The Clash of Cultures: Hybrid Learning Course Development as Management of Tension

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Abstract

Using a case study approach, this paper considers e-learning project management from the perspective of navigating tension between faculty and instructional design/e-learning expertise, in the context of as the bridging of two distinctive cultures. The diffusion of e-learning in an institution where, historically, faculty have been independent teachers and have not made extensive use of e-learning techniques, generated tension when a team-based approach to course design was adopted. Relationships, it is suggested, are as important as project timelines in such a setting.

Résumé

Par le biais d'une approche d'étude de cas, cet article examine la gestion de projets d'apprentissage en ligne du point de vue de la navigation de la tension entre le corps professoral et les experts en stratégies de mise en forme/apprentissage en ligne, dans un contexte de rapprochement entre les deux cultures distinctes. La diffusion de l'apprentissage en ligne dans un établissement où, historiquement, le corps professoral a été composé de professeurs indépendants qui n'ont pas fait un usage extensif des techniques d'apprentissage en ligne, a généré de la tension lorsqu'une approche d'équipe pour la conception des cours a été adoptée. Les relations, suggère l'article, sont aussi importantes dans un tel environnement que le sont les échéanciers de projet.

Introduction

E-learning has become mainstream as significant numbers of higher education institutions have committed to integrate e-learning within their normal operation (Salmon, 2005; Sharpe, Benfield, & Francis, 2006). However, the diffusion of e-learning through an institution is not always smooth or successful.

"Some institutions have achieved rapid gains though e-learning initiatives. Others have languished with e-learning functions that remain largely reactive and alienated. Some institutions have already managed to produce entire programmes of study that are e-learning enriched, while

other e-learning departments are caught in an ad-hoc pattern of development and work only with those academics who are interested or coerced. The situation faced in many institutions, in the words of Van der Klink and Jochems (Van der Klink & Jochems, 2004, p. 151), can be 'best described as high-level ambitions with poor implementation'" (Nichols, 2008).

This paper presents a case study of one institution's journey to make elearning a sustainable institutional reality through the adoption of a hybrid learning strategy, applied to a course development model through project management.

Laidlaw College is a private tertiary provider based in Auckland, New Zealand with two campuses and an extensive distance education arm. In early 2008 a strategy for the development of single courses that would serve both the on-campus and distance student population was ratified. These 'hybrid' courses would serve to bring together the previously separate on-campus and distance education activities. E-learning is a core part of these hybrid courses, which combine the use of learning guides (prepared using the open source application eXe), multimedia, and online resources (discussions and assessment submission). At the time of writing, four hybrid courses have been completed and a further four are undergoing development; around ten new hybrid courses will be completed by the end of the year. A core design team for each paper consists of a dedicated instructional designer working alongside a 'lead academic', or subject expert. This core design team is supported by a graphic designer and a video production department. The instructional designer's role is to project manage, act as education consultant to the lead academic, and take overall responsibility for the 'look, feel and function' of the finished course resource. In each design case experienced thus far at the College the lead academic was not familiar with e-learning opportunities, the demands of distance education design, or the dynamics of team course development. All courses have been developed with distinctive lead academics; the latest three were developed within the time frame of one semester.

The Project Management Model

Laidlaw College has clearly identified the benefits of its hybrid model. Combining the development of on-campus and distance education courses means that subject experts, previously limited to their classrooms, can have a nation-wide influence; the development of course resources for larger class groups (on-campus and at a distance) justifies the expense of specialist instructional design, e-learning and media development expertise; the academic and educational design quality for both on-

campus and distance students improves. The institutional use of elearning leads to further institutional benefits such as online assessment submission, ready class email lists through the learning management system, and improved resource access for students. The use of e-learning at Laidlaw College is a prominent part of the larger institutional shift toward hybrid course development.

The initial project management model chosen for the development of hybrid courses was based on the IPECC model, adapted by McVay-Lynch and Roecker (2007) for use in the e-learning context.

- 1. *Initiating*—key stakeholders are identified along with key indicators of progress (milestones).
- 2. Planning—the project management plan is developed
- 3. Executing—the project plan is implemented
- 4. *Controlling*—ensures that implementation meets all the required parameters of time, cost and quality
- 5. Closing—final project is delivered, and the process evaluated.

