MODEL 10

CORPORATIZING KNOWLEDGE

WORK-BASED LEARNING AT THE UNIVERSITY OF TECHNOLOGY, SYDNEY

Nicky Solomon and Julie Gustavs

The Work-Based Learning (WBL) initiatives are part of the University of Technology–Sydney's emphasis on practice-based teaching and the close relationship of the university and the workplace as sites of learning. The curriculum, which can be individualized to meet the needs of particular students and industries, is developed in a three-way partnership consisting of the student, the workplace, and the university. Portfolio development in the WBL program takes place in the context of that three-way partnership as students are planning their degree. In a series of four workshops, students are helped to develop a conceptual understanding of their learning path, plan the degree, and provide evidence of prior learning.

The WBL portfolio-development process is interesting from a number of perspectives. First, it is a notable example of portfolio development and assessment at the postgraduate level. Second, it makes explicit the relationship between work and schooling in the lives of adults, the often unspoken and implicit negotiations that occur between universities and employers, and the power relationships contained therein. Third, it emphasizes that, for working adults, the workplace itself is the major site of learning. "Learners," say Nicky Solomon and Julie Gustavs, "have many opportunities to use their work as a site of learning and as a learning resource. Professional placements, cooperative education arrangements, and practica are available, and many learners are involved in action-learning projects and individual learning contracts in the workplace itself."

The Work-Based Learning (WBL) programs at the University of Technology, Sydney (UTS), are a set of postgraduate[1] programs in which the source of the curriculum is learners' work, work experience, and workplaces rather than academically defined bodies of knowledge. In this model, we will explore the various teaching and learning practices involved in the development of individual learning portfolios at WBL. We will begin with a description of the institutional context of these WBL programs, then provide a detailed discussion of the four daylong workshops through which learners are given educational support to facilitate the development of their programs and portfolios. Finally, we will explore some of the issues that arise from the three-way partnership among learners, employers, and universities.

UTS is one of five technological universities in Australia. UTS was constituted as a university in 1988 as an amalgamation of two colleges of advanced education and an institute of technology. UTS is one of Australia's "new" universities, and its degree offerings and the identity of its academics have been shaped by a different history and a different positioning than that of the older universities in Australia. Specifically, the newness of UTS means that it has not been characterized by conventional disciplinary structures. While these exist at a macrostructural level, the university's image lies in its reputation for practice-based teaching. It describes itself as "a new and progressive university, non-elitist and egalitarian, with a distinctive focus on professional practice" (Blake, 2000). This focus has a number of manifestations. First, UTS has strong partnerships, alignments, and networks with industries and organizations in both the public and private sectors. Second, the student population is predominantly employed and studying part-time.

A third manifestation of our work-based focus is in the way work and professional practices are integrated into almost all programs at UTS. Learners have many opportunities to use their work as a site of learning and as a learning resource. Professional placements, cooperative education arrangements, and practica are available, and many learners are involved in action-learning projects and individual learning contracts in the workplace itself. Further, there is a recognition that learners bring to the learning situation a considerable amount of knowledge and experience that can "count" toward a degree. Therefore prior learning opportunities are recognized and processes have been established for students to claim credit for workplace-based learning. In the main, these claims for recognition are made against existing learning outcomes articulated in subject and course documentation.

[1]The term "postgraduate," which is used in most English-speaking countries, is the equivalent of "graduate" in American English.

The WBL initiative offered at UTS sits within this practice-based framework as an extension of existing connections with organizations and the world of work. It takes the notion of partnerships and the focus on work one step further by recognizing not only the importance of situated learning in the professional development of graduate students but also the way in which learning takes place during everyday work. In WBL programs, work *is* the curriculum. This curriculum is individualized and is negotiated within a three-way partnership among the university, the learner, and the workplace.

WBL programs are currently offered at postgraduate level (Master's, Graduate Diploma, and Graduate Certificate) in the Faculties of Education, Business, and Information Technology at UTS. Exhibit C10.1 represents the WBL model we have developed and implemented at UTS.

While space does not allow for a full discussion of the global context of this innovation, it is worthwhile considering why this kind of partnership—an educational partnership that was once inconceivable—now has such a marketable legitimacy (see Boud & Solomon, 2001; Symes & McIntyre, 2000). At a macrolevel, its legitimacy emerges within the broad social, technological, and educational changes that we are all experiencing in our professional as well as everyday lives. These changes entail and indeed rely upon changes in the microprocesses of work, that is, the way in which individuals do their work and relate with one another while accessing and producing knowledge. The emphasis on ongoing skills development and on the workplace as a site of knowledge production is reflected in the contemporary management literature with concepts such as the "learning organization" (Senge, 1990) and the "knowledge worker" (Gee, Hull, & Lankshear 1996; Reich, 1991) as well as in the expanding training industry.

This understanding of the changing nature of work helps to locate the new roles, patterns, and expectations being constructed for each of three partners in educational innovation—that is, the learner, the employer, and the university. And it helps explain why each of them finds a close educational alignment to be an attractive opportunity. A work-based learning program is attractive for learners who are seeking initial or further credentials in order to enhance their employment choices. Many WBL participants have a great deal of scope in their work positions and have many years of on-the-job experience. The WBL degree provides them with the opportunity to gain formal recognition for their learning. WBL also suits learners who want more "relevant" learning and increased choice in delivery modes so that their education can fit into their busy professional and domestic lives.

