Using Portfolios to Direct Workplace Learning

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Abstract

In this article the author discusses three workplace learning paradigms which can be used by both employees and employers to guide the learning necessary to keep the workforce competitive in today's markets. As a way to operationalize the expectations of these paradigms, portfolios are discussed as a helpful technique to document employees'past learning and to guide their future learning. Further, prior learning assessment recognition is discussed as a way for employers to give recognition to the workplace learning accomplished by employees. The author outlines the essential features, functions and components of portfolios, some non-traditional methods to engage in workplace learning, and describes prior learning assessment recognition and the issues around its use.

Using Portfolios to Direct Workplace Learning

In a recent book about the future of career, Collin and Young (2000) pointed to the need for workers to collectively consider both their needs and those of their employer if they are to achieve meaningful careers. In the same publication, Doyle (2000) highlighted the debate around the idea of career being managed on behalf of the individual and the organization. Part of this debate entails the idea of a "common, shared interest" (p. 229) between the employee and the employer. In a different but related strain of thought, Law (2000) suggested that due to changes in the world of work, ie., globalization, technology, economic trading communities that serial or portfolio careers will become more common with workers experiencing more discontinuities in their work experience. The idea of career as embodying the components of both the needs of the employee and employer, the idea of commonality that the employee and employer have in contributing to economic production, and the need for skilled workers to keep current in a labour market characterized by frequent movement between workplaces can be brought together by focussing on the work-site.

One aspect of the work-site which deserves more attention is workplace learning. Workplace learning for employees means taking an active part in managing and documenting their job-related learning. For employers, it means seriously considering the benefits of prior job experience as evidence of learning work knowledge and skills. The purpose of this article is to discuss the use of portfolios to guide current and future learning and to highlight the learning which has taken place on the work-site. Often portfolios are viewed as a document which attests to past learning with the view to gaining recognition within an educational institution.

In this article, the writer focusses on three topics: workplace learning and how employees and employers must work together to facilitate this learning; portfolio development as an employee's responsibility, its features, functions and the difficulties in developing one; and, prior learning recognition assessment as an employer's responsibility and the issues surrounding this assessment. Overall, despite the complexity of employee-employer relationships, this article suggests that both parties can work together on the work-site to maximize the possibility of learning and hence contribute to the on-going skill development of the labour force, and to recognize such learning.

Workplace Learning

There are at least two reasons why North Americans should focus on workplace learning (Inman & Vernon,1997). Workplace learning can be a response to the concern about the loss of competitiveness in world trading markets. If North American workers were more engaged and reflective in their work-sites, such as Japanese workers are reported to be, their productivity and work satisfaction would help to build a competitive edge in world markets. Secondly, due to the increasing rate of technological advances in the work-site, North American workers need to be encouraged to adopt a philosophy of life-long learning, and to engage in learning which reflects the needs of the work-site. These two developments stress the necessity of the employee and the employer working together to enhance workplace learning.

There are three approaches to workplace learning (Inman & Vernon, 1997). The first approach concerns the mastery of skills and their application, an approach termed the technical paradigm. The focus of this paradigm is primarily the domain of workers because it concerns the issue of getting and/or maintaining a job. The criteria used to assess worker competencies within this paradigm are typically pre-established by the employer. Workers must determine their level of competence relative to the demands of the work-site and make decisions based on their self-assessment. Further, workers need to understand the ways that workplace learning can take on new meaning in their lives, an approach known as the interpretive paradigm. Within this paradigm, learning is viewed as a process of interaction between the employee and his or her work-site. This interaction process highlights the need for workers to see learning as a continuous activity with direct benefits. Far too often workers view learning as that which takes place within the traditional classroom, and often they do not recognize non-traditional ways by which learning can take place. Workers should adopt a life-long learning perspective with the view to developing a set of skills which will directly benefit their quality of life. A third paradigm, termed strategic, suggests that workers view their learning and the needs of the corporation from a broader and comprehensive perspective.