McVay-Lynch and Roecker note that "[t]he middle three phases are not sequential. Instead they are iterative. You will find that you are constantly planning, executing, and controlling your project as necessary." (Lynch & Roecker, 2007, p. 11). The IPECC model is not the only model of project management described in the context of e-learning. Other models describe each phase slightly differently but similar themes are evident (Miller, 2009; Parker & Craig, 2008; Shackelford, 2002; Wysocki & NetLibrary, Inc., 2003).

The IPECC model provides a solid framework and conceptual model for the course development. However, as the hybrid course development projects at Laidlaw progressed it became evident that lead academics perceived the process of course development very differently from the instructional designer. In the words of one lead academic, "When I develop new course I work week by week. I prepare next week's lecture after I have finished teaching the previous one." Lead academics found it difficult to engage in the formal course design process meaningfully until they had already taught the course to an on-campus class. In an ideal world, the lead academic would be allowed time to gain teaching experience in a subject they are later required to develop. Due to the constraints of time and budget this was not possible, so development was more iterative than the phases of the IPECC model describe. The model proposed by Shackelford (2002) provides a better framework in these circumstances.

Shackelford (2002) suggests a seven-step e-learning project development cycle, made up of the following steps:

- 1. Concept
- 2. Product definition
- 3. Initial cycle development
- 4. Development of cycles and interim delivery sessions
- 5. Product acceptance
- 6. Product roll out
- 7. Project retrospective

The Shackelford model is a refinement of the IPECC model. The key difference between the two models is the Shackelford model divides the project into modular cycles of roughly equal workload, preferably with a repetitive element, culminating in a deliverable product. Each cycle lasts a fix length of time, and constitutes a self-contained minor project. At the end of each cycle the deliverable product and the process is assessed according to the overall project design and deliverables. Any adjustments which need to be made on the deliverable can be, and any important lessons learned can be documented for implementation in the next cycle.

In our case, each cycle ended up being equivalent to about three weeks of student learning focused on meeting one learning outcome. The focused nature of each cycle enabled lead academics to quickly identify the relevant core content and so engage in meaningful discussion on the more salient aspects of course design. It also significantly improved the overall productivity of the course design team because lessons learned in the first cycles could be applied to latter cycles. Subsequently, it is estimated that the latter cycles were developed in half the time of the first couple of cycles. Key to the success of this cyclic work at the level of teaching modules is the development of a robust course outline. In the opening stage of each hybrid development project, lead academics are charged with developing a course outline consisting of course objectives, assessment tasks, and bibliography. Academic peers are invited to critique the outline, which becomes the core reference document for actual course development. Rather than employing e-learning to provide a 'student-centred' approach to teaching and learning, Laidlaw College is deliberately taking a 'subject-centred' approach (Palmer, 1998) underpinned with a recognition of constructivism as a learning theory. Assignments in particular are designed to encourage conceptual development (Ramsden, 2003).

Ratifying the institutional strategy for hybrid course development at Laidlaw College required significant change management activity. A change management plan was developed with the senior management of the College using Kotter's (1996) framework for leading change. A significant factor in the eventual success of the hybrid course development can be attributed to a clear sense of vision and purpose, clearly identifiable benefits and a powerful guiding coalition. Shackelford (2002) notes that one of the primary reasons that e-learning projects fail is because there is no shared vision and minimal or non-committal support of management. This shared vision is vital at all levels associated with the change—from the setting of strategic direction right down to the operational aspects of hybrid course development. At key junctures in the hybrid development projects, difficulties arose which could have lead to their demise and the viability of the overall strategy. It was only because there was a shared sense of purpose and active support from management that these difficulties could be worked through. While institutional endorsement had been gained for the development of hybrid courses, translating this into the operational activity of course development presented its own challenges. These latter challenges provide the focus of this paper.

Most models of project management acknowledge the importance of change management, but often from a sterile and clinical approach. In our experience change management is a highly interpersonal experience requiring ongoing negotiation and clear communication. It involves challenging and reforming the culture of a team or organization. It also requires the diffusion of ideas and process throughout the whole organization (Rogers, 2003). Such diffusion must take place in both strategic and operational realms, the latter in the context of the former.

