

## **A Model Concerning the Assessment of Knowledge and Skills in the Workplace**

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### **Introduction**

Recognition of prior learning (RPL) has become a widely used method for visualizing and assessing learning and experiences that have generally been achieved outside the formal educational system (Andersson & Harris, 2006; Challis, 1993; Evans, 2003; Andersson & Fejes, 2010; Valideringsdelegationen, 2008). The development of the opportunity to have knowledge and skills recognized and assessed can be seen as a result of recently changed perspectives on learning. This change is largely due to the perspective of lifelong learning, which sees extended and prolonged opportunities for knowledge and skill development all throughout the life cycle (Jarvis, 2007). Seen from a political standpoint, RPL has featured prominently in European debate and policy work when occupational and employment issues have been discussed (Kok, 2004). This debate has dealt mainly with the problems of low employment rates. From a research perspective, this debate and the increasing use of RPL methods also raise new questions regarding different aspects of workplace learning and how to look at the concept of competence (Fenwick, 2006; Billet, Fenwick, & Somerville, 2006; Andersson & Harris, 2006; Harris, Breir, & Wihak, 2011).

The methods used when performing RPL around the world cannot be said to have reached a standardized form, but seem to have similar components and focuses. The subject of the validation process is supported in showing the general or specific knowledge or skills that she or he has achieved, having them assessed and evaluated by an expert and finally receiving a documentation of the result of the validation process, e.g., grades, certificates, etc. From a societal perspective regarding democratic aspects, there is an explicit interest in Sweden in seeing that RPL processes are carried out in the same manner regardless of where the person is being validated, and that the documented results are comprehensible and transferable on a national level (Valideringsdelegationen, 2008). Even if this is an objective for the Swedish National Agency for Higher Vocational Education, which is responsible for RPL issues in Sweden, it has to be seen as a complex field of work. In Sweden, RPL processes have been performed according to both upper secondary school system criteria and criteria in different branches of occupations. Depending on which criteria the RPL process has been measured by, the degree of transferability of the certificate naturally differs.

In an earlier paper, different assessment activities in workplaces were investigated in comparison to “traditional” RPL activities (Berglund & Andersson, 2012). The question posed was about how employers visualize and assess their employees’ knowledge and skills when they are about to be recruited, as they are developed in the workplace and when they are about to leave, due to career changes, retirement, etc. The results showed that working organizations have more or less implicit “systems” for assessing the knowledge and skills of their employees. The difference in comparison with a more “traditional” RPL process is that the reasons for assessing knowledge and skills are more a matter of usage in the activities of the organization, rather than the individual having documented proof of her or his skill. These activities, mainly managed by the employer and in many cases also with the assistance of the employees, were given the working title “Workplace RPL.”

In this paper, I present an Occupational Competence and Qualifications Model, originally developed by

Ellström (1992; 1997) but now adapted and advanced in order to illustrate how the relationship between RPL and this “Workplace RPL” in a Swedish context can be understood. The model also points out some vital aspects of the negotiation of skill on the labor market, and in that sense, can shed some light on power relations on the labor market and the extent to which employees have opportunities to develop and have their skills visualized and assessed.

