

Developing human capital through continuous training

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ABSTRACT The current economic and business environment requires a workforce capable of adjusting and adapting to changes and innovation. Traditional training models based on the job analysis do not suffice to update the knowledge, skills and attitudes of the modern workforce because they do not consider the whole background of competencies held by the workforce collectively and individually. In this paper we analyse the evaluation process of large Asturian firms performing continuous training. We find that the lack of a pedagogical approach towards the training policy conditions the effectiveness of this practice. It creates difficulties towards its impact and evaluation. The paper is based on the results of 45 structured interviews with human resource and training managers in large companies and two discussion groups with trade union representatives. The quotes derived from the interviews were processed with statistical package Aquad 5. While focusing on the evaluation, the paper also provides information on the role of self-assessment, of informal training mechanisms and of middle managers and trade unions in the training process. Therefore serves as a picture of the training process from a methodological and strategic perspective.

Keywords: Continuous training, Training evaluation and assessment, Human capital, Firm competitiveness

不闻不若闻之，闻之不若见之，见之不若知之，知之不若行之；学至于行之而止矣。

Not hearing is not as good as hearing, hearing is not as good as seeing, seeing is not as good as mentally knowing, mentally knowing is not as good as acting; when a thing produces action can it be said to have been truly learned.

—*Confucian Devotional Writing*; Xunzi (340-245 BC). Chinese Confucian scholar, translated by Mr. Kim Bennet.

Introduction

The business environment is becoming increasingly competitive, and keeping up with this new pace of competition requires firms to be ever more dynamic and innovative. The quality of the human capital available to an organisation does not only affect the type, variety and quality of its manufactured products; it also influences its flexibility, speed of production (Blundell *et al.*, 1999) and its innovative capability due to the employees' larger capability to experiment with new knowledge in such a way that something new is created (Bauernschuster *et al.*, 2008). Therefore, human capital and its maintenance are essential for firms. Freeman *et al.* (1990) point to a series of inter-related factors, which have all led to a greater attention to the workforce and its training. These factors include the development of a knowledge intensive economy, globalisation, the speed at which technological changes are occurring, the increases in educational levels in the working population and the widespread influence of the Anglo-American business and capitalistic perspectives. According to these authors, these factors have not only produced greater pressure for training in general, but have also evidenced the need for a model of *continuous* learning and training in particular (Freeman *et al.*, 1990).

In this new context, the tasks performed by the workers have to be reviewed. Instead of performing relatively stable and repetitive tasks over time, workers have to be capable of performing multiple and simultaneous functions in fields as diverse as manufacturing and maintenance, quality assurance or customer care. In addition to having specialised skills, workers are now required to use their abilities to solve problems as they arise, and even anticipate them when possible, using their creativity and innovativeness to do so (Huerta *et al.*, 2003). In this new environment employees manage their own careers, they are empowered at both the individual and the collective level—, they are given more decision-making authority and, at the same time, are expected to

contribute their full initiative and broad skill base to their organisations (Kochan and Osterman, 1994). In this process, updating the abilities, skills and competencies is key.

As noted above, these new circumstances and relationships call for a new model of training. This has been referred to by Luo (2007) as the “continuous training” model and it stands opposed to the bureaucratic control model of training, and its emphasis on traditional job analysis, rule systems and internal labour markets. These elements were characteristic of stable environments, in which workers’ knowledge and skill requirements could be known in advance and so the workers could be taught the exact knowledge and methods to be used in a particular context upon entering it. For most firms today, this no longer holds and/or would prove gravely insufficient.

The new continuous learning model is thus founded on the professional profile of a workforce that has to be continuously acquiring and updating its skills through training, whether work-related or not. From the firm’s perspective, this framework requires that work-related training not be an afterthought, but rather part of a predefined and planned, continuous effort to facilitate employee learning, and so improve productivity and work performance (Noe, 1999). The fact that the results of training programmes are partly intangible and invisible due to the potential causal ambiguity on the relationship between training and productivity, does not imply that training should be considered as any other firm investment. As such, its costs and returns have to be assessed and there should be a clear understanding of why the training programmes are undertaken, how they are managed and programmed and what are its expected effects on both the trainees and the firm.

