Experiential Learning:

Unleashing learning organizations

Rosemarie LIVIGNI
IBM
Boulder, Co 80301, USA
with contributions from
Patricia Ann Spear
IBM
Atlanta, GA USA

ABTRACT

What follows is a discussion of the implementation of experiential learning within an enterprise with the intent to capture learning activities including experiential ones in a single repository. This may serve as an implementation guide for an enterprise seeking to create a single Learning Management System (LMS) and solve the problem of too much information on a company's intranet; especially information that is experiential.

Keywords: experiential learning, learning management systems, implementation guide

1. INTRODUCTION

In a company the size of IBM, one of the biggest problem is finding information. The trouble is not too little but too much. For example, a search on the IBM intranet for experiential learning brings up 309 hits. How many of those are experiential activities and how many are definitions or explanations, unknown? The same can be said for searching on Project Management classes or Leadership classes. In 2006, IBM was preparing to move to a new Learning Management System (LMS) we call L@IBM. The purpose was to create a LMS system to act as a single repository for all learning activities within IBM. This system would allow us to create learning activities (classes/courses) beyond traditional classroom or e-learning. A task force was formed to define, and create a process for creating and capturing experiential learning activities. The benefits derived from the creation of these new learning activities are the ability to find all learning including experiential types in a single repository. This is a step toward the creation and maintenance of but one type of intellectual capital of a firm.i

The accessibility of data globally in a global learning management system creates a network or web of intellectual capital available to any IBM employee at anytime. The following paper describes the implementation process and governance document created to begin the process of sharing experiential learning throughout IBM.

2. DEFINITION OF EXPERIENTIAL LEARNING

The importance of experiential learning is that it allows people to "learn from their own experiences and from the experiences of others who have gone before them." ii Where before an experiential activity such as job shadowing might be shared among a working unit group (listed among those 309 hits in a search), this new LMS would allow the learning activity to be shared globally across IBM. For example although many senior consultants within IBM have created intellectual capital shared on a website for a specific business unit or account; that same information could now be shared globally as an activity within a Learning Management system by creating an experiential leaning activity that provides a link to the website where the original data resides. (The data does not need to be in two places, it may be linked in the LMS.)

Experiential learning can apply to any kind of learning through experiencing, reflecting, thinking and acting thus developing new skills, new attitudes and new theories or ways of thinking (Kolb 1984). Experiential Learning activities in Learning@IBM is a collection of work enabled (skill-based learning that occurs directly within the context of the workplace.) activities that **do not fall into any other delivery typeiii** defined in Learning@IBM (i.e. classroom, web based or e-learning types) and has a business need driving the creation of the Experiential Learning (EXP) delivery type learning activity and offering. This qualifier was added to ensure that only activities that a business unit deems as critical are created in the LMS (Learning Management System).

The delivery type for Experiential Learning is **non-scheduledi**v (no system pre-defined start and end dates) and may have **learning resources, (i.e. people) but no costs associated** with the delivery of that learning activity/offering that will result in no fee or tuition for the learner. This qualifier was added to reduce unnecessary internal billing for experiential activities due largely to high expected volumes. The following paragraphs demonstrate some implementation details that formed the initial experiential activity deployment.

After defining what experiential learning was for IBM the next step was to create a topology of types of experiential learning activities. This was done in order to define what should and should not be part of the LMS. For example, if I am a new employee to a department and I work with another peer does that need to be captured in the LMS? The answer is maybe. This lead to much discussion and dialog, with the group deciding that we needed a methodology or approach that all experiential learning activities must follow, if they do not follow that approach they will not be in the LMS.

Experiential Learning Asset Types Glossary
Experiential Learning activities are defined as work-enabledv (skill-based learning that occurs directly within the context of the workplace) therefore the PARR© 4-step approach - Prepare-Act-Reflect-Review applies (based on Kolb 1984vi). Work enabled learning "integrates learning activities into every employees

work."[vii] The PARR 4-step approach was developed at IBM based on various works by Jensen, Baker and Kolb (1997).[viii]

PARR is a 4-step approach that can be used across nearly all behavioral learning opportunities. Its unique advantage is that it provides some structure to the learning activity. An example of this would be job shadowing during an executive sales call.

Besides occurring in the workplace, other distinguishing features of PARR learning are (1) its emphasis on reflection -- the requirement to record one's thoughts to a series of questions about the learning activity and its results -- and (2) the requirement to review the experience and reflect with another person; either an expert or a coach. Reflection is something that is done after the experiential event and could include answering some preset questions. Review, the fourth and final step, is then done with a coach, mentor or manager.