Within this approach, employees understand the ways social and economic forces influence them and their work-site. When employees embrace this broad perspective, they readily see the need for life-long learning as necessary to remain competitive in the labour market. They see the need to work with employers to understand the technological and professional changes which are taking place, and how together they can best master the competence to meet these changes. One way to accomplish the tasks inherent in these paradigms is for workers to develop portfolios and for employers to embrace prior learning assessment of employee workplace learning and to provide appropriate recognition of this learning.

Portfolios

In the past, portfolios have been used primarily by artists, designers, and architects. More recently, portfolios are being used by individuals both as they prepare for work and progress in their career. For example, career portfolios are used in the public education system as well in post-secondary institutions (Danielson, 1996). These portfolios are composed of a collection of artifacts which attest to the competencies and academic achievements of the individuals constructing them. Traditionally, the portfolio was an edited and carefully constructed collection of documents which accounted for a person's learning over time (MacIsaac & Jackson, 1994). From a present and future perspective, the portfolio can be conceived as an ongoing plan in which the individual establishes goals, shows evidence of reaching the goals, reflects on and analyzes changing skills and knowledge, and sets out areas for further workplace learning. From this perspective, the use of a portfolio can guide life-long learning (Conference Board of Canada, 1993); as well as, prepare workers for meaningful involvement in the development of their skills and knowledge to keep themselves and their employers competitive in the larger economic community. Workers must take an active part and be responsible for workplace learning if they are to remain viable in this age of global interdependence and technological revolution (Rifkin, 1995).

Portfolio Distinctives

Constructing portfolios is a challenging task due to a lack of standardization in terms of what they should look like and contain. Portfolios are somewhat like resumes in that they may vary in their composition and appearance. However, portfolios may differ in a variety of ways including what is placed in them, how they are developed, their format, their purpose and validation (Canlearn Interactive, 2001).

In spite of the amount of latitude, portfolios have several distinctive features (MacIsaac & Jackson,1994). They serve as a record of accomplishment and attest to the aspect of workplace learning within both the technical and interpretive paradigms. This record of learning should contain specific documents which are credible indicators to support the learning to which the portfolio is attesting. For example, from the technical and interpretative paradigms, some indicators can include letters from employers, transcripts of workshops and/or courses completed, videotapes, reports of credits earned from formal and informal courses, and descriptions of work completed in different work-sites.

Portfolio construction should be a collaborative process. The portfolio should be done in association with colleagues and employers, and consequently reflects aspects of the interpretive and strategic paradigms of workplace learning. Such collaboration fosters reflection and discussion about the content of what was learned, and to some degree, the economic realities faced by the business where the individual is employed. Such reflections should centre around questions like "what did I do?", "what does this mean?", "what have I learned?", "how might I do things differently?", "what are the future realities facing this industry/business?".

Functions of a Portfolio

In addition to having a number of distinctives, constructing a portfolio can serve three functions which ultimately help workers develop their workplace competencies as well as demonstrate their involvement in life-long learning (MacIsaac & Jackson, 1994). The first function of assembling a portfolio helps the employee engage in self-assessment. To accomplish this, individuals take responsibility for assessing their professional development. They determine their levels of employability strengths and weaknesses, and as a consequence set goals as a means to improve their employability potential. This function of a portfolio is reflected when employees attend to the technical and interpretive paradigms of workplace learning. Consequently, the portfolio should contain artifacts which support the results of this introspective self-analysis, as well as an outline of the strategies planned to achieve the learning goals.

Additionally, a second function of portfolio construction is the requirement that employees assess their progress in the workplace. As indicators of monitoring and improving their competencies in the work-site, individuals assemble samples which indicate mastery of their learning goals. This function of portfolio construction necessitates employees to engage in the issues of the technical workplace learning paradigm and to demonstrate evidence of their commitment to a life-long learning philosophy to work-site competency development. Some indicators of these accomplishments include a written paper containing information about the following: an introduction outlining why the artifacts have been included, the work assigned by the work supervisor and his or her evaluation of the work outputs, a description of different samples of work which embody the competencies learned during the performance of the work, a statement indicating what was learned, the process used to accomplish the learning, a statement of the employee's self-perceived strengths and future learning directions.