### Two Different Assessing Systems

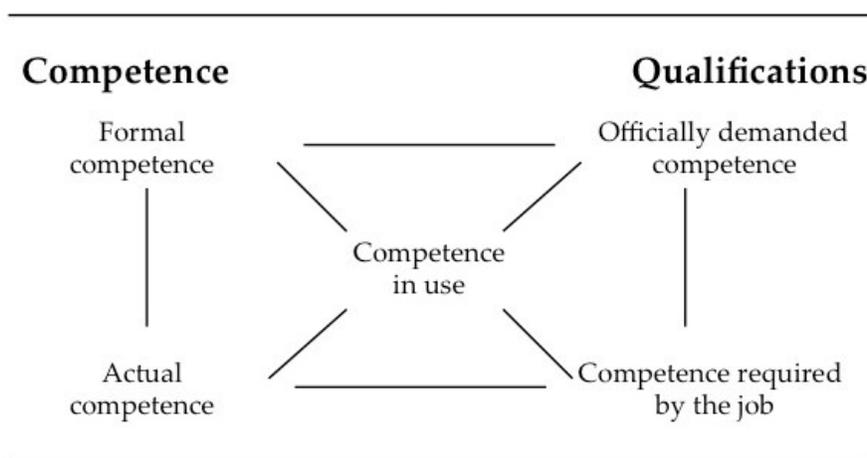
In different definitions of RPL, there is a focus on prior learning and its outcome, often talked about as knowledge, skills or competence (Andersson & Harris, 2006). These outcomes are often not clearly described or defined but rather generally implied, and taken for granted as common knowledge. Several attempts have been made to spot different aspects of the term *competence*, with the aim of problematizing too-simple explanations of the outcomes of workplace learning (Fenwick, 2006; Ellström, 1992; Billet, Fenwick, & Somerville, 2006; Lave & Wenger, 1991). Ellström (1997) tried to pinpoint “competence” as:

... the potential capacity of an individual (or a collective) to successfully (according to certain formal or informal criteria, set by oneself or by somebody else) handle certain situations or complete a certain task or job. (p. 267)

This means that competence according to Ellström is closely tied to the capacity of an individual or a working team, but nevertheless focused upon work tasks. Another closely related concept is *qualification*, most often used simultaneously with the notion of equal content. Ellström also has tried to define this term and tied it to the requirements of work tasks rather than the capacities of an individual or working team:

...the competence that is actually required by the work task; and/or implicitly or explicitly prescribed by the employer. (p. 267)

This division of the concept of competence, understood as the property of an individual (or working team) *and* as the demands or requirements of the employer or work tasks, gives rise to several different interesting and interrelated questions regarding both societal and labor market issues. Ellström (1992; 1997) summarized and discussed the definitions of competence with the support of an Occupational and Qualification Model:



**Figure 1: Different meanings of occupational competence** (Ellström, 1992, p. 38; 1997, p. 268)

As the model shows, competence can be divided into two general categories that can be further divided in two other aspects (an additional fifth aspect of competence is shown in the middle). According to Ellström’s (1992; 1997) definition of competence as the capacity of an individual to carry out a work task, the first category is named *competence*, and is divided into *formal* and *actual* competence. *Formal competence* is simply understood as formal education or similar, which is often presented in the form of grades, certificates, documentation, etc. On the Swedish labor market, the importance of a school leaving certificate of upper secondary

school is nowadays considered almost mandatory and often seen as a marker of general social and learning capacity (Olofsson, 2005; Richardson, 2010).