For employers, the appeal of the partnership is linked to an increasing understanding of the importance of supporting learning practices at work in

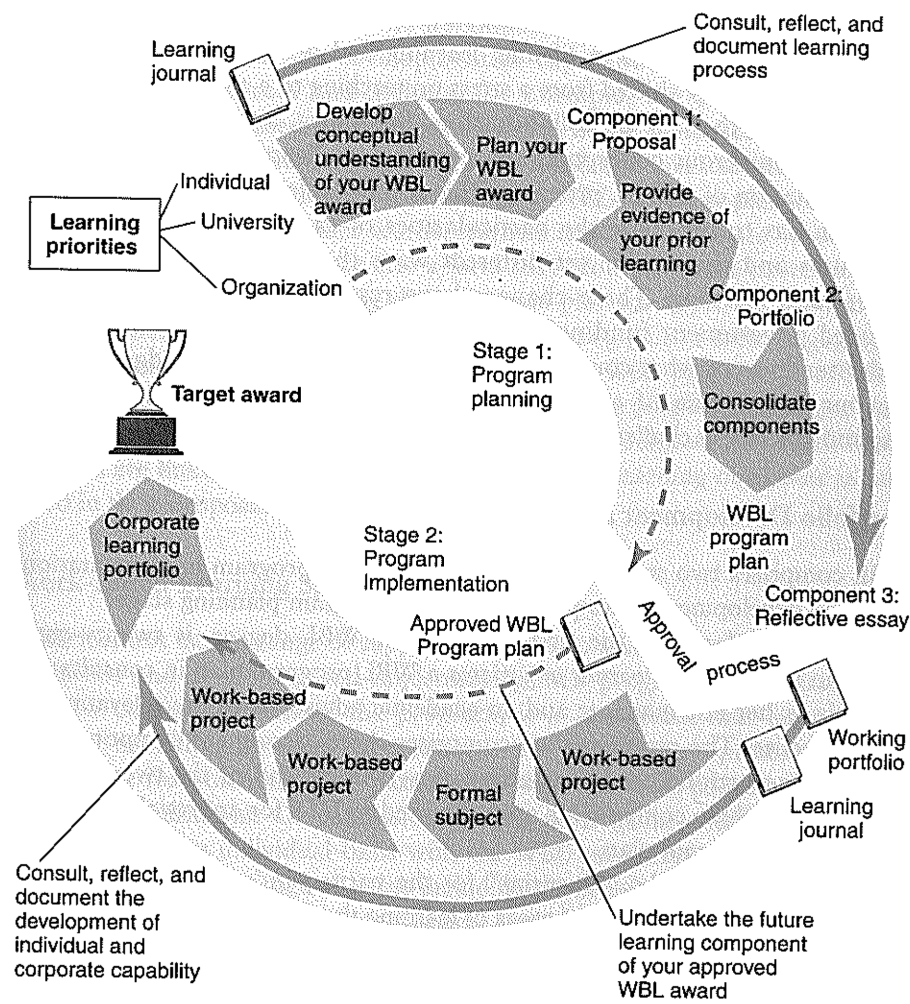

Exhibit C10.1

order to enhance organizational capability at a time of ongoing change and uncertainty. It is an opportunity for organizations to professionalize their workforce in order to be more competitive and to retain their "best" employees. For universities, in turn, WBL is one of many educational responses to political, economic, and social change. Collaboration with employers reaps rewards for universities in terms of their image and success in student recruitment in a fiercely competitive local and international marketplace. Moreover,

the focus on work and the individualization of learning programs links to government policy directions in lifelong learning and demonstrates how educational practices have shifted from a stress on teaching to a stress on learning.

While the rhetoric of collaboration, flexibility, and learner choice is appealing, numerous conceptual and practical challenges surface during the implementation of a WBL program. This is inevitable given the fact that the program has to negotiate the particularities of each of the organizational structures and the similar yet different ways the partners talk about and understand learning. These changes have resource implications (such as reduced government funding), but they also problematize conventional understandings of what counts as legitimate "academic" knowledge. Following our description of current practices, we will explore how UTS has responded to these challenges.

Portfolio Development and the WBL Curriculum

WBL comprises two stages: program planning and program implementation. Portfolio development takes place during the program planning stage.

Program planning, the first stage of the WBL degree, is twenty-eight weeks in length. Each learner negotiates a WBL program plan in consultation with his or her line manager and an academic advisor with the relevant content expertise. The program plan comprises three assessment components: a proposal, a portfolio, and a reflective essay. At the end of the twenty-eight-week period, these components are submitted to UTS for approval as an integrated WBL program plan.

The proposal is the "blueprint" for the participant's program plan. It is organized around a number of areas of learning that correlate to the "subjects" in a conventional university degree but that take into account the skills, knowledge, and understandings the learner has and what his or her future learning needs are. Some of these areas of learning correspond to the learner's claim for what we call "recognition of current capability" (RCC) as demonstrated in the portfolio, while others focus on "future learning," which is organized around conventional university subjects and/or work-based projects.

Work on the portfolio begins once the learner has completed a proposal. The portfolio provides a learner with the opportunity to present a case for the formal recognition and assignment of credit points for learning that demonstrates current capabilities. A claim of up to two-thirds of a degree can be made through the portfolio. The portfolio is also a mechanism that facilitates learners' understanding of the relationship between their work and

learning. Therefore, the portfolio-development process focuses not only on planning but also on the development of capabilities that go beyond the design of the program and include, for example, the ability to respond actively to the combined learning requirements of the workplace and the university. These require an engagement with academic literacies and practices involved in the negotiation and writing of a WBL program plan that meets degree requirements. In other words, learners need to "translate" their existing knowledge and experience into a form that "counts" in the university.

Finally, prior to submitting their program plan for approval, the learners write a reflective essay that focuses on the learning gained from engaging in stage one of their degree. Upon approval of their WBL program plan, learners undertake the Future Learning component of the proposal developed during the first stage of their degree. Both the formal subjects and work-based projects are linked to specific areas of learning and learning outcomes as outlined in their proposal.

Work-Based Learning Support Strategies

WBL learners have a range of support strategies to assist them in drafting their portfolios and developing and implementing their program plans. First, prior to their commencement of the program, it is important that learners are assisted in managing their expectations. We therefore co-present briefing workshops for potential WBL participants with the WBL coordinator in our partner organizations. On expressing interest, participants and their line managers meet on an individual basis with the WBL coordinator in the organization who discusses a range of issues including the benefits of the WBL program to the individual and the organization and some of the main challenges involved in postgraduate study, including time management and the academic expectations. Strategies are discussed that help both managers and learners prepare for this commitment. These may include discussing study leave offered by the organization and ensuring that the participant has enough scope in his or her work. In some cases, the engagement in a WBL degree is incorporated into the participant's performance agreement at work. The participant and manager also complete a joint application form in which they outline their understanding of the WBL program and reasons for the application. The WBL team at UTS and the WBL management team at the partner organization review applications prior to the participant's acceptance into the program. Any questions that emerge from this review are followed up in further discussions with the applicant and the line manager prior to acceptance in the program.