Lastly, when individuals put together a portfolio in a careful and thoughtful manner, they are challenged to consider how they present themselves and their accomplishments, and demonstrate what they have learned within the technical, interpretative and strategic paradigms of workplace learning. A portfolio which includes evidence of the individual's competencies and his or her on-going learning helps

to present that person in a positive perspective and represents one credible component to offer in the employment seeking and maintaining process. Reflective practice in portfolio development enhances the possibility of an individual getting employment while attesting to his or her engagement in aspects of all three workplace learning paradigms.

Non-traditional Learning Methods

When employees engage in self-assessment, they should consider a variety of non-traditional methods (Henry, 1989) by which they have learned new skills or may learn a number of new work-site skills inherent within the three workplace learning paradigms. Employees need to consider non-traditional learning methods because often they tend to minimize or disregard the learning gained by these methods or they fail to realize that they can use these methods to develop new work-site competencies.

Experiential Learning

Prior to constructing the portfolio, workers need to engage in self-reflection and self-assessment. They need to consider the non-traditional ways in which their work experience has helped them to learn work skills and knowledge. One method used to learn or enhance new skills is "learning by doing." This category accents the technical paradigm of workplace learning (Inman & Vernon, 1997). Workers can reflect on the competencies they have learned by focussing on what they have been or are doing. For example, it is possible that workers such as carpenters or electricians may have been exposed to new ideas and techniques in their work-sites where, through team participation and observation, they have learned the skill of being able to perform routine maintenance tests and checks on new equipment.

Another type of experiential learning is problem-solving. Workers in the building trades may have learned new skills when responding to structural damages in buildings due to excessive weather conditions. In addition to learning the skills involved in assessing the extent of such damages, they may learn ways to repair such damages without

rebuilding the entire structure.

A third method of experiential learning involves the use of media. Distance learning enables an employee to keep abreast of new developments within their work domain. Workers in the building trades can take distance education courses related to new innovations in the workplace. For example, recently lasers have been used to help carpenters install suspended ceilings. Also, computers are now used to custom design furniture, which when used in conjunction with wood-making equipment enable a cabinet maker to achieve a detailed custom product.

Another type of experiential learning focuses on work and community placement. It is possible by working with a mentor or an individual skilled in the use of a piece of equipment to learn new skills. For example, a carpenter who wants to learn the skill of cabinet making and the use of the equipment to accomplish this task, could work with an individual after regular work hours to learn the competencies inherent in this type of work.

Self-Reflection and Analysis

Another broad category of non-traditional learning methods involves workers engaging in self-reflection and analysis both individually and in groups. The methods used in this category help to operationalize the interpretative paradigm in workplace learning (Inman & Vernon, 1997). The use of self-reflection helps employees to consider their past and present learning and to relate this learning to future directions in the work-site.

One way to use self-analysis is to consider prior learning. Workers could review lists of skills and knowledge to determine their competencies and/or deficits. These lists can be obtained from educational institutions or from government officials responsible for labour certification.

Another way to use self-analysis is through the use of narratives. Narratives, which arise from discussion, serve as both process and product in that workers develop a scenario for themselves and the company which helps to guide their future workplace learning. Narratives help workers discover common ground within the

organization. This approach permits workers to see connections between their personal goals and that of the corporation by reflecting on such topics as the knowledge and skill they bring to the workplace, and how this knowledge fits with the strategic plan of the corporation. This process puts the responsibility on both employees and employers to decide what training is needed to meet the demands of the work-site.

Group Discussion

An extension of the use of narratives involves the use of discussion groups to determine where workers need further skill development. Through discussion, particularly between teams, workers can give feedback to one another on their perceived level of competence. Ideally this team approach works best where workers have varying years of work experience and skill development. Workers with more experience could provide feedback to those with less experience, and those with more recent educational experiences could update those who have been out of educational institutions for some time. These activities would help to accomplish the technical aspects of workplace learning. In addition, workers can improve their communication skills by having a colleague observe them and provide feedback based on selected areas of observation. Or, if they decide that communication lines between the office and field workers need improvement, a facilitator could be engaged and the issues discussed and resolved at a meeting between the employer and employees.