The Clash of Cultures

The institutional shift to hybrid learning sought to bring together previously disparate on-campus and distance education offerings, and so required on-campus faculty (in the role of 'lead academics') to function in different ways. A dedicated instructional designer was employed to help lead academics develop courses and resources appropriate for both distance education and on-campus learning. The accumulative effect of strategic institutional change, a different working environment, an unknown task and an unfamiliar colleague resulted in an atmosphere of uncertainty and tension at the start of each project in the initial round, both for lead academics and the new instructional designer. This tension evidenced itself in misunderstandings and frustration for both parties. The key to resolving this tension lay in developing a relationship centred on understanding each other's *culture*.

"The culture of a group can be defined as a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaption and internal integration, that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems." (Schein, 2004, p. 17)

The hybrid course development process at Laidlaw College revealed much about the 'basic assumptions' that were not shared by the lead academics and the instructional designer. Prior to 2007 the institution had an extended network of regional campuses, each with their own teachers and with their own local versions of any given course. A course on, say, cultural anthropology might be offered across multiple campuses by different lecturers, each acting independently. The distance education arm of the College was likewise independent, developing its own distinctive culture, quite separate from that on-campus. Indeed, many of the courses offered through the Centre for Distance Learning were not even written by on-campus faculty, (these were prepared instead by a crossinstitutional consortium). The departmental nature of the institution meant there was very little interaction between on-campus faculty and the Centre for Distance Learning. Unfortunately this proved an unsustainable model, but during this time faculty developed a cultural independence that resulted in a number of assumptions about what it meant to teach for Laidlaw College. When a hybrid learning strategy was adopted, a clash between what had been—independence, autonomy and self-reliance—and what was then required—coordination, transparency, and consultation—was inevitable. The development of hybrid courses challenged the notions held by on-campus faculty of what it meant to teach and to learn. It compelled a re-evaluation of the understanding of academic freedom and the role and status of faculty within the organization.

Schein (2004) identifies two initiators of cultural change that are relevant to our context. He stated that organizations change because of the introduction of new technology ,and the appointment of staff from outside the organization.

While the use of technology as part of teaching and learning had been a part of the College since 2003, its use was isolated within the Centre for Distance Learning. The move toward hybrid learning, with the consequence that the entire College would be exposed to educational technology, forced the re-evaluation of core beliefs and accentuated the sense of change across the organization. The appointment of the instructional designer, a new role for the College filled by an external candidate, completes Schein's recipe for cultural change. The decision to

mainstream hybrid learning throughout the College also coincided with the appointment of new Heads of Schools in the institution, each of whom was also an external candidate. All new appointments were expressly charged with bringing about organizational change to meet the new goals and objectives of the organization.

The development of hybrid courses brought two different group cultures, academic and instructional design (with its e-learning emphasis), into a close working relationship for the first time. Each group entered the new relationship optimistically assuming that their culture would form the basis for the new working relationship. At the time hybrid development projects started no one thought to discuss the cultural assumptions of the respective groups, because they were assumed to be given. The resulting interaction closely followed the Kubler-Ross grief cycle (Lynch & Roecker, 2007).

Table 1. The Kubler-Ross grief cycle (Lynch & Roecker, 2007, p. 138).

Stage in Cycle	Emotional Behaviour
Shock	Initial paralysis.
Denial	Trying to avoid the inevitable.
Anger	Frustration outpouring of bottled-up emotion.
Bargaining	Seeking a way out.
Depression	Realizing the inevitable.
Testing	Seeking realistic solutions.
Acceptance	Finally finds a way forward.

Initially there was the shock that the other party did not share the same assumptions or ways of working. This was followed by a phase of denial as both parties tried to proceed as if there was no difference in culture, and subsequent avoidance behaviour. This inevitably led to a build up of anger and frustration as the differences in culture became too much to ignore. Eventually both parties realized the inevitability of working together and the need to adapt in order to create a new shared understanding. This led to open communication and the first real steps of progress toward the forming of a new culture. Crucial to forming this new culture was coming to understand the differences of each cultural perspective, and identifying the sources of conflict. It is important to note that this cultural shift took place within the context of firm managerial commitment to the hybrid development strategy.

On reflection after the successful completion of hybrid development, one lead academic noted that the "hybrid course development process was 90% relationship building ... Once the relationship was sorted

everything else followed naturally ... I don't think we could have done anything better. Sometimes you just have to work through the messiness of relationships ... I wish we could have done this [hybrid development] three years ago when I first started lecturing. It would have changed the way I teach and opened up new possibilities". The extent to which this perspective might be gained before or during the actual project management process is now considered.

