to equip organizations with the ability to determine what it is that they need to build and to put into operation. Business analysis encompasses identifying, documenting, validating and managing the requirements that combine to make up the product scope that a project manager will accept as a realistic goal. As the most common reason for project failure is repeatedly identified as inadequately understood requirements, business analysis, as a nascent discipline, would seem to be a relevant domain of knowledge.

Despite its potential importance, business analysis, or what is referred to more academically as “requirements engineering”, has not seen the type of consolidation and formalization of experience and knowledge that has been seen in project management. Although attempts to do so have been launched, the progress has been slow and the establishment of a broadly accepted body of knowledge seems very far away. So it would be that a program seeking to address the discipline of business analysis would do so without the benefit of a credible reference around which to form a curriculum.

The absence of an underlying structure for the program curriculum for business analysis turned out to be an insurmountable problem. In general, this also underlined the immaturity of the discipline which also made its presence felt in the questionable quality of instruction. Surprisingly, many of the session instructors possessed minimal theoretical knowledge of the topics to be addressed and, more shocking still, often possessed scant practical experience. These weaknesses made the investment of time, associated with participating in the series of in-class sessions, all the more difficult to justify.

It would be fair to say that the program degenerated into a comical farce and one, enhancing its formal standing as a *farce*, where the program designers refused to acknowledge that shortcomings in the program even existed. When criticisms were raised, and the program attendees rose up in protest, the usual protective manoeuvres were executed by the consultants behind the program and the university, through which the program was offered, naturally denied any responsibility. The protagonist in this adventure tried numerous strategies in an attempt to encourage or force changes to be made. On the constructive side of this effort, a reading list of books that could be used as reference texts was provided to the program director and promptly ignored.

In both of the above examples of graduate certificates, the personal and professional merits of these programs were found to be lacking and especially so in the latter of the two. The general weakness of the programs from the perspectives of theoretical rigour, admission standards, and assessment criteria raise the unavoidable question of how such programs had come to be associated with a university at all. It must be declared that the resulting ‘graduate certificates’, or in this case, ‘Master’s Certificates’, should be understood as entirely worthless – academically and professionally. While the protagonist was largely protected from the consequences of such disappointments, the same cannot be said of most of the program participants who had been drawn to a university sponsored program, paid substantial fees, and invested significant amounts of time. For these people, the university had effectively exploited their desire for enhanced credentials and improved professional knowledge. That many Universities condone and even actively promote these programs speaks volumes about their poverty in terms of strategic vision, historical self-awareness, business acumen, academic professionalism, and even ethical resolve.

KNOWLEDGE MANAGEMENT

These most recent explorations would make fertile grounds for despair if another program had not been undertaken that careened in the opposite direction and offered value that massively outstripped the cost of the program whether measured in dollars or days invested.

The program in question was a Graduate Certificate in Knowledge Management (KM) offered by Royal Roads University in beautiful Victoria, British Columbia. This program was, unlike the two previous examples, very much cast as an academic offering and one that was genuinely appropriate for graduate students. The admission requirements, while retaining some flexibility in evaluating the applications of working professionals, were sufficiently rigorous to ensure that the program was populated by genuine peers who would provide a critical source of value. This program also featured an engaging implementation of what is called a “blended approach” to learning that combined an intensive in-class dimension with an extended period of online course work that featured both group work and individual assignments.

The program commenced with the admission process which, among other things, required applicants to draft a short document outlining their reasons for applying to the program and their objectives to be realized through its completion. While some form of statement of intent is not uncommon in application processes, the statement requested in this process fed directly into one of the early individual tasks – the development of a personal learning plan. Upon acceptance into the program,

there was a short period of preparatory reading as well as a couple of initial assignments to be completed prior to attending the program on-site workshop. This preparation also initiated participation in an online collaborative environment which, despite being somewhat limited in its functionality, proved quite sufficient to facilitate constructive online collaboration.