Continuous training, in this context, also has to be integrated within the firm’s wider Human Resource Management (HRM) policy. This should allow it to be carried out in the most effective manner possible. For this to occur, four essential steps are required. First, it must be performed a thorough analysis of the training needs taking into consideration both the organizational goals and the human resource management strategy. Second, the training programme has to be developed according to the nature of the training, namely whether it is general or specific to the firm. Third, the programme should be directed to those individuals most suited to follow it (individuals endowed with the best human capital at the outset, showing the greatest interest in the training, or most likely to subsequently fully implement the knowledge acquired). Finally, the training programme should be evaluated on the basis of its effects on the behaviour of the workforce, their productivity, and the competitiveness and profitability of the firm..

In this paper, we analyze the evaluation process of the continuous training practices of large enterprises in the region of Asturias, in Northern Spain. Structured interviews with human resource and training managers of the largest firms in the region were carried out with the aim of identifying the methodological and strategic aspects of the

evaluation of training. In spite of the remarkable progress achieved over the years, it is widely agreed that the discussion on training and its evaluation has not been put to rest. Therefore, there is considerable scope to report the results of continuous training and its evaluation with the objectives (and context) presented in this study. The remainder of the paper is structured as follows. The next section presents a review of relevant literature on both the theoretical framework of training and its possible effects on human capital, business profitability and wage increases. The following section presents the sample and the methodological aspects. The qualitative results of the evaluation of continuous training of Asturian firms are presented in the ensuing section that also highlights some of the lessons learned. The last section concludes the paper, providing recommendations for decision makers in terms of the evaluation and provision of continuous training.

Overview of the Relevant Literature

Human Capital and Continuous Training

Human capital is composed of three elements: (1) early ability, which can be acquired or innate; (2) qualifications and knowledge acquired through formal schooling and post-school certificates (education); and (3) competences and expertise acquired through training while at work (continuous training) (Blundell *et al.*, 1999). Human capital can be acquired through formal education or training and is related to the capability to learn. Human capital at the disposal of firms builds on the individual's human capital stock, which can be enhanced and updated through training. Therefore training is a planned and systematic way of improving a person's knowledge skills and attitudes so that he or she can perform the job more competently (Malone, 2003). It refers to the courses undertaken post schooling, which are designed to help individuals develop skills of use in their jobs (Blundell, 1999). *Continuous training* or development is related to the provision of job related knowledge and skills which make individuals more productive, flexible and able to adapt to change and innovations in their jobs and make them ready to take on more onerous responsibilities. *Continuous learning*, in turn, refers to the development of individuals who can be active participants in shaping the sustainability and future of an organisation as a result of the fact that they possess a broad knowledge base and skills for professional and personal growth (Noe, 2005) and allows them to deal successfully with their environment as by acquiring, knowledge, skills and attitudes (Malone, 2003).

This does not imply, however, that the knowledge acquired through formal schooling is of no use in the workplace, nor are training courses the only way job-related knowledge can be acquired. Traditional human capital models distinguish between gen-

eral and (firm) specific training (Becker, 1964). Specific training provides returns in productivity increases in only one firm. It is mainly performed on the job and provided by the firm. General training, on the other hand, can increase productivity in more than one firm. It is highly transposable, and can also be acquired off the job through external agents, such as training centres or trade unions (Veum, 1995). Of course, off-the-job training is not necessarily unrelated to the job; a wide range of skills directly related to work may be transmitted in this manner, for instance, skills and knowledge in new technological developments, ITC practices, legal or accounting procedures as well as managerial, health and safety, leadership or public communication skills. Specific training tends to have a positive incidence on promotion within internal labour markets, while general training may not because it provides the additional benefit of enhanced employability in other firms (Barret and O'Connell, 2001).

An economic central element in the traditional human capital perspective of training provision relates to the ability to appropriate the returns of the training effort. For instance, Becker's (1964) distinction between general and specific training emphasized the transferability of the acquired knowledge across employers. In deciding whether or not to undertake an investment in training, the costs of doing so have to be balanced against the potential benefits accruing from the training. The nature of the training—whether it is general or specific—will thus be critical in this decision, since it determines who will primarily benefit from it and, therefore, who should pay for it. In a perfectly competitive labour market, the rule would be simple: since the costs of training should be borne by the party reaping its returns (increased productivity, or increased wages), general training providing knowledge and skills portable across companies should be financed by the employee; whereas specific training—which by definition is only valuable to the firm providing it—should be financed by the firm itself; or at most be co-financed, in order to reduce the possibility of opportunistic behaviours by the trained workers.

Increasing human capital stock is dependent both on the actual stock of Human Capital (previous education level, past training or labour experiences), and on the employees' response to the training effort i.e. the extent to which employees devote effort to learning and effectively apply the new skills. Additionally, when general training is perceived by the employees as a gift, it can increase their effort to learn and lead to higher productivity levels. If individuals further see the training as a sign that the organisation considers them as a core element within it, then these positive spill overs are likely to be even greater (Barret and O'Connell, 2001); and general training can also, under certain circumstances, be a worthwhile investment to the firm.