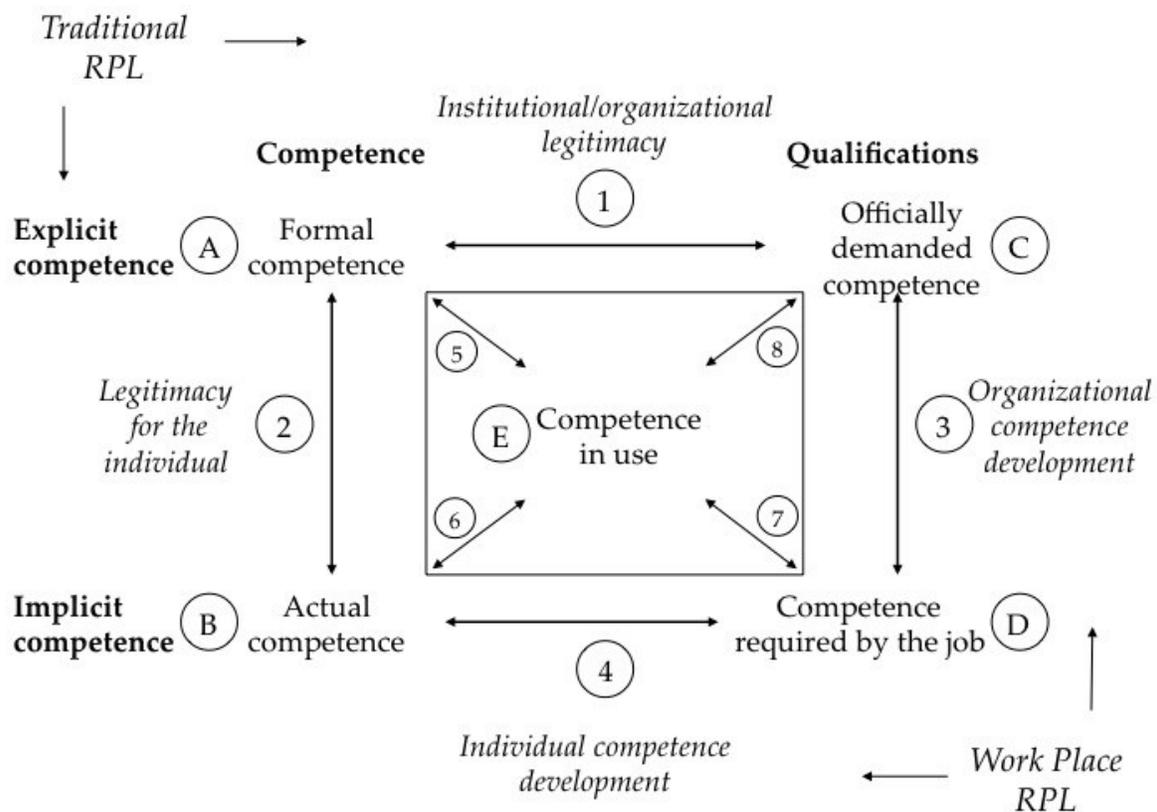
This aspect of competence is contrasted with *actual competence*, the knowledge and skill the person is actually capable of contributing in practice in a working situation (Ellström, 1992; 1997). This, of course, touches on the seemingly eternal question of the limited capacity of the formal educational system to contribute the appropriate and demanded knowledge and skills to the labor market. But it also can be seen from an individual level as the inability of society to recognize different forms of informal learning, e.g., workplace learning. For example, the *actual competence* of a worker with several years of experience in a trade in comparison with his or her original formal education is of much more value to the employer than what can be proven by certificates.

The second category (to the right in the model) considers competence as qualifications and also is divided in two categories. The first is *officially demanded competence*, which like *formal competence* is officially stated, often by the employer or trade branch (Ellström, 1992; 1997). The expansion of the educational system and the fact that many people, especially women, are reaching higher educational levels, has come to influence both the content and constitution of competence demanded by many work functions (Kok, 2004; Jarvis, 2007). This aspect of demanded competence also can be seen as a competitive advantage in marketing the company and can therefore be seen as highly important, at least in terms of competence, but also as signs of professionalization processes (Colardyn, 1997; Björnavåld, 2000). Ellström (1997) put this type of competence in contrast with the category, *competence required by the job*. Even if the difference between these two categories might not be much talked about nor a big issue at many workplaces, they should be treated as two different, distinct categories of competence. Research has shown that the latter is often characterized as tacit, undocumented, unspoken and also collective (Fenwick, 2006; Billet, Fenwick, & Somerville, 2006). Competence development, e.g., nonformal education and internal company courses, can be seen as an employer's way of dealing with actual or sometimes imagined task-related needs in this area. This also has been a matter for unions, with the objective of highlighting existent competence within the workplace using different competence mapping activities in order to have a more profound base of arguments in wage negotiations (LO, 2003; Svenskt Näringsliv, 2006; Svenskt Näringsliv, 2008).