PARR is best used for skills that are impacted by the workplace environment, such that the learner develops those skills within the actual context of workplace conditions. A PARR may be one of two types of activities, either experiential or observational.

- An experiential PARR is appropriate when the learning activity is best experienced in the workplace by an advanced learner.
- An observational PARR is appropriate when the learning activity is best observed in the workplace by a novice leaner.

Both of these could be recorded in the LMS as an experiential learning activity, the observational activity linked as pre-requisition to the second where the person acts on knowledge as well as observing it.

Example**:** One would not want a novice salesperson to "learn" by **experience** on a critical large-account sales call by making the call him or herself. Rather, the novice salesperson would better "learn" by first **observing** such a critical sales call. Therefore, a first time critical sales call would best be learned by an **Observational PARR.** After successfully completing an Observational PARR, this learner could then move on to an **Experiential PARR.**

The glossary below provides a list of Experiential Learning asset types that are broken down into sub-categories. The use of sub-categories will make segmented reporting possible.

The plan is to start with the below listed learning asset types and revisit the requirements for additional experiential learning assets as we gain experience.

The creation of subcategories was an initial effort to group learning types so we could easily produce reports on each category. New experiential subcategories will be added as they are needed. Also we may decide to split out some forms of experiential learning at a later date once we see the initial reports with which we can make better decisions on what data in reporting is relevant. As you can see some of the categories are subtly different, client interactions and job shadowing could be very similar experiential activities however the first is seen as a long-term assignment vs. the latter having a shorter duration.

The next step was to have some amount of flexibility in each business group as to whether or not they wanted an activity in the LMS. For some business units, like consulting, it is important to find and share experiential type activities because most learning in the consulting business is learned from others. So we allow the business units to decide whether or not an activity should be recorded in the LMS.

The other reason for sub categorizing experiential learning types was for reporting purposes; to have the ability to group like activities easily. What follows were the preliminary groupings the task force decided to use. This list may be added to and modified as we gain more experience with this learning type.

Examples of Experiential Learning Asset Types

Coaching: Facilitates employee learning and growth and it encompasses a communication approach, a leadership style and an expertise that unlocks the employee's potential to maximize performance.

Client Interactions: Provides IBM employees with the opportunity to visit client sites or attend client briefings, both internal and external, with the purpose of listening, understanding client needs and concerns, and expanding their knowledge of the client.[ix]

Cross-unit Projects: Provides employees with the opportunity to be part of a team of experts engaged in developing emerging technology and innovative customer solutions. The synergy arising from bringing together skilled professionals from different areas within IBM results in unique, exciting, and competitive offerings and solutions for the marketplace.

Job Rotations: Provides employees with the opportunity to move into another department or organization for a predetermined length of time. A rotation may include a variety of tasks and roles and provides the employee with a broader knowledge of the business while developing new skills.

Project Assignments: Provides employees with the opportunity to be part of a team of experts engaged in developing emerging technology and innovative customer solutions. The synergy arising from bringing together skilled professionals from different areas within IBM results in unique, exciting, and competitive offerings and solutions for the marketplace.

Stretch Assignments: Provides employees with the opportunity, while in their current job and role, to perform an additional task or set of tasks to expand skills and develop additional competencies. This work typically extends beyond your usual job responsibilities, after employees have demonstrated a readiness to perform more complex tasks, and may be performed within other parts of the organization.

Job Shadowing provides employees with the opportunity to spend a day or longer (as arranged with the shadowed employee) learning about a role and business area that interests the employee. It is an excellent way to gain a better understanding of what is involved in the role from the daily tasks, the skills required, and the work environment itself. IBM has a specific program for job shadowing which we call Blue Opportunities. IBM's Blue Opportunities program helps employees try on new hats through short-term, experienced-based learning activities outside of the formal classroom or e-learning. A Blue Opportunity is a career development opportunity. It can be anything getting one of your ideas or solutions patented, or publishing articles in journals or whitepapers, to connecting with other IBMers for client visits, job shadowing, and mentoring activities. The length of investment in activities can range from a few hours to several months and not all activities will be appropriate for all employees.

Mentoring is defined as an activity that joins two people together to achieve specific objectives for skills growth and development. The mentor agrees to share this know-how and act as a role model. The mentee agrees to make a conscientious effort to acquire the development offered.