The workshop component of the program comprised of an intensive one week (7 days) session held on the memorable campus of Royal Roads University. The program participants were drawn from an interesting cross-section of government and industry and from across Canada. One particularly striking feature of this group was the seniority of many of the participants. (While there were no international participants, an international dimension was added later through one of the activities included in the program.) This intensive workshop made ample use of a variety of learning activities ranging from orientation lectures, discussion sessions, group projects, participant presentations, and a decent supply of socializing. Interestingly, the online collaborative environment received active use throughout the on-site workshop with the late-night hours seeing the day's discussions advanced and new matters for debate being introduced. Even the workshop itself highlighted just how powerful blended approaches to learning can be.

Coming out of the workshop, participants had a number of assignments to complete individually and others that entailed providing feedback to other participants on their performance in the workshop. In many ways, group feedback, formal and informal, provided a powerful motivator for all the participants. Many of the people taking the program together commented on how much additional work they found themselves doing simply because it was going to be shared with a group of people whose esteem and respect was valued. This established an interesting quality for the program where participants modulated between individual and group activities. Just as modulating between face-to-face and online interaction seems to generate positive energy so did this movement between individual and group work. In retrospect, one of the lingering observations that could be made would be that tying more of the individual assignments back to the group activities would be beneficial. Individual papers, for example, could have been circulated amongst the program participants and peer reviews solicited. Some individual tasks, such as preparing a personal learning plan or maintaining a learning journal would remain more private and shared solely between individuals and instructors.

The completion of the post-workshop activities concluded what was the first of three courses in the program. The second course introduced a distinct change of pace. The focus moved onto a more theoretical subject that came with a significant amount of reading to be completed. This second

course was conducted entirely online and it had the advantage of drawing upon the positive relationships that had been formed during the onsite workshop. A new instructor was introduced, in this case a practitioner in the field (a practicing lawyer, it turns out, and quite appropriately because the subject of the course was intellectual capital and property). On the subject of modulation, a shift in emphasis was made from discussions that had a decidedly personal character, as appropriate and expected while people were getting to know each other, to discussions that were much more concretely focused on topics raised in the readings. There was a hurried quality to this course because the depth and range of issues being raised were not perfectly amenable to modularization into what were typically week-long discussion cycles (although the regularity of this cycle proved very constructive). Nonetheless, a great deal of material was traversed and having active discussions and group projects as a corollary to the reading made what could have been an exceedingly dry subject very interesting. In addition to the group activities, of which there were many, this course included one substantial research paper to be completed individually.

The final course in the program again shifted gears. Its subject was *communities of practice* and the collaborative technologies that can be deployed to support the formation and nurturing of these communities. Again the course was a little hurried and again this was a function of the number of things that the course sought to pack into the time available. For this course, the instructor who had facilitated the initial workshop returned as the guide and the participants embarked first on a survey of the theoretical basis for communities of practice and then set out on what amounted to a number of digital field trips. Following with the theme of modulation, the course participants were required to jump into and quickly master two completely different collaborative environments from what they had become accustomed to in the preceding two courses. In both cases, these field trips entailed interacting with leading practitioners in the fields of communities of practice and collaborative technologies. In one of the two field trips, the course participants joined an online workshop convened by some of the leading theorists whose materials had been surveyed at the outset of the course. In this particular online workshop, the course participants “met” and worked with, for six or seven weeks, people from around the world. A number of the participants in this online workshop were actively pursuing research in the area of communities of practice and this added substantially to the calibre of the exchanges. In the other digital field trip, course participants had a chance to interact with the key people who had been featured in a case study that had been used in the onsite workshop and that had that focused on the introduction of a community of practice initiative in the US Military. This course provided the conclusion for the program and it also entailed the preparation of a final paper that would be assessed. The intensity of interaction engendered by this course did mean that

several course participants did struggle to complete their final individual assignments on time but, then again, what is an educational experience without a couple of “all-nighters”.

As the retelling of the experience probably shows, this program packed a huge amount of learning into what amounted to a seven-month period. It was, in many ways, the one professional development investment in this entire journey that could really be classified as a fulsome learning experience. It was also one that was sustained in parallel with a significant level of work being performed by the participants, all of whom held significant responsibilities in their organizations and all of whom had family lives as well.