The provision of training is not isolated from the general environment of a firm. For example, the role of regulation or trade unions may alter a firm's tendency or intention to implement training programme. In fact, when firm specific training is proposed,

trade unions emphasize on who will bear the costs of learning and which will be the relationship of training to the pay structure, all at the expense of the learning process (Sutherland and Rainbird, 2000). The existence of non-competitive labour markets, with a wage structure linked to the job rather than to individuals' knowledge, skills or abilities can create incentives for companies to invest in both specific and general training. The same will happen if the firm has reasons to suspect employees will leave once the training is finished. The fear of losing employees subsequent to general training may also underlie the difference in outcome for the worker typically found between the two types of training.

The economic sector the organisation operates in also has an important incidence on the training process. For example, the service sector, which is knowledge based and represents around 2/3 of the industrial production in developed economies, has been producing more autonomous and economically affluent and secure workers, lessening the concern for survival and leading to values such as self-expression, freedom and quality of life that are key for empowered individuals (Inglehart and Baker 2000). These values require broad continuous training efforts, with an emphasis on personal growth and an understanding of the organisation's overall business and strategy (Noe, 2005). Meanwhile, the industrial sector, on the other hand, has tendency to remain focused on a more narrow form of training, where the objective is merely to teach workers how to fully exploit a machine by knowing all the technical aspects related to it and to the job in question.

Continuous training and its impact on firm competitiveness

Workforce proves to be an important source of competitive advantage for firms, since knowledgeable and specialized employees add value, are scarce, difficult to replicate and cannot be easily substituted. However, competitive value is neither an intrinsic property of resources, nor it is static; value is accrued with time, with investments toward increasing and improving those resources, and it is also dependent on the nature of the industry in question (Collis and Montgomery, 1995). Continuous training updates workers' skills and grants the workforce the status of a strategic resource for the firm. Indeed, a valuable and capable workforce is a pre-requisite for competing (Grant, 1995), but it is not enough to guarantee success, as firms must also implement mechanisms to update the human capital and facilitate its permanence in the organisation. Work-related training facilitates the development of heterogeneous human capital, while matching the temporary and specific needs of the firm with the specific requirements of the market, thus leading to new or updating existing competitive advantages. If internal labour markets (promotions) operate correctly, work related training may also encourage human capital to remain in the firm.

In brief, work-related training has a strategic function and must be carefully designed in order to anticipate the qualification gaps of the workforce (Leonard-Barton, 1992). This implies having a clear Human Resource Management plan for the workforce, of its training needs and its fulfilment.

From an economic perspective, training is as any other investment a firm undertakes and it should only be performed if its expected return is greater than the market rate of interest of the money invested (Blundell *et al.*, 1999). Therefore, in order to evaluate the training investment, its costs must confront its returns. As it has already been signalled, training as a means of improving human capital stock is intended to increase workers' productivity and higher levels of profitability and competitiveness for the firm. However, it may also originate higher wages and increase the internal promotion and external labour mobility for the workers. The first is a gain and the latter a loss of resources. As a result, training costs comprise not only the direct costs of training provision (enrolment costs, training time, materials and so on), but also the opportunity costs associated with the behaviours of trained workers, who might not learn, not use the knowledge and skills acquired, demand promotions or higher wages or even quit the organization.

Related to the returns of a training programme, it is worth noting that the success and utility of continuous training practices are conditioned by many factors, both at the individual and the firm level. For instance, they will depend on the trainee's initial human capital endowment and his or her interest on the training programme; the human resource management system in practice; and the labour laws and labour market flexibility, for individuals and organisations. Training success will also be contingent on the dynamism of the environment and the need to adapt to technological change; the quality concern in products and processes, which requires workers to possess greater decision making capabilities; and the polyvalence of the workforce which, in general terms, demands the ability to perform multiple tasks. Given that there are so many factors which can influence the outcome of continuous training efforts, an important aspect of any such programme will be its evaluation. However, both training and its effects are difficult to measure. On the one hand, training may not be visible nor recorded, because it can be performed informally (Veum, 2007). On the other hand, as an investment, it is intended to generate a return, but its incidence may be at the individual, the organisational or the societal level, which have different ways to be shown. Finally, the positive effects of training are not necessarily immediate since there might be a time deferral in their implementation.