With the third category, *competence in use*, Ellström (1997) brought in a fifth dimension of competence. This is closely related to the other categories but is nevertheless a unique category in itself. Its location in the middle of the model illustrates that it "balances" the competence of the employee with the demands of the employer and work tasks. Therefore, the factual *competence in use* also signals both overt and covert bargaining and negotiating issues. In a case study at a paper mill in the early 1960s, Lysgaard (1961) showed ingeniously that the employees collectively displayed highly elaborated strategies for not revealing the extent of their competence in the workplace, in order to put up against the demands of the employer and the technical-economic system of the organization. It also can be assumed in the analysis of this aspect of competence that employees do not always use or bring into the open all aspects of his or her knowledge and competence, due to both lack of economical compensation and lack of interest in certain work tasks (Berglund, 2010; Berglund & Andersson, 2012). On the other hand, it also can be assumed that different aspects of the competence that is used are not officially demanded by the employer, nor paid for.

### **A Model for Analyzing the Visualization and Relations of Competence in the Labor Market**

In the following, an elaboration of the model is presented with particular focus on aspects of recognition of prior learning (Berglund, 2010). A transformation of Ellström's model with an RPL focus has previously been made by Andersson & Fejes (2010, p. 61) in which the aspects of informally developed competence in particular were discussed. The objective with the elaboration of this model is to illustrate the relationship between the position of traditional RPL activities and general and specific assessment activities, previously mentioned as workplace RPL, that are used primarily by the employer in order to assure the supply and control of the knowledge and competence required by the organization. This looks as follows:



**Figure 2: A model of competence aspects from an RPL perspective** (Berglund, 2010, p. 67)

The model can be considered from three analytical perspectives: at a micro, meso and macro level. When looking at the model from a *micro* level, the situation of the individual and the single company or organization is mainly in focus. At this level, the model is used to question the competence of the individual and the need for and use of competence in the workplace. From a *meso* level, the workplace can be studied from an organizational, a local or a trade branch perspective. On this level, the model can be used to ask questions about the local needs of competence within the municipality, the single organization or the local branch. Finally, when looking at the model from a *macro* level, it is understood and analyzed from a societal perspective. On this level, the model can be used to discuss structural issues such as the educational system, general challenges in the field of knowledge and competence in relation to the national market, RPL national structures, the role of unions, organizational learning, etc. There cannot, of course, be any sharp boundaries between these three different levels of perspectives and they can sometimes overlap, but the simple point is that the model should be useful in reflecting on competence and RPL activities, not only for the individual and the company but also for branches and from a societal perspective.

### Explicit and Implicit Fields of Competence

The five previously mentioned aspects of competence have the same placement in this model as in the original devised by Ellström (1997) and are marked from A-E in Figure 2. The model should be further split into four fields, where the vertical split divides the different aspects of competence into *competence* and *qualifications*. *Competence in use* (E), in the middle of the model, can be seen as related to both sides (something that also is applicable for the next division). The second, horizontal division highlights the *explicit* and *implicit* character of each of these competence aspects. The explicit field of competence is the competence that is officially documented and demanded, as Ellström (1997) wrote. On a micro level, this is represented by the school leaving certificate and by the description of the competence required in a job advertisement. When examining this

category from a meso/macro level, the model can be understood as reflecting the products of the formal educational system in general and the broader demands of different trade branches.

The character of the implicit field of competence (at the bottom of the model) is more or less informal, tacit and often not documented. Because of the implicit aspect of competences in this specific field, these are subsequently the main targets for RPL activities. Indeed, this can indeed be said to indicate the black box of competence in society and has in many policy documents been outlined as a great source of competence supply to the European market, if it can be transferred to formal certificates, e.g., through RPL (Colardyn, 1997; Björnavåld, 2000). The competence in use (E), in the middle of the model, can be seen as a mixture of explicit and implicit aspects of competence, both seen and known and tacit and not officially recognized.