PARR: This is both a methodology and a category that can be used for those other work-enabled learning activities/offerings that encourage the learner to Prepare for a key activity, Act on that activity and by Reflecting upon the experience of having observed or engaged in a work activity and Reviewing the experience with a mentor who can further coach and guide the learner on how to refine their expertise.x

Within these categories may be sub categories, here is an example within mentoring

Types and purposes of mentoring
Career Development entail identifying a career direction within or outside the current portfolio of skills and experiences to position you for career growth.

Skills Development Growing proficiency in skills levels through experiential learning, enabling more effective performance of job roles, and increasing ability to demonstrate and apply customer-valued skills, knowledge, and experience.

New Hire Providing the understanding that allows employees to represent IBM to our customer, and to fit in quickly within the IBM company.

Diversity Understanding the diverse needs of teammates and peers to ensure that diversity is valued.

Qualification Programs includes Accreditation, Certification, Re-Certification, Senior Certification, Confirmation and External Qualification.

PARR Learning
Learn at Work, experiential activities designed to help you Prepare, Act, Reflect and Review (PARR) as you apply new skills to the job. Mentoring comes into play in this area, where you may receive coaching from a mentor during the PARR steps. Job shadowing through rotational assignments is also an option in this area.

3. CREATING A REPOSITIORY OF KNOWLEDGE

Experiential learning not only adds to the suite of learning activities available to all employees, it also can be used to create a repository of knowledge that can be used by others. Remember back to the search problem introduced at the beginning of the article, by having these activities in an LMS we create a central repository for learning be it classroom, e- learning or experiential learning. The other reason to capture this is to be able to share stories, stories or narratives are very powerful learning tools and people learn from them how to act or re-act in certain situations; although not a replacement for actual experience they can from the basis for knowledge (please refer to the observational PARR discussed above).

The term experiential learning is credited to Kolb.xi Since then Kolb has gone on to create Learning styles and many models and theories.xii These in turn have been used to create operational models (Senge).xiii. Within IBM the experiential learning operational model is the PARR method. This method is required to be used in order to have the experiential learning activity shared with others.xiv Many companies employ conversations that occur in virtual environments, including on-line discussion forums or WIKI'sxv, virtual conferences using a variety of tools that allow information sharing much like a classroom (net meetings, internet conferencing, Centra®xvi, IBM® Lotus®Same Time® Meetingxvii, etc.) and access to SME's (Subject matter experts) in their field. The ability to capture these "conversations" builds knowledge within the enterprise.

Experiential learning is valuable because its **creation and use** builds competitive advantage. Lawrence Prusak, of Ernest & Young's Center for Business Innovation, states: "Those of us who are attempting to do research in the areas of sustainable competitive advantage have come to the conclusion that the only thing that gives an organization a competitive edge- the only thing that is sustainable, is what it knows, how it uses it what it knows, and how fast it can know something else."xviii

4. EXPERIENTIAL LEARNING AT IBM

How did we use experiential Learning before the LMS?

Prior to the implementation of a Global LMS the system that was used was first, not global and second, did not allow for non-scheduled learning activities which meant that experiential learning activities could not be tracked in a single place. As you can imagine, this lead to a vast number of systems that were not aware of or connected to the main learning management system at IBM. Without a single place to look and record these activities many times they were simply not recorded and therefore knowledge sharing was extremely limited. Search capabilities on an intranet did make them accessible; however as anyone who used searches on the internet knows combing through irrelevant links is very time consuming and the ability to find the right resource is highly dependant on how one phrases the search. Another key limitation was the inability to report on the use of experiential learning across the enterprise.

During the planning phase of moving to the new global LMS care was taken to try and find these resources, identify them and show the benefits of linking them to learning activities in the new system. A governance document was put in place to create a consistent use of experiential learning type activities.

5. GOVERNANCE PROCESS

The following section of this document has been developed to establish guidelines for creating and maintaining Experiential Learning activities and offerings at Learning@IBM.

This governance document is not intended to dictate that all Experiential Learning assets are required or should reside in Learning@IBM. Decisions should be driven by the same guidelines as other delivery type learning events and should be based on business needs.

This document is a starting point to define how we begin to select and manage Experiential Learning at Learning@IBM to further enable learners to find and use experiential learning assets that will enhance their skills and provide guidance to the business in managing these assets in a structured way.