Despite all these drawbacks, as an economic investment, continuous training has to be measured and thus, in the 1990s, different models for the evaluation of training programmes were proposed (*e.g.* Tannenbaum and Woods, 1992; Kaufmann and Keller, 1994; Holton, 1996; Phillips, 1997; Kirkpatrick, 1997; Pineda, 1998). Kirkpatrick's

model became particularly popular among industrialists and is the most referred to by academics. This model assesses the value of training according to its impact at four different levels: worker satisfaction, learning, on the job behaviour and business results. These can be measured in terms of: (1) course attendance; (2) satisfaction with the programmes (questionnaires); (3) effects on worker behaviours/ transfer of the schemes learnt to the workplace (co-workers observation, teamwork, middle managers supervision); and (4) impact on business results. The first ones and knowledge tests are formal. The job performance tends to be informal and subjective and impact on business results is difficult to measure.

It does not surprise that evaluation of continuous training is seldom done at its impact on the firm's competitive position. Difficulties encountered in this process include (1) the difficulty of getting data on the variables of interest, such as: productivity, competitiveness and profitability; (2) the difficulty of assessing the real costs of training and who bears them; (3) the need to disentangle training from other human resource management practices and from the effects of labour market regulations, which may also affect productivity; (4) the dependence of the effects of training on workers' willingness to be trained and their past skills and expertise; and finally, (5) the issue of causality: is training a result of poor performance or does training lead to better performance? (Blundell *et al.*, 1999). Other factors affecting the impact of training are the nature of the knowledge acquired (specific or generic), where it is acquired (on the job or off the job), who is trained and how are shared –if at all- the potential productivity gains between employers and employees.

After this revision of the literature, we propose in this paper a first research question to clarify *why is training being undertaken by firms and how is the methodological process towards building a training programme*. A second research question is *how is continuous training being evaluated by firms and what is the importance of the andragogic approach to continuous training in the evaluation process?* Specifically, these research questions imply to analyse if there is a methodological andragogic approach to training, how is continuous training being evaluated and whether training is perceived as having any incidence on firm competitiveness and business results and how -if at all- it is measured.

Training in Asturian firms: Context and Sample

Sample

In order to analyse firm behaviour towards continuous training, interviews with managers at the most important firms providing continuous training in Asturias were held. The research purposely follows a descriptive perspective because the aim is to of build a thorough diagnosis of the evaluation process of continuous training

programmes. The information gathered was obtained from training and human resource managers in Asturias (Spain) large companies that perform public subsidized continuous training. Interviewing these managers allows for the specialists' perspective and lets the researchers contextualize any suggestion to improve the training process and its evaluation. Therefore, there is a general objective: Diagnosis of the training practices and their evaluation in Asturian large companies. There are also two specific objectives for this study:

- Assessment of the methodological process and its incidence on the evaluation.
- Approximation to the return on investment of the training effort and how it can be measured.

In this paper are presented the most relevant aspects of the evaluation of training from both a methodological andragogic and a strategic business perspective. However, since the evaluation cannot be isolated from the whole process, its analysis provides a thorough diagnostic of the continuous training practices led by firms.

The research was performed during the first quarter of the year 2014, with information being gathered through structured interviews. The population considered was 58 large Asturian firms that perform continuous training activities under Government sponsored programmes financed from payroll levies through the Spanish Tripartite Foundation for Training. 45 firms accepted to pass the structured interview with their training and human resource managers. In addition, there were 2 discussion groups formed by trade union leaders and training companies to contrast the information obtained.

The qualitative information obtained from the personal structured interviews and the group discussions was analyzed with the software AQUAD 6.0. The content analysis follows the standard procedures (Huber, 2004; Huber *et al.*, 2002):

- Word count, that leads to frequency analysis as an estimation of the strength of the concept.
- Key Word search in order to make visible the relationships between the concepts and basic contents of the research.
- Codification of Word segments according to the key words detected.
- Grouping of the codifications into catalogues.
- Meta-codes to integrate the existing catalogues.

The paper also presents 33 quotes from managers and 8 quotes from trade unions participating in the group discussions that help to clarify some of the perspectives and conclusions drawn. 30 companies are represented in the quotes (three companies are doubled). 14 firms operate in the industrial sector, 9 in the construction sector and 7 in the service sector. 11 quotes are from women managers and 18 from male managers. The 8 quotes from the group discussions are from 6 men and 2 women (7 from trade union representatives and one from a training provider). Table 1 presents the codes that facilitate the identification of the different segments and who produced them (see table 1 on page 64).