#### Relations, Movements and Tensions

After distinguishing and categorizing the different types of competence in order to highlight its explicit and implicit character and its value for the individual and the company, a closer examination can be made of the relationships, movements and to some extent the tensions between the five types. The first relationship examined is between formal competence (A) and officially demanded competence (C), and marks the need for institutional/organizational legitimacy (1). A simple visualization of this relationship on a micro level is the jobseeker comparing his or her own formal education with the description in a job advertisement of the competence required by a role. A vital aspect of this relationship is that it concerns the selling and buying of competence on the labor market, and the negotiations and bargaining involved in this process. On this level, it can be seen as the individual's ground for legitimacy as an employee, and the estimated level of legitimacy for the organization in having the required competence for its activities.

On a macro level, this relationship also highlights the "production" of knowledge and competence by the educational system, which has been highly debated and criticized for its lack of concurrence with the actual demands of the labor market (Olofsson, 2005; SOU, 2002; Svenskt Näringsliv, 2006; Åberg, 2002). On a meso and local level, the challenges of supply and demand in this field have been met by different types of activities, e.g., industrial college, branch committees in upper secondary schools (branschråd) and the development of training. On a societal level, this relationship concerns the legitimacy of society as a producer and provider of knowledge and competence to the labor market. However, it is equally about the legitimacy of the company, branch or labor market as a whole in having educated, competitive and high-quality workers. This can be especially noticed in many Swedish municipality divisions, since both the awareness and the demands of the users of common and collective activities have increased (Pestoff, 2009; Montin, 2007).

The next relationship (2) is between formal competence (A) and actual competence (B). This concerns the relationship but also the movement and tension between what is formally documented, i.e., how much of a person's competence can be officially proven, and what the person is actually capable of. There also is an aspect of time involved in this relation. There is, of course, a great difference between a newly examined plumber and a plumber with 20 years of experience, but formally, the difference between the two may not be significant. Conversely, the actual competence of a person with a 20-year-old certificate or grade but with no experience whatsoever in the trade may not be of much use to either the employee or the employer. Even if many employees enhance their formal educational level during their working career, it is more often the actual competence that is developed in what is called "workplace learning" (Berglund & Andersson, 2012; Billet, Fenwick, & Somerville, 2006). The "struggle" or tension in the relationship is subsequently about the legitimacy for the individual since it is mainly about the visualization of the competence formally achieved and the assessment of the competence informally achieved.

Actual competence (B) can be seen as the symbol of lifelong learning (Challis, 1993; Jarvis, 2007; Evans, 2003). Since workplace learning is most often tacit and seldom documented in certificates, there lies a vast treasure of not yet assessed knowledge and competence in many organizations (Björnavåld, 2001; Colardyn,

1997). Even if there is much focus on formal knowledge and competence, the employer has to have methods for considering the value of not yet assessed competence, both within and outside the organization. Here lies a tension, but also a possibility for both the individual and the organization to make informal competence known. In general, RPL methods are designed to meet this challenge. As previously described, traditional RPL methods meet the needs of the individual, while the employer has other “systems” of assessing and putting into use the competences that are needed in the activities of the organization (Berglund, 2010; Berglund & Andersson, 2012).

The third relationship (3) between *officially demanded competence* (C) and *competence required by the job* (D) highlights the notions of competence in the workplace, within the organization or the labor market. An interesting discrepancy is the fact that Åberg (2002) pointed out that far more jobs in Sweden officially demand (C) higher education than what is actually required by the job (D). The movement that characterizes this relationship also is about the uncertainty regarding the competence demanded within the organization, something that many management concepts and ideas both assist with and capitalize from (see Furusten, 1999; Örtenblad, 2009; Røvik, 2008). This movement and tension is therefore about *organizational competence development*. The interesting part is that the movement goes back and forth between the explicit and implicit field of competence. This presents the difficulty in factually pointing out the precise competence needs within the company. From the employer, there also is a general interest in upholding the image of a high degree of competence development in the organization, since it speaks of legitimacy and is used in marketing products or services. From the perspective of the employees, the relationship also can be seen as a tension between different interests. Generally speaking, it is, of course, of great interest for the employee to be looked upon as highly competent for the work that they have been hired for, but the situation in reality can be different, something that competence-mapping processes within the organization can reveal. Unions in Sweden have occasionally questioned these types of investigations since it sometimes becomes obvious that the competence of certain employees in fact does not meet expected criteria or standards.