During the program planning stage, we focus on helping learners gain the conceptual underpinnings for the proposal and portfolio text; on producing the required proposal, portfolio, and reflective essay; and on understanding the interrelationships among the three. Many WBL learners have not undertaken formal study for many years, and this presents a range of challenges. Concerted efforts are made to encourage WBL learners to build their learning support networks from the very outset of their involvement in the WBL program by drawing on the university, their organization, and personal contacts.

The main venues for student support in stage one of the program are the four daylong, face-to-face workshops. Workshops are held for individual client groups, and each group comprises 15–20 WBL learners. The four workshops are intentionally staggered throughout the twenty-eight-week period of stage one to allow learners time to work on drafts of their work. The WBL team at UTS designs and presents the workshop activities. The WBL coordinator from the organization attends all workshops and supports learners during group activities. The workshops are organized around the four processes in program planning.

> **Workshop 1. Develop a conceptual understanding of your WBL degree**
> This workshop occurs in the first week of the WBL program. Its main purpose is to provide learners with conceptual understandings of their WBL degree.
>
> **Workshop 2. Plan your WBL degree**
> The second workshop occurs in week five of the program. Its main purpose is to provide learners with the opportunity to consolidate their evolving understandings of the WBL degree and to focus on the development of the proposal component of their degree.
>
> **Workshop 3. Provide evidence of prior learning**
> In week fifteen of the WBL program, learners attend the third workshop. The main purpose is to further consolidate their understandings of their degree and to focus on the development of the portfolio.
>
> **Workshop 4. Consolidate the components of your WBL program plan**
> In week twenty-two of the WBL program, learners attend a final workshop. The main purpose of this final workshop is to refine the work they have done on their WBL degree and to focus on the development of the reflective essay.

Between the four workshops, participants work through readings and a series of writing tasks that scaffold the development of each of the components of the WBL program plan.[2] Learners are also encouraged to consult with their academic advisor and their line manager, whose respective roles are to ensure that the learner's developing WBL program plan both aligns with university standards and reflects organizational learning priorities.

Finally, learners are engaged in online group discussions. There are both formal and informal spaces for learners to discuss their evolving WBL program plans. UTS advisors, the organization-based WBL coordinators, and the WBL team at UTS take turns to field questions and promote discussion. Given the limited face-to-face support, online learning is a valuable community-building mechanism and can assist participants to engage in peer learning.

The support strategies discussed above are designed to help participants meet a number of challenges and make a number of shifts in their understanding of learning. The first of these challenges is to help learners understand how experience relates to learning. Many WBL learners do not have a clear understanding of what learning is when they begin their WBL program. They tend to understand learning as what one does in classrooms, and they explain their life and work experiences in terms of undertaking tasks rather than the learning those tasks represent. Support strategies for the workshops have therefore been designed to help learners to build the necessary theoretical understanding of learning and to encourage them to reframe their understanding of their life and work experiences as learning rather than as the achievement of tasks.

The second challenge is to help learners gain a holistic understanding of their WBL degree. We have found that if learners invest a great deal of time creating a proposal or portfolio prior to gaining that holistic understanding, it can be especially difficult to shift their mindset and encourage them to write further drafts of work. This can result in a poorly conceptualized WBL program plan. Further, learners need to understand that the WBL degree represents both *what they already know* and *what they need to know*, represented respectively by the portfolio and the Future Learning component of the WBL program plan. In each case, learners also need to identify appropriate titles for each of the areas of learning that will make up their degree.

---

[2]Initially, time frames for the completion of writing tasks were more flexible to accommodate the contingencies of the individual learner's work; however, we found that flexibility in fact impeded their progression through the WBL program. We have since established set time lines and milestones to help them to bring their WBL program plan to completion within the twenty-eight-week period.

Finally, the third challenge is to help learners understand the purpose of the portfolio and implications for the presentation of their case for an RCC claim. In the workshops and in the workbook, learners are provided with an electronic template for the portfolio component as well as an accompanying text to assist them to understand how to structure their WBL portfolio.

The Four Program Planning Workshops

Workshop One: Develop a Conceptual Understanding of Your WBL Degree

The key focus of Workshop One is to help learners begin to grapple conceptually with the idea of learning in general and the WBL degree in particular. Workshop One therefore focuses on an understanding of the difference between experience and learning.

We usually begin by having a short discussion about what reflection means and the relationship between learning and experience. This is useful, as it provides the facilitators with a clear idea about the conceptions the group has. At this stage, the main outcome is to encourage learners to share their thoughts and engage with the topic. We may record the group's ideas on a mind map to help learners to see similarities and differences between various responses.

Many learners find reflection to be a somewhat dubious idea that does not relate to them. To challenge this view, we show learners comments from prior students. For example:

> It is worth noting, perhaps even confessing, that I was not initially sold on the idea of reflection as a legitimate learning process. To my ignorant ears it sounded like a cheap academic trick to fool us experienced, work-hardened professionals, and a complete waste of "real learning." I am glad to say that I had the sense to persevere because I soon came to realize that it was not just an essential part of the program but is now a valuable weapon in my armory which will prepare me better for future learning. (WBL learner, reflective essay, 2000)

Reflection on learning gained from experience is very personal and can be a confrontative process. To gain trust from the learners and also to scaffold the next learning experience, we usually share a story about something we have learnt from our own work of developing and implementing WBL programs at UTS. We then give learners about twenty minutes to write a

short reflection of what they have learnt from an experience at work. To help guide their writing, we give them the following questions:

> What did the experience involve?
>
> What do you think you learnt?
>
> What did it feel like?
>
> How has it changed the way you think about and do your work?
>
> Is there further related learning that you still need to do?