If there are criticisms to be raised it would be that the density and intensity of the program was probably too great to be sustained for a period longer than seven or eight months. In some ways, the learning objectives might have been better addressed if the program was intentionally scheduled over a nine to ten month period (occupying the better part of a calendar year). Also, for the fees being charged to the participants, the amount of value being delivered by the program was so great that from a strict business perspective it would be hard to see how the program could be financially viable for the university without a significant expansion in attendance. But these criticisms are in fact “back-handed criticisms” because they underline, once again, the learning value that the program delivered.

The graduate certificate programs at Royal Roads University, at least at the time, were essentially one quarter of a full graduate degree and the resulting credits could be used towards an applicable Master’s Degree. The amount of learning as well as individual effort associated with this program would certainly support its being cast in this role. The presence of a number of individual assignments that underwent review and assessment further bolsters the academic merit of the program. In this case, the term “graduate certificate” could be used without embarrassment. If there was one other improvement that could have been introduced, it would have been the participation in the program, as one of the regular instructors, of a formally qualified, and actively practicing, academic to ensure that the academic standards being applied were in-line with those observed at other institutions of higher learning. This addition would hopefully not have changed the nature of the program, which struck participants as so immanently practical and engaging, but rather would have added a measure of academic supervision and guidance that would have enhanced the confidence the participants had that their learning, and the associated credential, would be recognized for its genuine academic merit.

EXPLORING ONLINE GRADUATE DEGREE OPTION

After another flurry of participation in executive programs and industry events, the protagonist in this adventure, still outfitted with an annual education budget, set out once again looking for another educational opportunity. This time, the inquiry focused on pursuing a full graduate degree program.

This path would have commenced immediately as a follow-on to the Royal Roads University certificate program except the university decided, for reasons that remain mysterious, to cancel all KM programs as well as those associated with distributed learning. It might be surmised that the economic equation, which the above observations pertaining to the surplus value that these programs delivered, may have ultimately led the university administrators to “pull-the-plug”. That decision registered among the program participants as a major disappointment and the university quickly became resistant to all inquiries and the previously energized community of working professionals were effectively forced to take their learning budgets elsewhere.

The research into available options for pursuing an applied graduate degree, one directly applicable to a professional career in informatics and business management, found surprisingly few to chose from. There was the usual assortment of Executive Master’s of Business Administration (MBA) but these are really optimized for working professionals at the very outset of their careers and who would be seeking to be catapulted to levels beyond where their experience would otherwise qualify them. The trend with these MBA programs is towards accelerated completion so that, in sometimes as little as a year, someone can master the spectrum of business functions and all this while they supposedly remain productive as working professionals. In practice, it is well known throughout organizations that people participating in these accelerated executive MBA programs spend a significant amount of their working time completing their reading and other assignments. These people are rarely, if ever, encumbered with real responsibilities that would permit this to go unnoticed or without serious consequences. The truth is that once a certain amount of experience has been achieved, a significant portion of the subject matter in a typical MBA quickly comes to appear as either “old-hat” or wildly impractical in many contexts. If the MBA had a role, it was felt at the time, it was in accelerating the knowledge acquisition and skills development of younger and much less experienced professionals.

The search for a suitable program continued and one program was identified that seemed to offer some possibilities. This was a graduate degree in management science with a focus on the *management of technology*. Its emphasis on quantitative methods and background theory was such that it seemed like it would be well suited to delivery exclusively via online methods. Other

programs, such as MBAs, offered using online methods alone seemed completely unattractive when a good part of the subject matter would demand face-to-face interaction in order to be fully, and credibly, addressed. But a program that was ultimately a science degree might not be as negatively impacted by the restriction to online participation. Accordingly, the application process began.

As expected, the application process was reasonably demanding and it required, as did Royal Roads University, academic records and references. In this case, the application process was encumbered by the full weight of bureaucracy associated with a larger university. Once the application process was complete an initiation program commenced although its primary focus was gaining familiarity with the online collaboration environment that would be used throughout the program. The delivery model was more fragmented than that of Royal Roads University where a cohort worked together through a complete certificate program. In this case, individuals selected and completed individual courses from those available in various terms. The focus of the program, the management of technology, was such that it held out a great deal of interest and it was reasonable to hope that the specialization of the focus would attract like-minded individuals.