The fourth relationship (4) is found between *competence required by the job* (D) and *implicit competence* (B). This illustrates the differences between what the individual has *actual competence* for and what the job in fact requires. When comparing this relationship with the relationship between *institutional/organizational legitimacy* (1), the former can be seen as the often hidden version of the latter in the search for and development of competence in order to meet the demands of the organization. The implicit character of this relationship is not only shown in the lack of official documentation, but also in the fact that much of the matching between the individual’s competence and the requirements of the job is done in silence and sometimes only known by the individual him- or herself. Therefore, this relationship can be seen as *competence development of the individual*.

The next four relationships (5-8) in the middle of the model have their starting point at the *competence in use* (E) aspect of the competence concept. Aspects of these four different relations have already been hinted at in the other examples given above. An example of the relationship (5) between formal (A) and used competence (E) can be the continual development of formal education outside and inside the organization. For the employer, this can be a matter of motivational activities and benefits in order to stimulate the employee(s) to enhance *formal competence* at work. Relationship (6) between used (E) and *actual competence* (B) involves the motivations for using the *actual competence* that is developed in work or perhaps brought to the organization. This is connected to both explicit and implicit aspects and is an issue that unions can often be a part of. This speaks about the challenges of using RPL processes in the context of the workplace.

Similar to the fourth relationship (4), the next relationship (7), between used competence (E) and the competence required by the job (D), signals the need for competence development as well as hidden or unacknowledged competences not in use, depending on the fact that required competence is not equal to what is officially demanded. The last relationship (8) shifts the focus to what is officially demanded by the employer or

organization and therefore has a more explicit character. This highlights the relationship between the type of competence and the quality of competence that the employer requires of the worker. This can therefore be an example of a working collective strategy in just using competence in order to show the employer, while the competence required by the job is not done in public (Lysgaard, 1961).

### **The Fields of RPL and Workplace RPL**

Lastly, this model has an added RPL dimension. In Sweden, RPL activities in general have been directed toward unemployed individuals and driven by municipalities, their adult education programmes and the Swedish Public Employment Service. RPL activities in Sweden are therefore closely related to the formal educational system. Often, there has been a focus on upper secondary school criteria when the knowledge and competence of the unemployed has been assessed through RPL processes. As a result, traditional RPL has been placed in the formal education corner of the model and can in general be seen as changing *actual competence* (B) into *formal competence* (A), and also meeting the need of legitimacy for both the educational system and the labor market (C).

In the opposite corner of the model we find the center of what is called “workplace RPL.” This is understood as the activities and strategies of the employer in assessing knowledge and competence at the workplace, with the purpose of making use of it within the organization (see Berglund & Andersson, 2012; Berglund, 2010). The “motor” of this type of RPL activity is the *competence required by the job* (D). For the employer, it is of the highest importance that the competence needed for the activities of the organization is at hand and that supply of it is controlled. Therefore, workplace RPL is a continuously necessary activity for the employer, and generally, the organization as a whole. This takes *actual competence* (B) into consideration and is communicated as *officially demanded competence* (C).