This governance document will evolve as knowledge and experience are gained as we move forward with identifying, managing, tracking, and measuring Experiential Learning at Learning@IBM.

The first phase of the decision making process is to determine if the Experiential Learning meets the following criteria:

- There is a business need driving the Experiential Learning activity/offering request
- The Experiential Learning activity/offering does not fall into any other delivery type defined at Learning@IBM.
- The Experiential Learning activity/offering are non-scheduled events (no system pre-defined start and end date)
- The Experiential Learning activity/offering are work-enabled (skill-based learning that occurs directly within the content of the workplace)
- The Experiential Learning activity/offering adopted the PARR© model or another adult learning model that allows the user to Prepare-Act-Reflect-Review
- There is a committed owner of Experiential Learning activity/offering content/asset
- The Experiential Learning activity/offering content is accessible for Persons with Disabilities (PwD).
- Learning Activities and Offerings Standards

The next step is to ensure that the Experiential Learning Activities and Offerings use the following fields.

All required fields as defined in the Learning Activity and Offering Request Tool

In addition to the required fields, the following fields should be populated as defined below:

- The **Course Overview Description** states the purpose of learning activity to the learner
- The **Course Objectives** are well defined and have a defined completion
- The **Additional Audience Description** field is clearly defined. Example: Senior IT Architects
- The **Duration** field accurately indicates the "expected" or "targeted" duration (hours/minutes) to complete the learning event.
- The **Duration Text** field, when appropriate, should be used to provide the learner with information on what the "expected" or "targeted" duration (hours/minutes) is to complete the learning event and the "expected" or "targeted" date the learner should complete the learning event.
  Example: This learning event will span a three (3) week period and requires the learner to spend two (2) hours per day for a total of 30 hours. You are expected to complete this learning event 30 days from the start of your enrollment.
- The **Competency, Skill and Job Role Skill Set** and expected exit proficiency level has been includedxix. Exceptions to this rule could be activities such as training on Ethics, Personal Business Commitments, Business Guidelines, etc
- The **Trigger after Order Date (days)** field should be used if learning events span greater than 30 days. This field enables overriding the 30 day default and can be customized to send the reminder notice to the learner to mark their event completed.
  Example: The learning event spans an eight (8) week period from enrollment date, this field could be set for 60 days.
- The **Offering Type** field must accurately reflect the sub-category of this learning event (please refer to Section 0 for sub-categories.) This will permit reporting Experiential Learning measurements by sub-categories.

A delivery type can only have one completion type assigned.
Recommendation for Completions Governance for Experiential Learning delivery type is:

Set completions to "Learner upon completion of learning activity" and the Manager and Completions Administration Roles in the event of learner long term absence.

If a requirement for an offering requires management completion, the default Experiential Learning delivery type completion can be changed at the offering level to "Manager marks complete."

Note: Learner bears primary responsibility for completions. The Manager and Completions Administrators are considered backup in case of extended learner absence.

6. LEARNING MEASURMENTS AND REPORTING IMPLICATIONS

Measurements Reporting
Reporting measurements should continue to be driven by the business needs, i.e., rather than measure all experiential learning activities; measure only those experiential learning activities that have a business need and/or are part of a specific program for certification; etc

Experiential Learning activities (ELA) (e.g. time spent in ELA, number of ELA events, number of ELA participants, ELA days per person,) should be distinguished from existing metrics for Learning (i.e., Instructor-led classroom, Self-paced on-line, etc) metrics. Mixing Experiential Learning Activities volume in with Learning volume and using the same terminology to describe it (e.g. learning days per person) would be confusing and misleading, in particular with year-to-year comparison reporting. It would also be misleading to refer to Experiential Learning Activity as "Total Experiential Learning". This statement simply acknowledges that the "total" volume of "Experiential Learning" at IBM is not feasible to measure.

The following are recommendations to facilitate Experiential Learning measurement reporting:

The terminology "Total Learning Volume" should **not** be used when reporting Experiential Learning measurements, since all experiential learning activities will not be in Learning@IBM and reported.

There is a vast and diverse repository of Experiential Learning assets in IBM that vary in purpose that could be maintained at Learning@IBM. Not all Experiential Learning Activities will have requirements to report back to the business; this should be driven by the needs of the business.