Creating a New Culture

Central to any instructional design project, in particular those requiring specific e-learning expertise, is the concept of teamwork:

"Teamwork is something that is more talked about than acted upon. Whatever the rhetoric, the reality is that during both the design and delivery phases of instruction, a disproportionate load is still laid on the individual content expert—that is, the professor. The responsibility for this is usually the choice of the faculty themselves, wedded as they are to the jack-of-all-trades idea of the master teacher in the classroom." (Moore, 2007, p. 113)

Developing a new culture meant moving beyond the rhetoric of teamwork, and addressing the specific interpersonal issues of conflict that hindered it. It meant giving up the notion of each team member being a jack-of-all-trades, and encouraging complementarity across team members. This required a deep sense of trust and an appreciation of the unique and specialized contributions each team member brought to the project. Specifically the new culture had to align both sides' understanding of the role of technology in learning, the distribution of power in the development relationship, the sense of timing during the development process, and the degree of fluidity that could characterize a hybrid course.

The Role of Technology in Learning

Salmon (2005) describes two phases of e-learning implementation in Higher Education Institutions. In the first phase, standard pedagogical assumptions and practices are transferred to the e-learning environment with no substantial change. The second phase is marked by the creation of new pedagogical assumptions and practices developed specifically for the e-learning context. In our case, tension arose because the different members of the design team were operating from different phases of e-learning implementation. Lead academics conceptualized 'first phase' use of technology; by contrast, the instructional designer was working to a 'second phase' agenda. The lead academics entered the course development process with the assumption that they would be able to

reproduce online everything that they did in the classroom—or else that what they did in the classroom would be constrained by what could be achieved online. Faculty enjoy and feed off the spontaneous interaction between teacher and student within the classroom. The constant refrain in the early stages of development was "Why can't we just record the lectures and put them on Moodle? That way the distance students can feel part of the class." Lead academics mistakenly associated the form of their pedagogy with its function. The function of instruction or teaching, was firmly associated with the form of lecturing. At first lead academics seemed unable to really appreciate how a different form of instruction or learning design could achieve the same function. The suggestion of different ways of structuring the learning through the use of technology caused unease, because faculty were unable to envisage the use of technology beyond what they were already familiar with (Collins, 2000). Creating a shared understanding of the role of technology in learning involved a clear separation of form and function. The purpose of each section or module of learning that would be included in the hybrid courses was articulated in a simple precise statement. This statement of purpose was then used to evaluate the different options available to structure the learning. The first steps in resource development were very hesitant, but once lead academics could see the finished products they became excited by the possibilities.

Power

Historically, courses for on-campus students would be developed independently by the faculty member who had been allocated the course. Each faculty member had sole control over their courses' content and design. With the development of the hybrid model such power had to be distributed. A lead academic working with an instructional designer had the responsibility of creating the course, and as a part of the nationalization of hybrid courses lead academics had also to consult with academic peers before finalizing their courses' overall design. Due to the newness of the hybrid model there was no institution-wide appreciation of the responsibilities and power relationships within the design team, even though the potential conflict had been identified and communicated to faculty by senior management. Faculty understood that changes in autonomy would be an inevitable part of the move toward hybrid course development, but when the reality of that change became apparent there was resistance and considerable tension. Faculty were concerned that their academic freedom was being eroded by having to share or handover responsibility. The instructional designer was concerned that he did not have enough input into design decisions, which would led to a course that would not harness the full potential of hybrid and e-learning.

The tensions surrounding power were further heightened because of a difference in status between the lead academics and the instructional designer. Each lead academic is a member of College faculty, while the instructional designer is a member of general staff. In addition to this formal distinction, the instructional designer was perceived as a member of the Centre for Distance Learning, primarily there to provide course development and support services for the e-learning systems and students of that Centre. This distinction in status resulted in a 'them' and 'us' mentality and a defensive posture from both sides in their eagerness to maintain a sense of status.

This power struggle was gradually reduced alongside increasing levels of trust. Because there was a low level of trust at the beginning of the project, power had to be carefully prescribed in consultation with the senior management team. It was decided that the lead academic had final authority on all aspects of the course, and that they had the primary responsibility for content. The instructional designer would act as project manager and educational consultant. As each project progressed and trust more deeply established, the role of educational consultant became more pronounced.