SYMBOL	EXPLANATION
I or GD	Informs about the source of the information (I: Interview; GD: Group Discussion).
Number	Digits to identify the document.
M or F	Gender of the respondent (M: male; F: female)
IN or SR or CT	Economic sector of the firm (IN: Industry; SR: Service; CT: Construction)
1 or 2 or 3 or 4	Refers to the age of the respondents (1: 25 to 35 years old; 2: 36 to 45 years old; 3: 46 to 55 years old; 4: more than 55 years old)
TF or TU	For group Discussions TF: Training firm TU: Trade Union representative
Example	Interview number 1, answered by a man from a manager in a company in the industrial sector aged 47 is codified as (I.1.M.IN.3)

Table 1: References used to identify the qualitative segments

Qualitative analysis

The different comments made in the interviews and the group discussions led to 108.000 words. After analyzing them, 1.891 content segments were produced. These were coded into 39 different categories which were then classified into 7 catalogues. These catalogues are the conceptual representations that human resource and training managers in the firms have considered the most relevant for the evaluation of training. Table 2 presents the data. The catalogues found were: the nature of the evaluation (its time, who performs it and its content); the instruments used to perform the evaluation (11 instruments); the purpose or aim of the training programme and thus the focus of the evaluation (individual, group or company); the methodology followed; the role of the regulatory framework and of the trade unions in the training; the problems of the evaluation and, finally, suggestions for improvements. In fact, these categories could be further classified into methodological aspects and strategic dimensions of the evaluation process. Of course, the aspects are directly related to the deployment of the training programme itself.

DEVELOPING HUMAN CAPITAL THROUGH CONTINUOUS TRAINING

DIMENSION	CATALOGUE	CATEGORIES	CODE	f*	F**	FT***
EVALUATION OF FIRM TRAINING (EFT)	NATURE OR TYPE OF EVALUATION (TE)	Initial (I.)	EFT-TE-I	024	487	
		During the training process (P.)	EFT-TE-P	018		
		Final (F.)	EFT-TE-F	094		
		Impact (I.)	EFT-TE-I	061		
		Internal (IN.)	EFT-TE-IN	100		
		External (EX.)	EFT-TE-EX	024		
		ROI Analysis (R.A)	EFT-TE-RA	025		
		Self-evaluation (S.E.)	EFT-TE-SE	053		
		Job analysis (JA)	EFT-TE-JA	088		
		INSTRUMENT (I)	Tripartite Foundation satisfaction questionnaire (Q. S.F.)	Assistance (A.)		
Middle Managers (C.M.I.)	EFT-I-A			092		
Questionnaire to trainees (Q. T.)	EFT-I-MM			028		
Trade Union report (T. U.R)	EFT-I-MM			016		
Firm Department (F.D.)	EFT-I-QT			036		
Practical exercises (P.E.)	EFT-I-TUR			024		
Job Execution (J.E)	EFT-I-FD			016		
Trainer as evaluator (T.E.)	EFT-I-PE			016		
Quality audit (Q.A.)	EFT-I-JE			060		
Software (SF.)	EFT-I-JE			020		
Competencies (C.)	EFT-I-TE			024		
Results (R.)	EFT-I-QA			024		
Personal development (P.D.)	EFT-I-SF			024		
AIM (A)	Competencies (C.)	Results (R.)	EFT-A-C	080	252	
		Personal development (P.D.)	EFT-A-R	056		
		Conflict avoidance (C.A.)	EFT-A-FD	060		
		Team Motivation (T.M.)	EFT-A-CA	032		
			EFT-A-TM	024		
METHODOLOGY (M)	Informal (I.F.)	Kirkpatrick's Evaluation (K.)	EFT-M-IF	088	120	
			EFT-M-K	032		
REGULATION (R)	Collective convention (C.C.)	Training committee (T.C.)	EFT-R-CC	056	338	
		Compulsory Training (C.T.)	EFT-R-TC	032		
		Trade Union does not take part (N. TU.)	EFT-R-CT	096		
		Trade Union Personal development (TU.DV.)	EFT-TU-N	056		
			EFT-TU-DV	098		
PROBLEMS (P)	High cost (H. C.)	Lack of instruments (LI)	FE-P-HC	040	160	
		Difficult to Quantify (D.Q)	FE-P-LI	025		
		No initial diagnosis (N.I.D)	FE-P-DQ	055		
			EFT-P-NID	040		
IMPROVEMENT SUGGESTIONS (I)	Other methodology (O.M)	Quantify training (Q.T)	FE-I-OM	030	090	
			FE-I-QT	060		
1891						