Learners then share these ideas in small groups. After approximately twenty minutes, we ask learners to refer to their workbook, which gives some advice about reflective writing. Based on the work of Hatton and Smith (1995), it provides one useful way of recognizing different types of writing—descriptive writing, descriptive reflection, and critical reflection.

Descriptive writing is not reflective. It simply describes events and does not attempt to provide reasons for these events or thoughts about their implications. Descriptive writing is useful for recalling what happened, and we'd expect that learners' reflections would include it, but we stress that description alone is not adequate for the critical reflection we expect WBL learners to engage in throughout the WBL program.

> I'm now up to my tenth meeting with the client about the contract. My last meeting was terrible. After the meeting, I talked about it with a colleague who has had a lot more experience in negotiating contracts. She has given me some advice—build on the relationship with the client.

Descriptive reflection includes both a description of events and some reasons for why they occurred. At a more sophisticated level, it might involve using perspectives from external sources to provide these reasons. Again, it is not yet adequate for the critical reflection we expect, but it's closer:

> I'm now up to my tenth meeting with the client about the contract. There is now building animosity between us. This is terrible. I couldn't see my way out of the meeting. We seem to just get bogged down with nitpicking about the wording and passing it from our legal to their legal and back again. It's costing a packet, it's all too time consuming, and plus I can't see where it will all end—probably in losing the contract! I finally decided to talk to a colleague of mine and she was really helpful. She said, "Contracts are so often thought of as a written document but they are really about building and maintaining relationships." She also invited me to sit in on an initial meeting she had with a client to negotiate a contract.

Critical reflection (as in conducting a dialogue with yourself) involves a greater stepping back from events and exploring alterna-

courses of action in context. The writing might make more connections with a range of perspectives from the literature and other sources, might begin to reflect back on earlier reflections and challenge earlier assumptions. This is characteristic of the **critical reflection** that we hope your reflections will include.

> After talking to a colleague and watching her set up a contract with a new client, I developed a different perspective on negotiating contracts. I had assumed that somehow I always got landed with the difficult clients that seemed so nitpicky about the wording. I can see a pattern now in the contracts that I have negotiated—I develop a draft contract stipulating our terms of the agreement prior to the initial meeting with the client. I always thought this would seem professional and speed up the process. I realise that another way of thinking about this is that this way of establishing the process doesn't really allow the client to feel ownership for the document. We also usually meet in my office. I've come to realise that space is a really important consideration in negotiating contracts—perhaps we should meet on neutral grounds—possibly even in a more informal setting so that we can feel more relaxed and really work on understanding each other. I always have legal there from the outset too. I thought this was a good idea because it ensured that we were covered right from the start. My colleague by contrast didn't have a document prepared for the initial meeting but rather spent the entire time in the first meeting really clarifying what the client wanted and what we wanted out of the partnership. She also established what both parties will bring to the table. This was all minuted and agreed to before legal was brought into the picture. Negotiating contracts, in this sense, is about building trust relationships.

In the next stage of the small-group activity, participants discuss their own writing in the light of three types of writing outlined above and are encouraged to understand the relationship between each type of writing and its context, purpose, and audience. Workshop One typically includes a group discussion focusing on how and why we should aim to develop a more critical approach to writing about our learning experiences. From this point, we progress to a discussion of different theorists and their conceptions of reflection. The range of readings in the workbook includes selections from Anderson, Boud, Cohen, and Sampson, "Students' Guide to Learning Partnerships" (1998); Binney and Williams, *Learning into the Future: Changing the Way People Change Organizations* (1997) ; Boud, Keogh, and Walker, *Reflection: Turning Experience into Learning* (1985); and Senge, *The Fifth Discipline: Practice of the Learning Organization* (1990).

Many WBL learners have not read scholarly journal articles and other academic texts for some time, if at all. Hence, they may feel quite daunted by reading and understanding these more theoretical materials. A useful scaffolding activity is to do a jigsaw reading task as a workshop activity. This involves learners reading different sections of chapters in a text and explaining ideas discussed in small groups. Learners are encouraged to discuss the extent to which they disagree or agree with the ideas presented by the authors. After the workshop, learners undertake a number of writing tasks. The first writing task requires learners to reflect on the learning they can expect to gain from undertaking a WBL award with reference to their understanding of the readings and the workshop discussion. This involves identifying the shifts in thinking that underpin the Work-Based learning program. Other writing tasks include identifying supportive and potentially disruptive influences impacting the successful completion of their program, beginning their learning journal, and starting to work on identifying the learning focus for their degree. This involves locating relevant sources of information that will help them to identify the learning priorities of each of the three stakeholders in the WBL program. This may include documents or relevant people, that is, business plans, performance agreements, and CVs. Between Workshops One and Two, responses to writing tasks are discussed and refined with advisors, and in online discussion groups.

Workshop Two: Plan Your WBL Degree

In Workshop Two, we help learners to consolidate their understanding of the link between learning and experience by asking them to construct a time line of their learning from prior work experiences. We provide learners with an extract from a learner's time line detailing a number of educational, work-based, and other relevant experiences (Exhibit C10.2). First we talk about the current roles and recent courses attended by the participant and then unpack the key themes of learning that each of these experiences entails. This encourages people to think of how they have gained knowledge from a range of experiences and the connection between disparate experiences.

Learners then work in pairs and help each other to gain a feel for what they have learnt from specific work, education, and other relevant experiences. For this task to work well, it is useful to inform learners prior to the workshop to bring a copy of their Curriculum Vitae (CV) and other relevant resources. Referring to the resources, they ask each other questions such as:

What is your current work position?

What are some of the major roles and responsibilities in your job?

What are the broad themes of learning in these roles/responsibilities?