The insight arrived at through discussion focussed on social change and how social change influences the demands on the work-site addresses the learning raised in the strategic paradigm (Inman & Vernon, 1997). This type of learning may take place within a staff meeting where employers share the issues facing the industry. For example, the construction trades often work with insurance bureaus when repairing buildings covered by insurance. Insurance bureaus may change the level of competency expected from employees of these firms to guarantee quality in such repairs. It may be necessary for construction firms doing

repairs covered by insurance bureaus to have a certain number of apprentice carpenters and licenced carpenters doing the work. Employers can communicate these changes to their employees. Knowledge of these changes helps employees know and prepare for these future expectations. In this way, the company and its employees engage in process mapping to develop a plan for on-going change.

Elements of a Portfolio

Portfolio preparation is an exercise requiring self-assessment, analysis, synthesis and prioritizing of learning goals arising from reflection on the ways learning has taken place or may take place on the work-site (Mann, 1997). While there may be common features, the purpose of the portfolio is very important in order to guide its structure and the artifacts which are placed in the portfolio (Danielson, 1996). There are a number of common elements to include in a portfolio.

1. *Life history which indicates the most salient events in a person's life*
   This component involves a short (one to two pages) narrative outlining the significant events in the worker's life and how these relate to the individual's personal attributes and values. This life history should indicate the origins of work goals for the employee and how the person views his or her work personality and the skills and competencies presently possessed.

2. *A chronological record which details a list of work experiences since school graduation*
   This aspect contains a list, in outline form, of the work performed by the person including both paid and unpaid experiences. The record should contain the following: when the work experiences were accomplished, the duration and responsibilities of the work experiences, and the location and the name of the immediate supervisor in each work location.

3. *A paper citing life experiences and the learning gained from them*
   This paper should proceed from the first one in which the worker out-

lines what and where workplace learning has taken place. The paper should be short and worded in a concise and clear fashion. This information helps the employer to assess the quality of the learning.

4. *Evidence which supports the learning*
   This evidence includes a number of artifacts attesting to workplace learning. Ideally before this component is completed, the worker should use a list of competencies which outlines the pre-requisite skills and knowledge for the worker in his or her selected area of work. For example, apprenticeship and occupational certification branches of provincial governments publish the competencies needed for workers in a number of trades. Workers should carefully analyze these lists and present artifacts which attest to competencies in these areas. Such artifacts include certificates and diplomas from educational institutions as well as a list of the competencies mastered in the institution, testimonials from peers and supervisors verifying the learning, photos of products demonstrating the competencies being attested to, sample drawing of projects which were undertaken, and/or videos illustrating the person performing the competencies. In addition, it could include outlines of workshops attended.

5. *A paper outlining the person's personal, career and educational goals*
   This paper should be short, about one page, in which the person reviews these goals as arising out of salient work experiences. This report could be presented in outline form so that the employer is able to gain quick knowledge of what the person wants to accomplish.

Portfolio development should not be done in isolation but should directly relate the learning to a goal, ie., meeting technical competence in the workplace. It should be done in consultation with employers or government personnel responsible for labour standards who are knowledgeable about the needs

of the labour market, and who are able to assess the types of learning experiences which demonstrate competence to meet these needs.

Issues in Portfolio Development

Employees may experience some difficulties as they engage in assembling a portfolio (Boud & Walker, 1993). The reflective process requires employees to focus on themselves, their context, and the use of a number of skills and strategies with which to engage in self-assessment. Additionally, the process requires employees to attend to the learning components of their work experience and evaluate the results of their learning. The difficulties which prevent an employee from engaging in this process may come from a variety of sources and can be considered as arising either externally or internally to the person.

One internal source of difficulty centres on the employees' perception of their past work experiences. Three such difficulties include the following: having had negative experiences in their past work histories which do not leave them objective about workplace learning, doing workplace duties without adequate preparation which result in feeling a lack of competence, and working in workplaces which are characterized as stressful.