Table 2. Codification of the Evaluation of Firm Training Dimension

* f: Frequency of content segments

**F: Frequency of content segments in the catalogue

***FT: Frequency of content segments in the dimension

The information derived from the quotes in the different catalogues is presented and analysed in the following paragraphs:

Methodological aspects of the evaluation of the training programme

Catalogue 1: Nature or type of the evaluation

This catalogue provides information about operational aspects of the evaluation process such as when it is performed; who does it and its impact. 487 content segments refer to these aspects, which is fairly normal due to the focus on methodological aspects. All firms perform a final evaluation of the training programme (frequency 94); though initial ones are rarely done (frequency 24). Few firms perform evaluations during the training programme. If they do so, it follows an informal way being performed by the trainers who, in addition to train, are expected to perceive how the trainees are acquiring the knowledge or capabilities sought. It can be concluded that the evaluation effort is on the final evaluation, which is also compulsory as it is shown in the following quotes.

“There is no formal evaluation during the training process because the courses offered are short ones and it is the trainer who should realize if there is any need to change the programme, once it has been started” (I.2.F.IN.2, EFT-TE-P).

“We are not required to make an initial evaluation as it occurs with the final one” (I.25.M.SR.3, EFT-TE-I).

“It is useless to perform and initial evaluation; it is a loss of time”. (I.29.M.CT.4, EFT-TE-I and EFT-P NID).

“It is always a final evaluation, we use the Tripartite Foundation Questionnaire” (I.26.M.CT.2. EFT-TE-F and EFT-I-QSF).

“The evaluation is done only at the end of the process due to the regulation obliging us to do so through the specific questionnaires we have to pass to the trainees” (I.18.F.IN.3, EFT-TE-F and EFT-I-QSF).

“If we do not make a formal initial evaluation it is due to a lack of interest or to its cost. Why should we perform an initial evaluation if nobody asks for it? ...” (I.12.F.IN.2, EFT-TE-I and EFT-P-NID and EFT-P-HC).

“...The important one is the final evaluation; we have always done it and it is the only one that they ask us to make...” (I.8.M.SR.3, EFT-TE-F).

From a methodological perspective, the lack of an initial evaluation implies that the firms do not possess an objective and clear knowledge of which are the trainees' initial knowledge stock and capabilities; neither there are benchmarks to compare the results of the training programme once it is finished or while it is being run. This creates difficulties to perform more detailed and formalized evaluation processes, such as the 4 level framework proposed by Kirkpatrick. In fact, what was clear from the interviews is that most firms do have information about training needs but do not formalize them. Managers explain that they rely on informal mechanisms through middle managers' perceptions of the initial situation. It is also usually given for granted that the people designing the pedagogical programme already know which the starting point is and how to deliver the sought competencies. Additionally, they perceive that there is no need for any previous assessment because the starting point for the competencies needed tends to be the job analysis. Therefore, the acquisition of the competencies needed to perform the job is not necessarily integrated with the workers' (lack of or existent) competencies. This fact isolates the training programme from other personal development activities.

“Usually, training managers consider that middle managers are aware of what knowledge and competencies possess their subordinates, so they do not see any need to ask them again at the beginning of the training process. They rely on the trainer”. (GD.2.F.3. TF, EFT-TE- I and EFT-P -NDI).

“Well, we use the job analysis to determine the competencies that have to be achieved, so there is no need to make an initial evaluation. We aim for a result. Training is thus related to the job and not to the person performing it. We know what people must know to perform effectively a task”. (1.9.M.IN.3, EFT-TE-JA).

Despite the firms tend to analyze the impact of training programmes (frequency 61), they do not assess this impact on economic variables based on return on investment (frequency 25). The managers confirm that the impact is analyzed in the capability to implement and apply the knowledge which is assessed by middle managers and through self-assessment.

“Of course we do see training as an investment and as such we do have to measure its return. However, it is difficult to assess it because the results of training are dependent on the person being trained, there may be a gap of time until the knowledge is implemented and there might be some other social costs due to trade unions social unrest if we do not provide training- Training is perceived as a social right..... There is also the need to recover the money paid for through the training levy”. (I10.M.2, EFT-TE-RA and EFT-A-CA and EFT-P-DQ and EFT-TU-PD).

“Quite often, during our visits to the premises workers tell us that during the training course they did not learn all that was needed to effectively perform the job tasks and that they would appreciate attending to another course or the following one.” (I16.F.3, EFT-TE-SE and EFT-I-MM).