### **Discussion**

As the model attempts to illustrate, there seems to be an unmistakable division of how knowledge and competence is made visible and how RPL activities are used, depending on your position as an individual. In a Swedish context, it still seems that RPL is closely attached to the formal educational system. Though the Swedish National Agency for Higher Vocational Education, which is responsible for caring out Swedish RPL policy, has a close relationship with the trade branches regarding different branch-specific RPL systems, the focus is on the unemployed, students and immigrants, in that order, and not so much on employed people (YH-myndigheten, 2010; 2013). This is, of course, largely due to the more or less implicit division in society where the public domain is responsible for formal education, employability in general and the consequences of unemployment, while the private sector generally takes care of the development, adaption and matching of knowledge and competence at the workplace. For example, the Confederation of Swedish Enterprise has explicitly expressed their doubts about a wider use of RPL, where everybody, at least theoretically, should have the right to be validated. Their reasoning is that RPL should only be used for the cause of employability (Svenskt Näringsliv, 2008). It is, of course, a matter of cost. In the final report from the governmental committee regarding RPL activities in Sweden, it was stated that it seemed reasonable to assume that the initiator of the RPL activities also should be the one to pay the costs (Valideringsdelegationen, 2008). The consequences of this are that if the individual wants to have his or her at-work developed competence validated, she or he would either have to be unemployed (and become a target for labor market support) or pay the cost him- or herself. In speaking with representatives of different unions, RPL (validering) is a clear part of policy and strategic plans, but in practice has not been seen as a priority.

The foundation for recognition of prior learning is simply that some form of prior learning has occurred, and this is usually something that has been done within the workplace. According to the model, this can be said to be a process attached to two of the aspects of competence: the *actual competence* of the employee (B) and the *competence required by the job* (D). Often, the competence of the employee stays at this implicit level. In the long run, however, it inevitably becomes a matter of changes along the line between *officially demanded*

competence (C) and the competence required (D). This is due to various factors, such as product and technical development, changing demands from customers or environment, etc., but also can be a strategy for marketing the company and its products or services. This can be seen as a type of professionalization of the trade, a process that will eventually require a higher level formal education, a process we have observed in the Western Hemisphere in particular over the last decades (Rifkin, 1995; Castells, 2009; Bauman, 1998). Therefore, there also will be a movement along the line between *formal competence* (A) and *officially demanded competence* (C), a process that on a macro level is mainly an agreement between the society and the private sector and on a micro level, a negotiation between the individual and the company. Interestingly, there is seldom movement from *actual competence* (B) to *formal competence* (A), as long as it is an ongoing learning process and the individual is employed. The risk for the employer is simply too high. Investments in competence development can be jeopardized or become too expensive if visualized, simply because an assessment of competence can provide unions with arguments in the salary negotiation process, or the individual can become motivated to seek new employment where the pay is better, all with a competence ticket in hand.

What might then be a solution? What if we go the other way around? For a long time, workplace learning has been proposed as a way of enhancing general competence levels on the labor market for low-educated workers (Evans, 2003; Ellström, 2001; Wallin, 2011; see also Jarvis, 2006). Among the many benefits of workplace learning are the proximity to working situations, the integration of work and learning both at lower costs, and far more opportunities for setting up learning processes, etc. (Boud & Solomon, 2003; Fenwick, 2006; Ellström, 2005). The responsibilities of universities to society include: working with applied research, taking part in industrial development and learning, and offering companies, industry or other organizations contextually adapted learning programs (Brulin, 1998). This could be a direction in which to take RPL within working organizations. Workplace learning has as its purpose both enhancing the knowledge and competence of the staff, and creating legitimacy for the company and its activities.

It seems unlikely, due to different reasons this article has pointed to, that the knowledge and skills of the employee (B), will be validated (A) by the employer even if this has become more or less obvious related to the demands of the activities (D) within the organization. It seems more probable that the *officially demanded competence* (C) is a key factor in increasing the motivation for the employer to assess the knowledge and skills for the staff (A) when this can be seen as an important aspect when marketing the products and services of the organization. The logic seems to be that if RPL activities are to be a more commonly used method within the organization with the purpose of assessing informally developed skills, they have to be presented as a win-win situation, not only for the employee but also for the employer as a strong argument when marketing the skills of the staff.

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