Further, employees may not be very introspective and may lack self-awareness. They may view learning as only taking place in traditional classroom settings and may find it difficult to see their workplace experiences as learning experiences. They may experience low levels of self-efficacy and/or self-esteem and may feel uncertain and unsure about accepting the responsibility for self-assessment. They may view the expectations from others as being too high and unattainable. Additionally, employees may lack the skills necessary to engage in self-assessment.

Further, external difficulties to portfolio development involve the lack of time required for self-assessment and scenario building, particularly if an employer does not see the benefits of such activity. Also, when all employees do not see the benefits, there may be a lack of support and interest in the discussion required to accomplish the

work which is pre-requisite to portfolio development.

Baud and Walker (1993) offer some suggestion for working with these difficulties. They suggest that if the difficulties have strong emotions attached to them, the employee may want to receive counselling. They outline a four phase process which begins by acknowledging that a difficulty exists, and continues on to clarifying and specifying the difficulty, understanding and explaining the origins of the difficulty and working with the difficulty to desensitize and re-conceptualize it. The use of this process enables employees to have a balanced out-look in their present work location and should enable them to be more objective about their present and past work experiences.

In summary, workplace learning involves two groups of people. Employees, one group, have to take responsibility for their past and future learning and document it in a manner which indicates their competencies to perform a definite skill set or to learn new skills sets in a particular work environment. When employees engage in constructing and maintaining a portfolio, they are able to provide the documentation to support their past and future workplace learning. Employers, the other group, have to be ready to accept evidence of this learning, ie., the contents of the portfolio, and engage in a process known as prior learning assessment recognition (PLAR). When employers trust and recognize the evidence in portfolios, they enhance the possibility of furthering the learning which has or can take place in the work-site, as well as help to lessen the difficulties in transitions for employees moving between work locations.

Prior Learning Assessment Recognition

Portfolios are documents which attest to workplace learning. The knowledge and skills learned in the workplace are typically learned in a non-traditional context and using non-traditional methods. A growing movement which seeks to gain recognition for these non-traditional learning experiences is known as prior learning assessment recognition. This term is used to represent a process which

assesses the efficacy of the artifacts in a portfolio as indicators of significant learning and to award recognition by a credible person, institution or professional body.

Employers need to support and engage in PLAR when they assess workers for the work-site. Employers are appropriate individuals to assess and provide recognition for the contents of portfolios. They are knowledgeable about the skills and processes inherent in the technical, interpretative and strategic paradigms of workplace learnng. Further, their work experiences enable them to assess the skills and knowledge needed to make their work-site productive and competitive. When employers provide PLAR, they contribute to the on-going development needed to keep employees abreast of technological and global demands placed on today's work-site.

What is PLAR?

Proponents of PLAR argue that what one knows is more important than where one learned it. PLAR takes a broad view of learning which encompasses the intellectual, spiritual, emotional, and physical aspects of an individual (Michelson, 1997). PLAR is a means to avoid unnecessary duplication of training and education efforts and is an appropriate way for adults to have their learning assessed, to identify their goals and commitment to life-long learning, and to have these goals and learning accomplishments recognized (Mann, 1997). PLAR documents evidence of both traditionally acquired learning as well as learning gained in non-traditional ways (Barkatoolah, 1989). This movement addresses the question of how life experiences in the area of work, leisure and education can be structured to provide for ease of assessment and accreditation (Barkatoolah, 1989).

A big part of the motivation for PLAR is premised on the reality that economic competition in world markets requires a work-force who can respond to the needs of business but do not have the time to do the lock-step method of demonstrating evidence of their competence (Mann, 1997). In addition, when workers change employment locations

due to changes in the work-site, proponents of PLAR argue that the learning which took place in the previous employment sites should be recognized in any future employment site.

Presently PLAR is primarily used to demonstrate academic competence, but there are indications that it is being used to show evidence of professional competence as well (Michelson, 1997; Fostering a Profession, 1999). Currently, the Standards and Guidelines Initiative has developed standards for the practice of career development in Canada. While further refinement is necessary, the work of the Standards and Guidelines Initiative is based on the assumption that traditional learning venues are not the only ones which can be used by individuals to demonstrate mastery and competence in a work domain. More specifically, individuals will be able to document prior learning experiences gained in non-traditional ways to demonstrate their competence within the broad domain of career development. This recognition provides a sense of social justice for individuals who have gained, in non-traditional ways, the same competences as those who have learned them in them in the traditional manner (Barkatoolah, 1989). When this recognition gains a broader acceptance, it will permit learners entry into professional associations as well as programs of higher learning (Mann, 1997).