The following are recommendations to facilitate Experiential Learning effective measurements:

When appropriate/possible, combine Experiential Learning activities and limit how many surveys are sent, i.e., New Manager learning path requires completing 21 PARR's, recommendation is to only survey at completion of all 21 PARR's. This recommendation is based on the Employee Survey Registrar limiting the number of times employees can be surveyed and the impact on system performance due to potential increased volumes.

Track learning effectiveness for 1 to 2 years prior to establishing targets for Experiential Learning. This recommendation is based on the fact that there is no benchmarking data available in this area.

Request that Global Learning Strategic Measurements Team begin to scope the capability and cost to: Change the default of sending surveys for e-learning events (Experiential Learning) 30 days after the "learner enrolls/launches course." Experiential Learning offerings may span greater than 30 days. The recommendation is to send surveys after the learner marks complete Add sub-categories for reporting purposes.

Explore other options to trigger reminding learners to complete surveys, i.e., putting survey link in review phase of PARR's, etc.

Level 1-2 Survey -

Learning Program
The Learning (skills, ideas or experience) was relevant to my current job, project or next assignment.
The learning will have practical benefits (applying skills, ideas, experience) to my current job, project or next assignment.
I intend to apply on my current job, project or next assignment what I learned.
The venue/delivery media used was conducive to learning.
To what extent did you understand the content taught in the learning program BEFORE completing it?
To what extent did you understand the content taught in the learning program AFTER completing it?
How would you rate the overall effectiveness of the advisor if you had one interacting with you during this experiential learning activity?
Satisfaction
Overall, how satisfied were you with the learning program that you just completed?
Comment Section

Level 3 Survey

Learning Transfer
I am following on my job or project, a plan or course of action to apply what I learned.
I have the opportunity on my job or project to use the skills/knowledge gained in the learning.
The skills, ideas, experience I learned are practical or useful on my current job, project or next assignment.
My work team supports me on my job or project to apply what I learned.
My organization helps me on my job or project to apply what I learned.
I am able to use on my job or project the needed resources to apply what I learned (e.g. processes, equipment, tools, documentation).
The content enables me to improve my job performance. (e.g. reduced time, improved quality, increased revenue).
Performance Improvements
Overall, the learning improves my job performance.
The Learning improves my job performance in the following terms,
Overall Satisfaction
Overall, how satisfied were you with the learning program that you completed?
Comment Section

Reports

A report for EXP Delivery type will be added to GLDM (Global Learning Data Mart) which is accessed by the Global Learning Intelligence Community, Business Units, Geography's and Learning Personnel.

Specific reporting requirements by various Learning Intelligence Communities, Business Units, Geography's and Learning Personnel have not been defined. All new Experiential Learning requirements will be governed by the existing GLDM process.

Report requests have sections for requestor information and request details so that they can be assigned to an appropriate Learning Intelligence analyst. A request ID is assigned to each new request and the requester will be contacted within two business days. A target delivery date will be set, based on the request's size or complexity and current request backlog. Information needed for the request detail follows:

7. CONCLUSION

Implications for knowledge creation

Although some experiential offering types in the LMS will result in nothing more than recording of the activity there are others, specifically client interaction, job assignments and shadowing which can lead to learning by others (organizational learning). The importance of creating both a "directory of specific knowledge and skills and a directory of learning resources" is building what Tobin calls a "Knowledge network".xx While 100 people may get to visit with a client; a thousand more can link to a website in the LMS and read about that client interaction. These employees then have the ability to reflect on the knowledge and review the situation with a coach or mentor (PARR). While 100 may get to job shadow, thousands can link to a website and read about the real life experiences of that person. The use of experiential learning is that it is skill-based learning that occurs directly within the context of the workplace, such that workplace environmental factors important to developing the skill are present and operative during the use of the PARR process to internalize the experience. The LMS and the experiential learning type have created many opportunities to leverage experience to anyone that seeks that experience and knowledge. Although this second hand experience by proxy may not result in the same level of true knowledge creation as first order experience; the ability for others to learn and the number of people capable of experiencing the event increases multi-fold. "In today's dynamic global business environment, learning isn't an option. Companies that learn to harness the knowledge and skills of their employees, build a positive learning environment, and become a knowledge enabled organization can build a prosperous future, for the future itself is little more than a learning process."xxi

Once we start to capture experiential learning activist in the LMS we begin to solve the "too much data problem' and have a single

repository for experiential learning activities. Over time this will result in the creation of intellectual capital that provides a legacy to those who have come before us. Just think of the value a brand new sales person could derive from reading about a sales call that was made by a seasoned veteran. Or knowing that the PARR they just completed has been tested time and time again in real world situations; or being able to read about lessons learned from a project executive who was trying to retain a valued client.