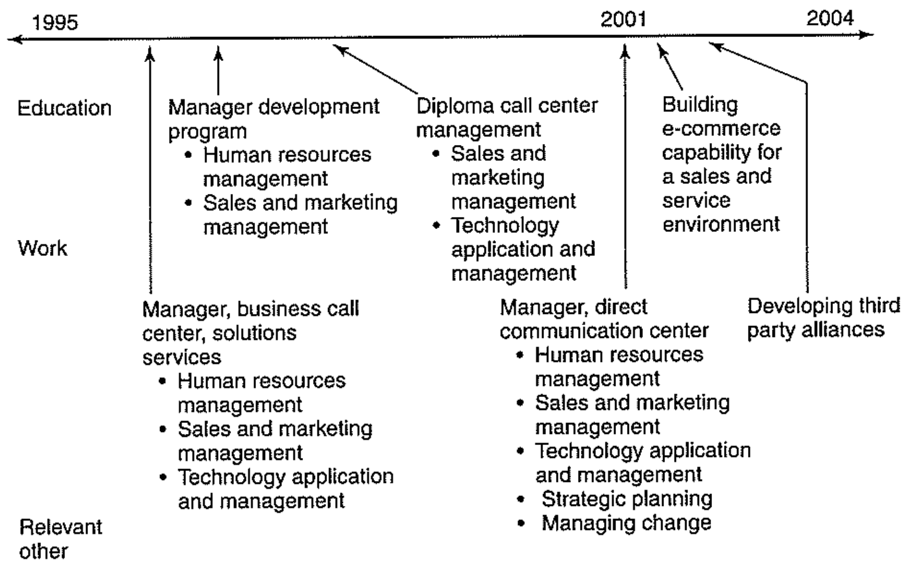

Exhibit C10.2

Can you see similar themes of learning in previous work positions?

How has your learning in your current job built on your learning in previous positions?

What educational experiences have you undertaken that relate to your work?

Have these experiences built on the learning themes that you identified in your current and/or previous jobs? How?

In constructing their time lines, students also focus on their "future learning." They add this dimension to their time line by analyzing their business plans, other strategic documents, and a personal list of learning and career goals that they have identified in one of the writing tasks in between Workshops One and Two. Learners find this to be a very rich learning experience. They have not generally reflected on their skills, knowledge, and understandings so deeply and linked them explicitly either to what they already know or to what they need to learn to improve their work practices and facilitate their career development. After they have completed their time lines, we conduct a whole-group activity in which learners discuss the types of questions that helped them to reflect critically on their experience, explore their findings, and develop the specific components of their WBL program plan.

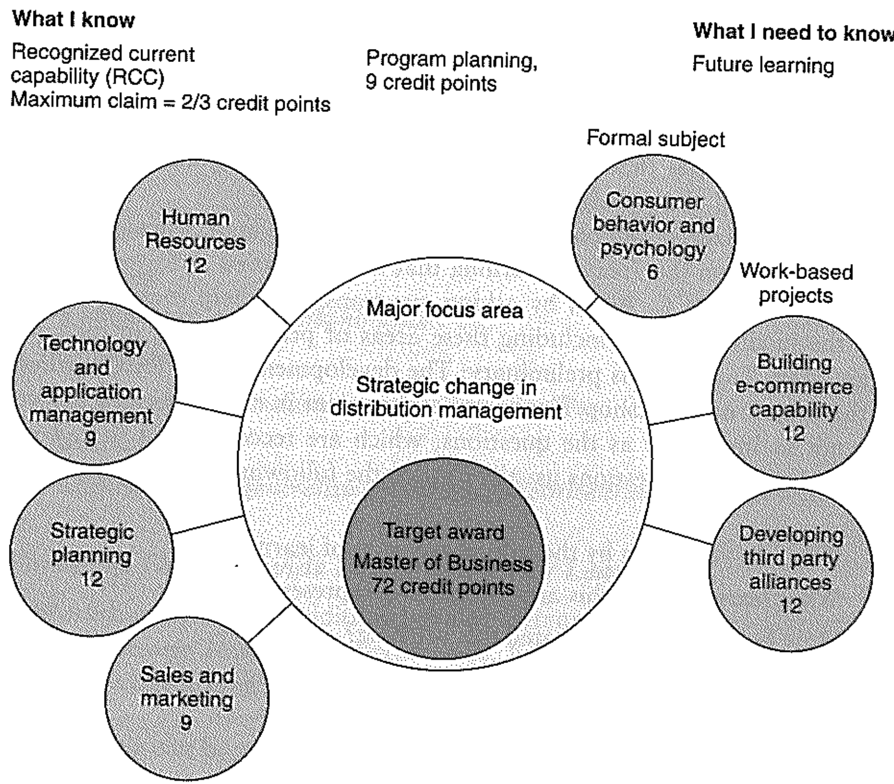

Exhibit C10.3

To continue to develop a holistic understanding of their degree, learners undertake an activity in Workshop Two in which they are asked to develop a concept map for their degree. As a scaffolding activity, learners analyze a sample concept map and discuss it in groups. As guides to this exercise, they use two taxonomies provided by the university, one that describes various levels of learning and another that indicates the required distribution of credit points. A sample concept map is included in Exhibit C10.3.

Naming the major focus area and RCC as well as future areas of learning in the degree is a vital part of the program-planning process and one that learners generally confront with both excitement and angst. These feelings are explicitly acknowledged and reflected on in the workshop discussions. Key points raised are that the "naming" of subjects in conventional university degrees is generally beyond a student's control. It is done for them by the

lecturer. By "naming" the titles of the areas of learning in their degree, they are taking control of its shape and thus the construction of past and future perspectives of their learning. It is emphasized that this is a very valuable learning experience in itself, and one that has allowed many WBL learners to develop capabilities that equip them to be both more autonomous learners within UTS and "knowledge workers" at the workplace.

Following the development of their own concept map, learners work in pairs to focus on the areas of learning that they identified as forming part of their claim for RCC. Again by asking questions, they help each other tease out the justification for including these areas of prior learning in their program plan. This work is preliminary: The development of the RCC portfolio is the subject of Workshop Three, and at this point in the process the answers are not as important as the questions, which are recorded and shared in a group discussion. Questions usually include the following:

What do you mean by the title of this area of learning?
What learning does this area of learning represent?
How have you demonstrated this learning?
What evidence do you have for this area of learning?
How do you intend to gain this "future learning"?

