Work at the heart of firm-based learning

For most employers, employees acquire competences less by taking part in organised training programmes than by carrying out their work tasks. The training and employee trajectory surveys (*dispositif d'enquêtes sur les formations et itinéraires des salariés/Defis*) show that employees whose work dynamics offer the best opportunities for informal learning are also the ones who enjoy the highest levels of access to organised training. This is particularly true for employees in the least skilled jobs.

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The development of competences at firm level is generally assessed by the number of training courses employees attend. Such courses, which are planned and purposive, are easily identified and therefore quantifiable and hence extensively documented in studies based on analysis of statistical surveys on continuing training. The results of such studies reveal numerous inequalities that confirm the old and oft-repeated adage: training leads to training. However, this is not the only path to the development of competences. Only 15% of employers declare it to be the principal mode of new competence acquisition for employees. The majority state that employees' knowledge and expertise are mainly developed informally as they go about their work.

Informal learning, which is highly fragmented and often invisible, eludes any attempt to measure it. It is known to exist but cannot be counted. However, the factors that encourage it have been identified. Qualitative studies carried out by sociologists, ergonomists, educationalists and psychologists have revealed those dimensions of work that foster informal learning*. These dimensions can be captured guantitatively. So what can we say about the distribution of employees between these various dimensions which are linked, on the one hand, to the organisational context in which they operate and, on the other, to the work they carry out? The Defis surveys, which were designed for the study of all forms of learning, provide the basis for this investigation (see Box 1, page2).

The 'work dynamic', a new analytical tool

The numerous studies based on qualitative approaches to learning are now sufficiently convincing that they can be used to identify the factors likely to encourage informal learning at work*. These factors are to found, firstly, in individual firms' organisational and managerial contexts and, secondly, in the work employees are engaged in. By combining them, a new analytical tool can be constructed; this is the 'work dynamic', which is characterised by the extent of the opportunities it offers for informal learning.

The Defis surveys were designed to 'couple together' (i.e. combine) data gathered from employers and employees. As such, they open up new perspectives for analysis. By combining data on the organisational context as described by employers and on work tasks as described by employees, they make it possible to capture individual work dynamics. The only dimensions taken into account in our approach are those likely to promote informal learning; six are located in the organisational and managerial context and three in employees' work activity (they are listed in Box 2, page 2). Each dimension, whether linked to context or activity, is captured by a battery of variables*. On the basis of the data analyses carried out, the employees were distributed among three types of organisational context and four types of work activity. Thus each employee can be characterised in terms of both the context in which

COMPANY INFORMAL LEARNING WORK ACTIVITIES CONTINUING TRAINING

* For a more comprehensive approach (detailed bibliography for the studies, list of variables, data analysis methodology), refer to the digital supplement, available at www.cereq.fr (in French)



The Defis suveys

The training and employee trajectory surveys (Defis) link the training measures undertaken by employees with their occupational trajectories. There are two strands to the surveys:

- the companies strand: a representative sample of 4,500 companies in the private sector (excl. agriculture) with ten or more employees were surveyed in 2015. In some sectors, companies with between 3 and 9 employees were included in the sample. In the study presented here, the field was restricted to those with 10 or more employees. The aim of this strand is to gather detailed information on the context in which employees receive (or do not receive) training.

- the employees strand: a panel of 16,000 individuals, who in December 2013 were employed in one of the companies surveyed in the first strand, is being tracked over a five-year period (from 2015 to 2019).

The Defis surveys were initiated by the Conseil National d'Evaluations de la Formation Professionnelle/National Council for the Evaluation of Vocational Training (CNEFP) and are funded by the Fonds paritaire de sécurisation des parcours professionnels/Joint Fund for the Securing of Career Trajectories(FPSPP) and designed by Céreq.

> they operate, which is more or less conducive to informal learning, and the work activity they are engaged in, which also encourages informal learning to a greater or lesser extent.

At the heart of the dynamic most conducive to informal learning

The three types of organisational context and the four types of work activity can be combined to form a 12-box grid within which the various work dynamics more or less conducive to informal learning are located (cf. Table 4).