“Self evaluation has a positive incidence, since the trainee has subjectivity to define his/her training needs. It is also a qualitative approach to training needs that is the opposite to the job analysis as the source of training needs. However, with training we care about having competencies to perform the job tasks, not how they integrate with the workers’ overall competencies” (I.9.M.IN.3, EFT-TE-SE and EFT-TE-JA)

The firms evaluate the training programme internally and very seldom it is an external body who will perform it (frequency of 100 versus 24). This is a clear consequence of the way the training programme being evaluated: through on the job performance.

“We do not care that much on formal evaluations made by the trainers, but on how the acquired knowledge and capabilities are implemented by our trained employees. Middle managers are able to assess it better than the trainer”. (I40.M.4.; EFT-TE-IN and EFT-I-MM and EFT-I-TE).

Catalogue 2: Instruments

Eleven formal and informal measurement instruments to evaluate the programme were mentioned by the managers. However, the focus is set on those implemented more easily: course assistance and trainees’ satisfaction. Most firms refer to the Questionnaire of the Tripartite Foundation (frequency 104). This is quite logical, because it is compulsory to pass a predefined questionnaire to the trainees in order to access to the training subsidies. As it is also expected, attendance to the courses is also used as a proxy of satisfaction with the course (frequency 92). Job execution (frequency 60) and, thus, middle managers’ surveillance and self-assessment are also relevant to evaluate informally the training programmes. As mentioned above, there is a lack of interest on the theoretical assessment made by trainers through practical or theoretical exercises or questionnaires passed to trainees (frequency ranging from 16 to 20).

“We talk to middle managers because they know what is happening in their premises and departments. The workers tell them what training topics and courses they would like to take and, if it is feasible, we programme those courses.” (I.43.M.IN.4, EFT-I-MM).

“Well, I guess that we do evaluate the results of training on the job when trainees perform it. It is an informal way, without written tests; but after all, it is a form of evaluation; isn’t it?” (I.37.4.M.IN.3, EFT-I-JE and EFT-M-IF).

If practical tests are used to evaluate the capabilities acquired with the training programme they are either related to the performance of the job tasks or to satisfy compulsory regulation or quality audits that require the workers to possess specific certificates.

“The only formal evaluation that we perform is for those workers being trained in such sensitive activities as fire detection and control, health and safety and first aid. The competencies achieved are tested in the factory premises by middle managers and, if performed successfully, the trainees get the accreditation.” (I.3.F.IN.2, EFT-I-QA and EFT-R-CT and EFT-A-C).

Catalogue 3: Aim of the evaluation

As expected, the objective of the evaluation is related to the aim of the training. Most firms’ training is directly related to the acquisition of job related competencies. In a second place, it is also linked to the personal development of the workers, so it cannot be really claimed that there is not an integral perspective of the training policy. However, it is seldom assessed.

“We offer training to our workers as part of their potential development in the company. Any training is beneficial for the employees, as well as for the company; so there is always a personal benefit” (I.3.F.IN.2, EFT-A-C and EFT-A-PD).

There are situations in which a more human resource paternalistic perspective exists and training is performed in order to avoid conflicts, to create a positive working climate or for the employees’ personal development. If the employees are happy performing their tasks and thus do not create conflicts, their request for personal development training courses can be satisfied. This makes training a strategic decision to reduce labour conflicts and to create a favourable labour climate within teams (their frequencies are 32 and 24):

“If a bloke working 8 hours at a 40° Celsius temperature welding day after day asks you for an English language course, you should provide it to him. He must be happy, after all, the poor man has got enough with the job he has to perform; though that’s what it is.” (I.28.M.CT.2, EFT-A-PD).

“We do offer transversal courses, and we expect that mutual contact will allow for a better understanding of other people’s job difficulties and so, they will understand better the problems that may arise when performing a task jointly. That creates a sense of camaraderie and reduces potential conflicts.” (I.36.F.IN.3, EFT-A-CA and EFT-A-TM).

“Sometimes, we have a request from a middle manager saying “c’mon give them a course just to see if they calm down a bit and become friends again”. The managers do not know

what to do to regain social peace and are fearful of ending up having problems with the group; so training is used as an adequate mechanism for social rest” (I.4.M.IN.4, EFT-A-CA).