The questions that the group has identified are noted by learners and are used as a guide to refine their concept map in subsequent independent writing tasks. Participants also work in groups to analyze samples of participants' proposals, using the criteria outlined in the workbook to discuss the strengths and areas of improvement. One particular challenge is to help participants to write learning outcomes for each of their areas of learning. To help them with this process, we have developed a formula that is as follows:

Learning verb + content + context + purpose

We also provide participants with samples of learning outcomes from participants' work and a series of "learning verbs" with which they may choose to commence their learning outcomes as follows:

Knowledge
"I am able to *state/outline/recall/identify/list/enumerate* . . . (for example) the key principles of . . ."

Understanding
"I can *describe/discuss/explain/clarify/identify* . . ."
Application
"I can *illustrate/demonstrate/apply/relate/adapt* . . ."
Analysis
"I know how to *distinguish/contrast/compare/calculate/analyze* . . ."
Synthesis
"I am able to *organize/synthesize* . . ."
Evaluation
"I know how to *evaluate/appraise/assess/review* . . ."
Abstraction
"I know how to *generalize/hypothesize/theorize/transfer/reflect* . . ."

Workshop Three: Provide Evidence of Prior Learning

In Workshop Three, an additional group activity again focuses learners on the link between learning and experience. Each group is given a statement that relates to learning and experience, for example:

Learning can be gained from positive and negative experiences.
Learning is dependent on the diversity of your experiences not necessarily on the time spent on gaining the experience.
Learning that results from an experience may be unintentional.
Learning needs to align with the level of your target degree.
Reflection on learning can be used to integrate quite disparate experiences.

Learners are asked to discuss the meaning of each statement with other members of their group. They are also asked to refer to their CV and to relate examples from their own experience. Explanations of these statements and a related writing task are provided in the workbook to help learners consolidate the learning that they gained from the workshop activity.

It is in Workshop Three that we most centrally address the task of compiling a portfolio. Although a portfolio can be presented in a variety of ways, we have found that it is very important to provide learners with clear guidelines as to how to structure their portfolio. In Workshop Three, therefore, learners critically review a sample of a learner's portfolio. They focus on its strengths and on the ways in which it could be improved. Analysis of a

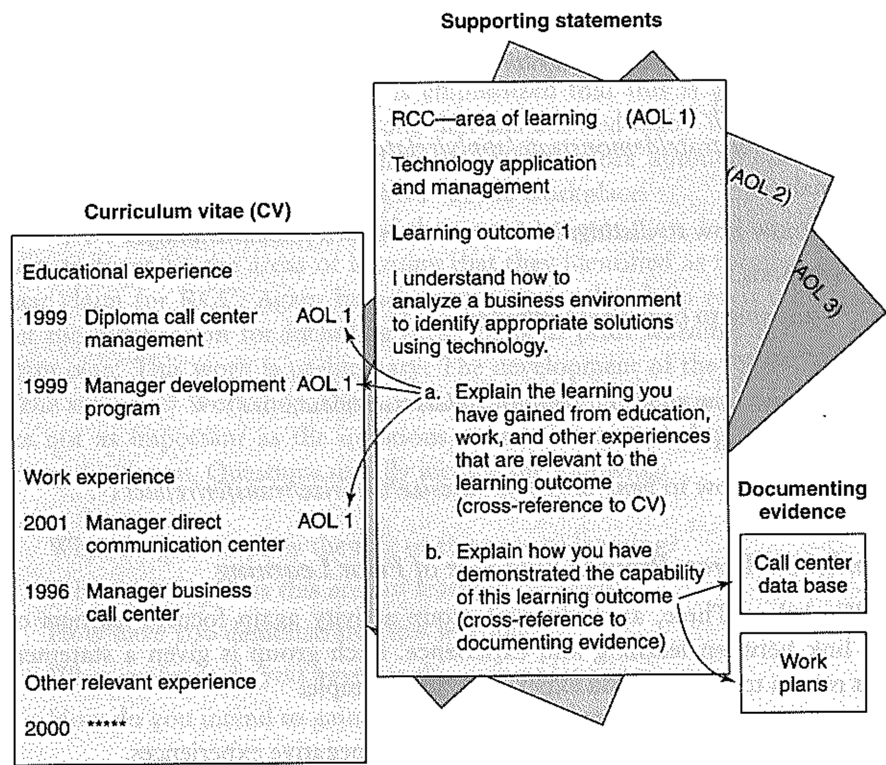

Exhibit C10.4

sample portfolio is a useful strategy to help learners to think about ways of constructing their own portfolio.

Exhibit C10.4 illustrates the structure of the portfolio and the relationship between the three parts it comprises. The three parts of the portfolio are discussed next.

The Curriculum Vitae

The CV provides the assessor with a broad, chronological overview of the participant's whole career, including brief descriptions of education, work, and other relevant experience (i.e., when, where, and how the learning was acquired). Where relevant, participants cross-reference the areas of learning in their RCC claim.

Supporting Statements for Each Area of Learning Included in the RCC Claim

The supporting statements are the most important part of the portfolio. They provide the assessor with a strong case demonstrating the participant's achievement of the learning outcomes for each of the areas of learning (AOLs) in his or her claim for RCC. They also link each of the three parts of the portfolio together. They elaborate on key learning experiences outlined in the CV and explain the documenting evidence.

Reshaping the CV generally poses few problems for the participants. Most participants have a fairly recent CV that they have developed for work purposes; we use this as a base in the workshop to discuss ways in which it needs to be reshaped in order to meet the purposes of the WBL program. This involves restructuring the CV in terms of educational, work, and other relevant experiences and briefly outlining the key learning experiences that will be further elaborated on in the supporting statements.

A Comprehensive Record of Documenting Evidence for Each Area of Learning Included in the RCC Claim

Participants need to provide the assessor with tangible evidence of the learning they have gained for each AOL in their claim for RCC. In selecting documenting evidence that will support their RCC claim, learners first have to understand what documenting evidence they can draw on. Such evidence can be direct or indirect. Some examples taken from work include financial forecasts, work plans, and training materials. Indirect documenting evidence refers to documents that conventionally signify the value of learning. This includes certificates, awards, references, and evaluations.