The reality of the program turned out to be something of a disappointment. Part of the blame would necessarily fall on the shoulders of the protagonist who was applying expectations of “learning engagement” that has been established by the Royal Roads University program. But part of the blame is rightfully allocated to the university promoting the program. It quickly became clear that the approach to distributed learning being used was one that essentially convened online lectures together with a regular regime of assignments. Examinations were a central feature of each course with these exams requiring physical attendance at the university or facilitation by a formal proctor. While the matter of examination location could be dealt with, there was also the matter of scheduling. Examination dates and times were absolutely fixed. While this could also be worked around, the prospect of serious schedule conflicts began to arise. The most serious issue with the program, however, was the fact that, much like the case of MBA programs, it was designed for, and principally attended by, very junior participants. When some of the initial textbooks were ordered, it was with horror that they were received. The textbook on Management, for example, was immediately bequeathed to one of the protagonist’s high school age children. The initial sessions for one of the courses then confirmed the worst. The attendees were indeed graduate students but in most cases they were very recent graduates and the course interactions were exactly those one would expect in an undergraduate course, even a first year undergraduate course.

When it was then considered that the cadre of instructors were drawn solely from the ranks of academia within the university and that there would be a complete dearth of practical experience being folded into the learning process, the investment of time, effort and expense that completing the program would entail could not be justified. Participation in the program was formally ended by the protagonist within the first couple of weeks of the program. In retrospect, it seems unlikely that if the program had been completed, and the best made of what would be provided by its exclusive reliance on online participation, that it would have created a learning experience worthy of a university graduate degree. And this remained true no matter how formally the university applied controls to the examination and assessment process or how vigorously this formality was promoted as the essence of higher learning.

OBSERVATIONS

One question remains. What lessons can be drawn from this particular series of experiences? These lessons may in fact already be well known amongst educators. What merit they may have, if there is any, will stem from their having emerged, not from a survey of research literature, but from a personal journey of investment and participation.

CONTENT

One thing that leaps out from these experiences is that the programs that left the strongest positive impression were those that mixed practical skills-oriented training with elements of more theoretical education. The practical training helped to make the program content tangible and immediately applicable and this, in turn, enabled participants to both develop useful skills and explore how the background theories might actually be applied to address real-world problems. This duality also seemed to map, constructively, to the need of a working professional to advance specific elements of a specialization while also developing more general skills and knowledge. The working experience that parallels this adventure in learning confirms that advancement on both of these axes is important.

PARTICIPANTS

Not surprisingly, the programs that again left the strongest positive impression were those that featured instructors who provided both current theoretical knowledge and proven practical experience. In the very best examples of this, the learning was facilitated by a team of instructors that amongst them provided solid academic credentials and noteworthy professional backgrounds. In most

of the cases, these two criteria were rarely manifest in a single individual and therefore the better programs always featured a diversity of perspectives provided by a number of instructors.

These learning experiences further emphasize that the composition of the participant cohort was another key contributor to the quality of the learning experience. Those programs that assembled people of comparable experience levels but highly diverse backgrounds and working environments also tended to leave the strongest positive impression. Particularly noteworthy were programs that incorporated the collaboration of people from around the world and this, interestingly, held true even in cases where the interaction was completely online.

DELIVERY

The professional working career into which this learning was folded was one that featured significant amounts of travel, substantial levels of work, and schedule demands that could be overridden on a limited number of occasions and to a limited extent. Not all professionals will necessarily operate in environments quite as consuming as this but it would appear that many do and that this seems to be a growing phenomenon.

The investments that have been made throughout this adventure have been those that necessarily could fit into this type of a work life. In the earlier phases, training courses and industry events, running between two and five days, were preferred in part because they could be booked into a larger schedule and then worked around. It is notable that when these activities were being undertaken, it was a common occurrence that work tasks would be resumed each evening. However engaging the learning activities may have been, the work still needed to get done.

As time progressed the emphasis definitely began to shift from practical training that was geared, primarily, towards developing specific skills, to programs that would offer more general learning opportunities exhibiting a greater emphasis on theoretical knowledge. This shift introduced some serious challenges. Finding programs that could be plugged into the flow of work that could address these more complex needs proved difficult. As was demonstrated by programs that tried to compress more theoretical subjects into artificially short time periods, usually to comic effect, the short format course model does not suit this role. Learning some things, it turns out, takes a little time.