Trust started to develop as both parties began to display their competencies. This led to a change in perspective, from protection of one's own power to serving ('em'powering) the other team member. The attitude of service did much to lower barriers and facilitate the building of trust. Trust between the team members grew as expertise were demonstrated, leading to greater freedom and opportunities to demonstrate expertise which resulted in yet higher levels of trust. Eventually the power relationship across design teams became characterized by collegiality and partnership.

Time Management

E-learning projects require a considerable investment of time and resources before a course is taught (Bramble & Panda, 2008; Rumble, 1997). In the case of hybrid course development at Laidlaw College, finished courses consist of a course outline, a learning guide (developed using eXe), a book of readings, a multimedia CD-ROM, assessments, and a corresponding Moodle course area. Each component of the course had to be carefully planned, developed, reviewed and tested. Because of scheduling constraints of key team members some of these components had to be developed out of sequence and in parallel with each other. This necessitated a clear and detailed course design plan, so that the complementarity of course resources could be guaranteed in the final analysis.

Team course development and detailed course design plans were new to the lead academics. They would normally develop their courses very differently, beginning with a significant portion of their time becoming immersed in the subject, then developing a course outline as the basis for constructing a lecture series. When the course actually started, faculty might have planned only the first few weeks in detail with the rest of the course being prepared as the semester progressed.

In contrast, hybrid course development at Laidlaw College starts a full six months before the course is actually delivered. This is a relatively tight time-frame compared with the development of courses in larger institutions (Smith & Ragan, 2005), accentuating the cultural differences between the sense of time management. Faculty believed that six months was ample time, based on their cultural experience; to the instructional designer, six months is exceptionally ambitious! Due to a lack of experience with developing blended courses, faculty did not have the same sense of urgency as did the instructional designer. This caused delays, as lead academics would place other priorities ahead of course development. In an effort to bring the project back on schedule the instructional designer eventually negotiated a set of rolling deadlines for each module. Each module was a unit of teaching, equivalent to a week's worth of engagement. The delivery date for each module was made, in effect, equivalent to faculty's traditional deadline of preparing for a class. Communicating the timeline using the illustration of lecture preparation enabled faculty to understand and relate to it. The module was taken as the base unit for time management because it formed an easily definable independent unit which all parties understood. A module includes a learning guide outlining the sequence of learning and providing some notes on the subject, a reading guide which provides the readings for the module, and accompanying multimedia. A module checklist was developed to create a clear understanding of what needed to be done as well as providing a measurable indication of progress. The development of a module was split into four parts. Initially, the form and function for the module would be discussed. Following this the lead academic would write a module draft incorporating the agreed learning activities. This draft would then be given to the instructional designer to develop in the learning guide and reading guides. Finally, multimedia was created in partnership with the lead academic.

A series of modules were grouped together to form a milestone, or deliverable. At each milestone all members of the design team would review and evaluate the course design and production so far. Any issues could then be identified and remedied before they become systemic issues. The milestone also ensured an accurate measure of progress to ensure the project stayed on course. Team members had the freedom to

work to their own schedule within a milestone group, but had to met the milestone deadline. A simplified Gantt diagram was used to schedule the project. In addition to the milestones based on the development of the modules, a milestone was placed at the end of the planning phase and at the end of the production phase. The planning milestone ensured that the design team had a clear documented design plan that is agreed by all parties. The production milestone ensured that all parties were satisfied with the completed product before it was duplicated and sent out to students.

Relief from the tension of different time management strategies came from an understanding of the respective needs of each team member. The solution tried to accommodate each team member as much as possible without compromising the overall work flow or time deliverable.

Content Development Process

Content development for a lectured face to face courses is exceptionally fluid in that a lecturer can decide to include extra material or remove excess ideas at short notice, or even on the fly, as the need arises. Such changes can be made quickly and with a minimum of extra effort. It could be said that face to face faculty can, and often do, take an evolutionary approach to preparing their courses.

In contrast, the hybrid and e-learning content development process is more static. A detailed design plan is created at the start of a project. All subsequent development is based on that plan. Because changing the design plan requires substantial extra effort, a lot of energy is expended up front to create a robust design. While the actual delivery of hybrid or e-learning courses can be flexible, design, by necessity, is more structured. While faculty tend to start loose when considering their on-campus courses, hybrid development requires them to be very purposeful right from the start.