One particularly useful activity to help learners to clarify the documenting evidence to be included in their portfolio is to develop a matrix for each area of learning and its four to five learning outcomes. The box, "Area of Learning 1 in Claim for RCC," is provided in the workbook as a guide.

The workshops stress that it is not enough for participants to simply include unsupported documenting evidence in their portfolio. It is important to explain why they chose this evidence, how it is relevant to their portfolio, and in what ways it demonstrates their capability in the specified area of learning. The site for this explanation is in their supporting statements. It is often quite difficult to help participants to see that the evidence does not "speak for itself." To help participants come to this realization, we ask them each to bring a piece of evidence that they plan to use in their portfolio claim. In groups, they focus on one person's evidence. In the first part of the

Area of Learning 1 in Claim for RCC

Electronic Information Systems Design

	Education		Work		Other relevant experience	
	Direct documenting evidence	Indirect documenting evidence	Direct documenting evidence	Indirect documenting evidence	Direct documenting evidence	Indirect documenting evidence
Learning outcome 1 Understand how to analyze a business environment to identify appropriate technology-based solutions and the like.	Screen dumps of interface of a call-center database	Diploma: call-center management	Work plans: outlining detailed needs analysis.	Gold Champions award certificate from CEO	Reflection on a range of relevant readings	—
Learning outcome 2, 3, and so on						

activity, all group members (including the person whose evidence it is) write down what they think can be assumed about the learning achieved from the evidence as it stands. In the second part of the activity, group members are encouraged to ask the person whose evidence it is to provide the group with information about the learning that the evidence demonstrates. One person in the group acts as the scribe writing the questions that the group asked. Following this activity, we discuss the questions and also the discrepancy between the assumptions made by the group leader and other members. We then consider that the assessor would be in a very similar position to other members of the group who in many cases could ascertain very little about the learning that the evidence showed without the further explanation gained by

the group on asking key questions. This leads into the discussion on the role of the supporting statements in the portfolio.

Learners are required to develop a supporting statement for each of the areas of learning in their claim for RCC. Learners generally find the writing of supporting statements to be the most difficult part of the portfolio. The supporting statements form the site for the argument they present to convince the assessor that they have an understanding of each of the learning outcomes for the areas of learning in their RCC claim. To explain the purpose of the supporting statements, learners are provided with the analogy of a lawyer presenting a case. This analogy is useful because it helps participants to understand that evidence can not stand alone. The strength of the case is built around how convincingly the lawyer can explain the relevance of the evidence in demonstrating his or her argument. WBL learners write drafts of supporting statements as a workshop activity and peer review each other's work. Where possible, we make explicit links with previous activities they have done that can help them to write the supporting statements, that is, the critical reflective writing task in Workshop One and the construction of the timeline in Workshop Two.

Workshop Four: Consolidate the Components of Your WBL Degree

This final workshop focuses on the peer assessment of the work participants have undertaken thus far and also on gaining an overview of what to write in their reflective essay. In workshop groups, we discuss the challenges that the WBL program has involved and what participants learnt from these challenges.

Conclusion

Portfolios have become one of the key pedagogical devices that are both cause and effect of the increasing legitimization of the relationship between work experiences and learning. Indeed Work-Based Learning at UTS is motivated around this relationship, and the development of individual portfolios is an integral component of these degrees. As described in this chapter, portfolio development in WBL degrees is a process through which individual learners make credit claims for the recognition of their current capabilities (prior learning). But, importantly, it is also a process that facilitates the learner's understanding of the relationship between his or her work and learning.

While the relationship between an individual's work and his or her learning has become almost common sense, however, its realization is a complex one. The boundaries between being an employer and being a student, between educational institutions and organizations, have become more

permeable, but the emerging overlaps are complex. The language for thinking about and describing one's work at the workplace is not necessarily the same language that is used in universities for thinking about and describing learning. Moreover, once learning is articulated and once it becomes managed and institutionalized, any notion of an unproblematic view of the relationship between being a worker and a learner needs to be challenged.

As we have attempted to demonstrate in this chapter, at UTS we are confronting the challenges. We do so by developing teaching and learning strategies that focus on learning a new language for describing oneself—a language that has currency in both organizations and universities. These strategies are not only relevant to learners. They are also part of a process that is contributing to the development of new professional identities as academics also struggle with many challenges when working in these new programs. At the same time, the design and delivery of WBL programs invariably create epistemological and political tensions. The emergence of these tensions is not surprising given the layers of relationships that are intrinsic to this program and the very different histories and understandings of each of the partners.

For many years, universities have had "business" relationships with organizations, and indeed for many years work practices have been incorporated into students' learning. Yet in this kind of collaborative program, the knowledge discourses and structures taken for granted in more conventional academic programs are in a process of change. The new knowledges and the shifting power relations, while inevitable, disturb not just the nature of the learning but also the systems and policies of universities and the way academics understand themselves and their work.

At the beginning of the chapter, we drew attention to the seductive nature of WBL programs. We described the appeal for each of the partners—the university, the students, and their workplaces. Perhaps the phrase "openness of disciplinary boundaries" best captures the feature that makes it so attractive. Yet it is the very openness of the boundaries that is the cause and effect of many of the complexities and contradictions of work-based learning programs.

Even within a university that foregrounds professional practice, many academics view WBL as problematic. While they may have worked with organizations and employees previously, most often their relationship with the "real" world has been more or less on their own terms. They articulate their concerns in several ways. They describe WBL as an unwelcome symptom of the corporatization of the university and the accompanying loss of the university's status as a primary knowledge producer in contemporary society. They describe their resentment of the increased scrutiny by the university of their everyday work and fear an additional layer of surveillance by the partnership

organization. It is not surprising, then, that some academics respond to these new innovations by resisting participation.