The dispersion of employees across the grid shows that organisational context and work activity do not always go hand in hand. However, the classification carried out places a large majority of employees in a dynamic that has at least two of the nine dimensions identified as conducive to informal learning (cf. Box 2). Only 8% are placed in a dynamic without a single favourable dimension.

Thirty-nine per cent of employees work in the most favourable organisational contexts as judged against the six organisational dimensions identified as conducive to informal learning. These contexts foster employee involvement in decision-making, control of their work and the way in which targets are to be met. By banking on a strategy that attaches importance to fame or their brand, the companies in which these employees work foster a sense of belonging to a group with a strong identity. Although each employee strives to improve their own individual performance, their efforts are intended primarily, in accordance with the modes of organisation adopted, to contribute to a collective production plan. Mutual assistance among employees is particularly highly developed here. These companies frequently have to deal with change, whether in technologies or processes or in relations with clients and partners, and so attach considerable importance to the latest developments and, beyond that, to innovation. They have developed a capacity to pool knowledge by formalising their operating methods and procedures at a group level. These firms are those that place the greatest emphasis on the formative value of work by, for example, formally appointing certain employees as tutors or organising extensive validation of experiential learning. Furthermore, by fostering interpersonal ties and exchanges, these organisations enable employees to understand their respective activities better and to establish links between the various jobs, in a word to extend the range of possible learning opportunities. This type of work organisation depends on the establishment of semi-autonomous teams or work groups. Firms also find this advantageous, incidentally, because broadening job tasks and enhancing employees' capacity to replace each other increases internal flexibility.

By combining this type of organisational context with the type of work activity assumed to be most conducive to informal learning, it is shown that only 9% of employees are located in the most conducive dynamic (characteristics detailed in the digital supplement). The employees located in this dynamic confirm in their survey responses that they do indeed enjoy considerable autonomy. They describe a type of work activity that enables them to take responsibility, in particular because they are able to alter their targets and the means of achieving them and subsequently conduct a self-appraisal.

The prospects for learning are also enhanced by work activities involving the accomplishment of a variety of tasks or the resolution of unforeseen problems. Their work also allows them to exchange experiences and compare their expertise

The dimensions of the work dynamic conducive to informal learning

Six dimensions are linked to the organisation and managerial context, namely the decompartmentalisation of work, dialogue and information sharing, reflection on work practices, development of ability to transmit and explain competences, individual commitment fostered by management practices that attach importance to the collective and prospects for development and mobility.

Three dimensions are linked to employees' activity, namely exchanges of experiences and comparison of expertise at work, the activation of cognitive processes and autonomy. and professional practices with others. Working in a team, being in contact with suppliers or clients, going to exhibitions and conferences and taking part in meetings are some of the opportunities provided to foster interpersonal relations. Moreover, these employees are more likely to state that a colleague taught them how to do their work or, conversely, to have themselves taught colleagues how to do theirs.

Two further results reinforce the definition of the dynamic most conducive to informal learning: 91% of the employees located in it state that their 'work involves learning new things' (compared with 52% in the work dynamic the least conducive to informal learning) and 64% that they had 'acquired new competences in the year preceding the survey' (compared with 35%). One question remains unanswered: what about access to organised training by work dynamic? Do the various ways of learning exist concurrently or substitute for each other?



The various ways of learning

Organised training depends on the fulfilment of two conditions: the existence of intention (the aim is to learn) and planning (the training takes place at a set time). It includes courses, conferences, seminars, self-directed training, training in the work situation and job rotation. Training in the work situation is provided in the workplace and uses the trainee's normal work tools. Job rotation involves the provision of training through exchanges, secondment, shadowing of colleagues or study visits.

Informal learning is defined negatively. It is neither organised nor structured (in terms of goals, times or resources). Informal learning is usually unintentional on the part of the learner.