The need to balance structure with fluidity remains a constant tension within the hybrid development projects at Laidlaw College. Key to resolving this tension is understanding the different needs of the various team members, and designing a system to accommodate them. A more fluid design can be offset by active teaching engagement during the course. Faculty are also free to adjust their hybrid course once it has been initially taught and the design team has considered the first round of student feedback. Since hybrid course development has required peer-review and the use of the same course resources across different teaching centres (including at a distance), changes made by faculty remain very transparent to their peers. Fluidity, in hybrid courses, is really a matter of viscosity. There is a tension for faculty to want to change course content on a whim; there is also the danger of course materials

becoming immovable. The message to faculty (both distance and across various campuses) is not to be constrained by the course materials that have been developed, but also not to compromise their integrity.

Conclusion

Laidlaw College has a clear strategic approach to e-learning, and is making great progress in e-learning diffusion. While the challenges of setting a firm strategic direction are in hand, various tensions have arisen in implementation. The application of a project management approach to guide and inform the development of hybrid courses has resulted in the tensions of two cultures colliding. These tensions between faculty and instructional design staff can be resolved through a deliberate emphasis on the growing of a new shared culture through careful project management. Creating a new culture at Laidlaw College has taken time and a willingness to invest in relationships, all the while confronting issues of the role of technology, power, time management, and content flexibility. At Laidlaw College, where these issues have been identified and deliberately tackled, the return on investment has been significant. The sense of collegiality that now exists between the instructional designer and lead academics has fostered innovative thinking and a willingness to explore new ideas and pedagogies.

E-learning projects, this case study concludes, are more effective and progressive where the tensions between potentially conflicting cultures are anticipated and openly worked through. Development of a shared culture is an incremental yet essential element of success that ought to be as deliberately managed as the more tangible outputs such projects pursue.

References

Bramble, W. J., & Panda, S. K. (2008). Economics of distance and online learning. p. 296.
Collins, M. (2000). Leading faculty gently by the hand. Retrieved January 21, 2009, from: http://www.whirligig.com.au/globaleducator/articles/CollinsMauri2000.pdf
Kotter, J. (1996). Leading change. Boston, Massachusetts: Harvard Business School.
Lynch, M. M., & Roecker, J. (2007). Project managing e-learning: A handbook for successful

Lynch, M. M., & Roecker, J. (2007). Project managing e-learning: A nandbook for successful design, delivery and management. New York: Routledge.

Miller, D. P. (2009). Building a project work breakdown structure: Visualizing objectives, deliverables, activities, and schedules. ESI international project management series. Boca Raton: CRC Press.

Moore, M. G. (2007). Editorial: Teamwork. *American Journal of Distance Education*, 21(3), 113-116.

Nichols, M. (2008). Institutional perspectives: The challenges of e-learning diffusion. *British Journal of Educational Technology*, 39(4), 598-609.

Parker, D. W., & Craig, M. A. (2008). Managing projects, managing people. South Yarra, Vic.: Macmillan Education.

- Ramsden, P. (2003). *Learning to teach in higher education*. London; New York: RoutledgeFalmer.
- Rogers, E. M. (2003). Diffusion of innovations. New York, NY [u.a.]: Free Press.
- Rumble, G. (1997). The costs and economics of open and distance learning. Open and distance learning series. London: Kogan Page.
- Salmon, G. (2005). Flying not flapping: A strategic framework for e-learning and pedagogical innovation in higher education institutions. *ALT-J*, 13(3), 201-218.
- Schein, E. H. (2004). Organizational culture and leadership. San Francisco: Jossey-Bass Publishers.
- Shackelford, B. (2002). *Project managing e-learning*. ASTD e-learning series, 5th bk. Alexandria, VA: ASTD.
- Sharpe, R., Benfield, G., & Francis, R. (2006). Implementing a university e-learning strategy: Levers for change within academic schools. *ALT-J*, 14(2), 135-151.
- Smith, P. L., & Ragan, T. J. (2005). Instructional design. Hoboken, NJ: J. Wiley & Sons.
- Van der Kilink, M., & Jochems, W. (2004). Management and organization of integrated elearning. In *Integrated e-learning* (pp. 151-163). London: RoutledgeFalmer.
- Wysocki, R., & NetLibrary, Inc. (2003). Effective project management traditional, adaptive, extreme (3rd ed.). Indianapolis: Wiley Pub.
- Wysocki, R.K. (2007). Effective project management. Somerset, NJ: John Wiley & Sons, Inc.

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