However, some academics do take up the opportunity to participate, but in doing so many also struggle with their new roles in WBL programs. Many are confronted by the inadequacy or irrelevance of their disciplinary knowledge and express regret at the loss of their existing expertise and of their previous certainties of their roles and responsibilities. These concerns call for a number of additional strategies. At UTS such strategies involve the design of professional development programs for academics. These programs not only focus on the new ways of teaching and learning in these programs but they also provide a site of debate about the place of disciplinary knowledge in the programs and the accompanying power and control issues.

As described early, many students are drawn to the program by the apparent freedom to develop individual programs that are based on their existing knowledge and experience as well as their current work projects. However, giving students this degree of responsibility often presents a number of challenges. As the majority of students do not have the course design experience of educators, the size and complexity of designing one's own program can be daunting. In addition, unlike in conventional programs, there is little institutional separation between work and university learning in work-based learning programs and thus between the roles of employee and learner. This is manifested in students' relationship with their work supervisor and academic advisor, at times complicated by different expectations. Students and their supervisors need adequate preparation and support in order to work with these complexities. Initial preparation includes participating in information sessions that realistically present the nature of their responsibility.

While partnerships are described as flexible and negotiable, there are limitations to the degree of flexibility. It is essential that the roles and responsibilities of all the partners are negotiated and articulated before the program begins. At UTS we have found that management's desire to be involved in the delivery reduces as the program becomes part of their overall human resource development program. However, if workplace supervisors and management withdraw altogether, care needs to be taken so that academics resist the desire to retreat into conventional subjects and ways of being.

References

Anderson, G., Boud, D., Cohen, R., and Sampson, J. (1998). "Students' Guide to Learning Partnerships." In *Peer Learning: A Guide for Staff and Students.* Sydney: University of Technology Sydney.

Binney, G., and Williams, C. (1997). *Learning into the Future: Changing the Way People Change Organizations.* London: Nicholas Brealey Publishing.

Blake, T. (2000). "Planning and Review Unit." UTS public documents. Sydney: University of Technology, Sydney.

Boud, D., Keogh R., and Walker, D. (1985). *Reflection: Turning Experience into Learning.* London: Kogan Page.

Boud, D., and Solomon, N., eds. (2001). *Work-Based Learning: A New Higher Education?* Milton Keynes, UK: Open University Press.

Gee, J., Hull, G., and Lankshear, C. (1996). *New Work Order: Behind the Language of the New Capitalism.* Crows Nest, NSW, Australia: Allen & Unwin.

Hatton, N., and Smith, D. (1995). "Reflection in Teacher Education: Towards Definition and Implementation." *Teaching and Teacher Education* 11(1), 33–49.

Reich, R. (1991). *The Work of Nation: Preparing Ourselves for 21st Century Capitalism.* New York: Knopf.

Senge, P. M. (1990). *The Fifth Discipline: Practice of the Learning Organization.* New York: Doubleday.

Senge, P. M., et al. (1994). *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization.* London: Nicholas Brealey Publishing.

Symes, C., and McIntyre, J., eds. (2000). *Working Knowledge: New Vocationalism in Higher Education.* Milton Keynes, UK: Open University Press.

PORTFOLIO DEVELOPMENT AND THE ASSESSMENT OF PRIOR LEARNING

Perspectives, Models, and Practices

Elana Michelson, Alan Mandell, and Contributors

Stylus

STERLING, VIRGINIA

Published in 2004 by

Stylus Publishing, LLC
22883 Quicksilver Drive
Sterling, Virginia 20166-2102

Copyright © 2004 by Stylus Publishing, LLC

All rights reserved. No part of this book may be reprinted or reproduced in any form or by any electronic, mechanical or other means, now known or hereafter invented, including photocopying, recording, and information storage and retrieval, without permission in writing from the publisher.

Library of Congress
Cataloging-in-Publication-Data

Portfolio development and the assessment of prior learning : perspectives, models, and practices / edited by Elana Michelson and Alan Mandell.— 1st ed.
p. cm.
Includes bibliographical references.
ISBN 1-57922-089-4 (alk. paper)
ISBN 1-57922-090-8 (pbk. : alk. paper)
1. Portfolios in education—Case studies.
2. Adult education—Case studies.
3. Educational tests and measurements—Case studies. I. Michelson, Elana, 1949–
II. Mandell, Alan, 1950–
LB1029.P67 P665 2004
374'.126—dc22 2003021087

First edition, 2004
10 9 8 7 6 5 4 3 2 1

ISBN: 1-57922-089-4 (cloth)
ISBN: 1-57922-090-8 (paper)

Printed in the United States of America
All first editions printed on acid free paper that meets the American National Standards Institute Z39-48 Standard.

CONTENTS

ACKNOWLEDGMENTS vii

1. INTRODUCTION: PORTFOLIO DEVELOPMENT IN HISTORIC CONTEXT 1

2. APPROACHES TO PORTFOLIO DEVELOPMENT 21
   Academic Orientation
   The Meaning of Education
   Personal Exploration
   Learning from the Outsider Within
   The World of Work and Careers
   Dimensions of Expertise

RESOURCES FOR PORTFOLIO DEVELOPMENT FOR CHAPTER 2 63

3. MODEL STUDIES IN PORTFOLIO DEVELOPMENT: AN INTRODUCTION 67

MODEL 1. THE OFFSPRING OF DOING: FRAMING EXPERIENCE AT ALVERNO COLLEGE 69
James Roth, Georgine Loacker, Bernardin Deutsch, Suzann Gardner, and Barbara Nevers

MODEL 2. LEARNING FROM OUR EXPERIENCE: PORTFOLIO DEVELOPMENT AT SINCLAIR COMMUNITY COLLEGE 85
Carolyn M. Mann

MODEL 3. LOVE TALK: EDUCATIONAL PLANNING AT EMPIRE STATE COLLEGE, STATE UNIVERSITY OF NEW YORK 100
Lee Herman

MODEL 4. I AM A WRITER: WRITING FROM LIFE AT THE EVERGREEN STATE COLLEGE 121
Kate Crowe