Experiential leaning provides learning outside the classroom; in the workplace; documenting and storing these experiences are an important and up to now, missing piece of creating and retaining the intellectual capital of a firm.

7. COMMON TERMINOLOGY

Course – New term is Learning Activity (see definition below)

Curricula – Is the plural of Curriculum. In the new Learning@IBM structure, curricula is a menu selection that is used to ensure a progressive view of learning activities designed to aid learners in achieving their desired levels of expertise, specialization and certification

Learning Activity & Offerings – Learning activities and offerings are terms used by Learning@IBM to structure access to learning events. Learning activities are a description of learning objectives and should be directly linked to the expertise taxonomy skills that they enable. Learning Activities connect the learner to the different offerings a learner can enroll in. For each Learning Activity, the learner enrolls in an Offering.

Learning Asset – Learning assets are owned by a single portfolio and only one portfolio. Learning assets created in the learning management system Learning@IBM become learning activities.

Portfolio - A group of related learning assets in support of performance enablement, aligned with business priorities, to build resource capabilities and drive job performance

8. REFERENCES

(book)

Baker, A., Jensen, P., & Kolb, D. A. (2002). Conversational Learning: An experiential approach to knowledge creation. Westport, CN: Quorum Books…..6

Baker, A., Jensen, P., and Kolb, D. A. (1997). In conversation: Transforming experience into learning. Simulation & Gaming, 28(1), 6-12…..4

Senge, P., Kleiner, A., Roberts, C., Ross, R. B., & Smith, B. (1994). The fifth discipline field book: Strategies and tools for building a learning organization . New York: Doubleday. 6

9. FOOTNOTES

[i] Organizations as "adaptive learning systems"

[ii] Tobin, D.R. (1998), The Knowledge enabled organization, AMACOM, New York, NY, page28-29.

[iii] Some other delivery types defined in L@IBM are classroom and e-learning.

[iv] Experiential Learning delivery type was defined as non-scheduled events to reflect a mind set that learning can take place at any time.

[v] Work enabled learning is learning that occurs as part of everyday work.

[vi] 1984 book 'Experiential Learning: Experience As The Source Of Learning and Development' Kolb acknowledges the early work on experiential learning by others in the 1900's, including Rogers, Jung, and Piaget.

[vii] Ibid Tobin, 1998, page 39.

[viiiviii] Baker, A., Jensen, P., and Kolb, D. A. (1997) In conversation: *Transforming experience into learning. Simulation & Gaming*, 28(1), 6-12

[ix] Ibid Tobin, 1998, page 79.

[x] Ibid Tobin, 1998, page 79.

[xi] , D. A., Rubin, I. M., & McIntyre, J. M. (1974). *Organizational psychology: An experimental approach*. Englewood Cliffs, NJ: Prentice-Hall.

[xii] Baker, A., Jensen, P., & Kolb, D. A. (2002) Conversational Learning: An experiential approach to knowledge creation. Westport, CN: Quorum Books.

[xiii] Senge, P., Kleiner, A., Roberts, C., Ross, R. B., & Smith, B. (1994) *The fifth discipline field book: Strategies and tools for building a learning organization*. New York: Doubleday.

[xiv] Ibid Tobin, 1998, page 85.

[xv] A **wiki** is software that allows users to create, edit, and link web pages easily. Wikis are often used to create collaborative websites and to power community websites. http://en.wikipedia.org/wiki/Wiki

[xvi] Centra product link http://www.saba.com/products/centra/

[xvii] Lotus Same time product link http://www14.software.ibm.com/webapp/download/preconfig.jsp?id=2007-06-02+03%3A31%3A49.881063R&S_TACT=104CBW71&S_CMP=

[xviii] Ibid Tobin, 1998, page 43.

[xix] The intention is the ability to link the Experiential Learning activity to a skill such that IBM's skill gap closure solution can recommend the Experiential Learning activity to the right people given their skill assignments and current skill levels. This linkage is likely to be outside the domain of the Portfolio Manager in terms of authority to approve. The skill owner is the one to approve the recommendation. This process is still being defined.

[xx] Ibid Tobin, 1998, page 98-120.

[xxi] Ibid Tobin, 1998, page 205.