Employees in the dynamics most conducive to informal learning are those who have greatest access to organised training

The employees in the most conducive dynamic have the highest rate of access to organised training (65%), whereas those who suffer the least conducive dynamic have the lowest rate of access (18%) (cf. Table 5 on the following page). Moreover, this order is verified regardless of the type of training: access

Distribution of employees across the work dynamics grid (in %): organisational context and work activity do not always go hand in hand

Employees' work activities Company organisational contexts	Conducive to informal learning They promote 3 dimensions 1. Cognitive processes 2. Exchanges 3. Autonomy	Moderately conducive to informal learning They promote 2 of the 3 dimensions 1. Cognitive processes 2. Exchanges	Moderately conducive to informal learning They promote 2 of the 3 dimensions 1. Cognitive processes 2. Autonomy	Not conducive to informal learning They promote none of the 3 dimensions	Distribution of employees by company context
Conducive to informal learning They promote 6 dimensions: 1. Dialogue and information sharing 2. Transmission of competences 3. Prospects for development 4. The decompartmentalisation of work 5. Reflection on work practices 6. Importance attached to the collective	9*	11	12	7	> 39 %
Moderately conducive to informal learning They promote 3 of the 6 dimensions: 1. Dialogue and information sharing; 2. Transmission of competences 3. Prospects for development	6	11	11	17	▶ 45 %
Not conducive to informal learning They promote none of the 6 dimensions	2	2	4	8	▶ 16 %
Distribution of employees by work activity	17 %	24 %	27 %	32 %	

Source: CNEFP-Céreq, Defis 2015. Field: employees in companies with 10 or more employees.

*9% of employees are both in the most favourable context and the most conducive work activity (i.e. in the work dynamic most conducive to informal learning).

Rate of access to organised learning by work dynamic (%)

Employees' work activitie Company organisational contexts	Conducive to informal learning	Moderately conducive with exchanges between employees	Moderately conducive with autonomy of employees	Not conducive to informal learning	All the employees
Conducive to informal learning	65	50	52	22	49
Moderately conducive to informal learning	49	49	48	25	40
Not conducive to informal learning	46	34	33	18	27
All the employees	27	48	47	23	41

Source: CNEFP-Céreq, Defis 2015. Field: employees in companies with 10 or more employees.

Rate of access to organised training: share of employees who have taken part in at least one organised training event in the year preceding the survey.

to training in the work situation or through task rotation reflects the same inequalities, even though they are a little less pronounced than in the case of training courses. Employees in the most conducive dynamic enjoy the highest rates of access: 56% for training courses and 22% for work-based training or task rotation. The rates for employees in the work dynamic least conducive to informal learning are 14% and 5% respectively, which are the lowest rates.

Thus the various types of informal learning are far from being substitutes for formalised training. On the contrary, the various forms of learning tend rather to exist concurrently. Is it not the case that, time and again, training in all its forms is provided only for the most highly qualified?

The most conducive dynamics are particularly advantageous for employees in the least skilled jobs

Employees in the least skilled jobs are regularly identified as the ones who, according to the statistical indicators, are the furthest removed from organised training. This is true regardless of the type of training; neither training in the work situation nor training based on job rotation can compensate for their lower rate of access to organised training courses and programmes. Are employees in the least skilled jobs more likely to receive informal training, which is often presented as a palliative for the scarcity of organised training programmes?

*These results are derived from a logistic regression that included size of firm, sector, age, gender, socio-occupational category, level of qualification, type of employment contract and seniority.

They are overrepresented in the dynamics least conducive to informal learning but are not absent from the others: five per cent of them are in the most conducive dynamic (9% of all employees). In this case, they are much better provided for with respect to organised training. Their chances of accessing organised training are eight times greater, all other things being equal*, than those of their counterparts in the work dynamic least conducive to informal learning. Their rate of access to organised training, at 68%, is equivalent to that of employees holding the most highly skilled jobs and, like them, located in the most conducive dynamic. For managerial staff, the differential is much smaller, with the chances of accessing training increasing twofold in the most conducive dynamic.

At a time when individual responsibility for training is being emphasised more than ever, these findings support the idea that work, as captured through its dynamic, determines to a large extent employees' access to all forms of learning. This is particularly true for employees in unskilled jobs. Thus this approach based on identification of the work dynamics most conducive to learning indicates which levers have to be pulled within firms in order to ensure that all employees, and particularly the least well qualified, can find the means to extend their competences and perhaps develop professionally.

Further reading

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