Issues in PLAR

There are a number of issues which must be addressed prior to assessing a portfolio (Barkatoolah, 1989). Both employees and employers involved in this task should be aware of these issues and clarify them so that everyone feels that fair play has taken place. One issue is the criteria used for assessing the artifacts in the portfolio and whether these artifacts are suitable indicators to reflect the standards on the work-site. There are two components to this issue. One component involves measuring the indicators and the other involves predicting the fitness of the worker to perform adequately in the workplace. For example, a worker may have all the skills needed to perform the work required but may not be able to do the job with sufficient speed to

ensure accuracy. Speed and accuracy are important factors in productivity but it may be difficult to infer them from learning artifacts. Also, a person may have worked up to expectations in one setting but not be able to meet the expectations of another due to differences between employers. Further, sometimes it is difficult to separate what is being assessed in the portfolio – the person or the artifacts. Often people may feel that their self-worth is being assessed and not the artifacts. This issue raises the importance of employees giving careful thought to including artifacts which accurately indicate their competencies.

Another issue in portfolio assessment involves the background of the worker and the assessor. Each of these individuals has a socialization history with different experiences and expectations. Assessors may have had challenging demands placed upon them to perform tasks at a high level of competency while workers may not have had such expectations. A minimum level of competency is sometimes difficult to determine. For example, it would be difficult to determine the minimum level of competency acceptable in cabinet making due to the many styles and intended purposes of the cabinet being constructed. Ideally the portfolio developer and the assessor should have similar experiences, however, each should be aware of their background to ensure more objectivity and to be aware of the limitations of the assessment process.

In addition, there is the issue of a power imbalance between the assessor and the employee. Employees have a right to a fair reading of the indicators of their competencies, however the assessment process is the responsibility of the assessor. Assessors need to be knowledgeable about how to give feedback to employees. Employees need to have the skills to receive this feedback and to ask questions about the assessment process. Further, there are issues of confidentiality which can influence an employee's self-efficacy and motivation in future such endeavours.

Conclusions

Workplace learning has implications beyond performing the duties required with an occupational position.

Such learning requires employees to go beyond mastery of level entry skills and knowledge and to acquire the future skill needs of their occupation to remain competitive in today's markets. Portfolios represent a multi-textured view of the employee and can be used to demonstrate the products and processes of life-long workplace learning. Constructing a portfolio requires employees to take responsibility for their skill development and to actively seek ways and means to develop new work-site skills. Many of these ways exist on the work-site, and if used, enable employees to continue their life-long learning without resorting to traditional means to develop their competencies. When portfolios are constructed in a thoughtful and reflective manner, employees are able to document their work-site competencies and also present a credible picture of themselves.

Prior learning recognition assessment is individualistic and provides for recognition of the learning acquired on the work-site. Appropriate use of PLAR provides the needed recognition of workplace learning gained over an employee's life-span. Together, portfolios and PLAR provide a direct link between life experiences and workplace learning. The skills of self-assessment and portfolio construction must be learned while workers are in their initial stages of skill and knowledge development, if these skills are to be used to guide their life-long learning. Additionally, employers must be given the opportunity for training in portfolio assessment to ensure an open and fair process, and to provide and encourage the needed recognition of employees who have learned work-site skills and knowledge in non-traditional ways.

In spite of the difficulties inherent in the development and assessment of portfolios, employees and employers must recognize the work-site as a viable place within which to learn competencies for successful deployment on the work-site. When employees and employers work together in an open and fair manner, they ensure a workforce which is skilled to meet the competitive demands of business markets. Together they are able to work in a complementary manner to develop a

vision which helps to revitalize an organization and produce a work environment which provides for human resource development to take place.

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