Not without good cause, it was amongst university programs, geared to working professionals, that a solution was sought. The experiences chronicled above, fortunately, illustrate that it is possible to develop more general skills and more theoretical knowledge through these programs, provided

certain design criteria are observed. Some of the experiences relayed, however, illustrate how it is also possible for such programs to be spectacularly unsuccessful in achieving these declared goals.

Once a longer timeframe is necessitated by the character of the learning being pursued, it seems to become inescapable that a successful program will be one that will allow the working professional to participate *over time*. This in turn would seem to necessitate that at least a portion of the learning, and even a significant portion, would be pursued via remote, and frequently asynchronous, participation. What this means, in practical terms, is that the program must exhibit a substantial online component. This does not diminish the critical importance of face-to-face engagement as a central element of what is frequently called the *blended learning* experience but rather places bounds on how much of such engagement is practically sustainable. The competing time commitments of working professionals, if these individuals are genuine professionals and if they are genuinely working in parallel with their learning, simply will not admit anything other than this type of blended approach.

Among the experiences in professional development surveyed above, by far the most positive was that provided by Royal Roads University using just such a blended approach to facilitating learning. The combination of an intensive face-to-face workshop and with an ongoing program of reading, research and reflection, all propelled by the online interactions of a strong community of peers, proved to be overwhelming effective. A comparison with the alternatives that were explored simply is not possible as the other programs utterly failed to achieve even a fraction of the effect of the program offered by Royal Roads University.

SUSTAINABILITY

As has been touched upon above, the working professional is noted for just that – *working*. In part, this is a function of the fact that the learning being pursued is being funded by the work that is being sustained in parallel. This is true for those whose employer might be funding the education program as well as those who are self-funded. It is also important to remember that the mandate for work to continue in parallel with learning is not just a matter of funding the programs. Working professionals, almost by definition, become highly valued resources for their organizations and for the most part these professionals take their responsibilities to those organizations very seriously.

Throughout the experiences relayed in this adventure it was a common occurrence for participants in learning programs to be found working through the night, once the class had disbanded for the day, to provide support to their colleagues at work because, to their minds, failing to provide that support

was not deemed an option. The natural tendency of professionals to be workaholics, and our protagonist stands as something of a poster child for this affliction, may be granted but so must the dependency of these organizations on the efforts of these professionals. If a learning program becomes so demanding as to fracture the link between these professionals and their organizations then it will be the learning that will be sacrificed.

The observation that emerges is that learning programs must adopt a form that permits working professionals to productively and sustainably weave their working and learning together. This tends to privilege two scenarios as touched upon above: short courses or face-to-face events, typically less than one week in duration, and longer programs that combine short face-to-face events with participation in a learning community and a program of reading, research and reflection that is pursued in a distributed and asynchronous manner.

Based on the experiences of the protagonist in this adventure, some boundaries can be put forth that set out a possible upper limit on what an education program can reasonably expect to be genuinely sustainable for a working professional. Within a given calendar year, the most a working professional will likely be able to sustain would be two weeks (80 hours) face-to-face interaction and approximately 15 hours a week of learning participation when operating in distributed and asynchronous mode. Many programs are predicated on making much greater demands than this, and their proponents are quick to cite many grand reasons why this may be so. But in truth, the more a program exceeds this boundary, the more likely its cadre of participants will be made up of people who cannot be legitimately recognized as *working professionals*.

CREDIBILITY

As the financial and time investments associated with learning activities increases, as it does with the shift in emphasis from skills development to more general and theoretical education, so does the importance of credibility. The importance of the university in providing the substance and standards that will underlie this credibility is undeniable. A couple of the experiences related in this document identify cases where universities have effectively exploited their stature as a source of transferrable credentials to attract working professionals into programs that in fact offered no academic merit. Of the many things recounted in this adventure, none is sadder than this spectacle. It remains true, however, that it has consistently been to the university that our protagonist, like many working professionals, has turned. Happily, at least some of these learning experiences can be lauded as genuinely *good* while only a few graphic examples merit being branded as *bad* or even *ugly*.