However, we should not neglect that managers perceive the positive aspects of training for the firm (frequency 56). After all, the final objective and primary purpose of any training programme is to provide workers with a set of oriented competencies that will lead to desired outcomes at the firm level. *“Yes, of course we always expect to get some results”.*(I.45.F.SR.2, EFT-A-R)

“Results are there. They are visible.”(GD.1.M.2.TU, EFT-A-R).

Middle managers assume the training costs, either directly paying for the courses or indirectly, through their employees’ time, so they should have some saying on its evaluation.

“We do scan for training needs within the company to design our programmes; but we also provide an answer to the training needs arising from our middle managers. Of course, there is a minimum group size and when the people in the list are called it might not be the best time for the middle manager to be left without their workers. However, they will benefit from their training” (I.3.F.IN.2, EFT-M-I).

Catalogue 4: Methodology for the evaluation

As it was already pointed, there is no formal evaluation methodology (frequency 88). The informality is related to the analysis in the job performance and to get middle managers’ perspective rather than asking the trainer to evaluate the knowledge or capabilities. The answers quoted so far do not support that very specific formal evaluation programmes are being performed. The managers know about Kirkpatrick’s proposals for assessment of training on business results, but confirm that they are not implemented.

“Well we usually do the ROI , that programme by Kirkpatrick, you know the return on investment . . .” (I.22.M.CT.3, EFT-M-K and EFT-TE-RA).

“Yes, of course we do evaluate, the Tripartite Foundation Questionnaire, we always pass that questionnaire. It is compulsory isn’t it? And well, we also use it for the rest” (I.15.M.IN.4, EFT-I-QSF).

Strategic aspects of the evaluation of the training programme

Once those catalogues that were considered to be more oriented towards methodological aspects have been presented, it is worth concentrating on those catalogues that show a more strategic focus. Of course, this focus does not neglect the fact that implementing the methodological aspects is conditioned by its operational or strategic nature.

Catalogue 5: Regulation and role of trade unions

As pointed above, and due to the population chosen, the firms get a subsidy (or recover the paid levies) to perform training activities. Therefore, they have to abide to certain rules, such as the length of the courses or the obligation to pass a final questionnaire. Four aspects can be highlighted in relation to regulation and training evaluation: the compulsory nature of the training programme for the employees, the provisions set in the sector or company labour conventions, the role of trade union representatives and the existence of a formal structure or training committee.

Most training is performed in response to legal requirements such as environmental hazards, work related safety and health, driving trucks loaded with dangerous products or food processing. In most cases, the workers already possess certificates, whilst in others the firms provide training to grant them new certificates or to update them. The evaluation of the training programme is therefore done through an analysis of the job execution or course attendance.

“I would say that at least 60% of our training is done to update the skills that the law requires our workers to have. If a certificate has to be delivered to prove the acquisition of the competences, we pass job specific tests; otherwise with the assistance is enough” (I.39.F.CT.3, EFT-R-CT and EFT-I-JE and EFT-I-A).

“When we are asked to propose training contents, we first focus on aspects that are required by law, such as health and safety at work; then on training that might give workers generic capabilities for their personal development ...” (GD.2.M.3 TU, EFT-R-CT and EFT-A-PD and EFT-TU-DV).

The sector conventions—which are legally binding—tend to regulate in very generic terms the provision of training. It could be useful to regulate the nature of the training offered and who should bear its costs. However, even though it might seem astonishing, some managers are not sure if their sector convention regulates any training provision at all. This highlights the low importance that sector conventions seem to have on training programmes. In some cases there are compulsory training committees; though with reduced attributions.

“I think that the sector convention regulates something about training, but I could not assure, well... Let’s say yes” (I.27.M.IN.2, EFT-R-CC).

“I think that training should be negotiated in the sector conventions. Training is financed from levies by workers and companies. In some cases, workers ask Trade Unions to offer courses for workers, which they would even pay for if they were not being offered. And I am not talking about generic courses, but specific courses to put into practice in the job.” (GD.1.F.2.TU, EFT-R-TC).

When training is extensively considered in the convention, training committees are created to evaluate the training plans and propose training actions. However, in most cases, the trade unions do not decide which training actions should be implemented or demand courses that increase the workers’ personal development. Human resource and training managers explain that, in most cases, the role of trade union representatives and workers in the definition and development of the training programme is merely testimonial.

“We have got a good relationship with the Trade Union representatives but they really do not care about training...” (I.14. M.SR.3., EFT-TU-N).

“Trade Union representatives agree with everything in training, as long as we provide courses on health and safety at work or any related topics. That’s what they want and they do not really create problems ...” (I.24.M.IN.3, EFT-TU-N).

“The training committee is there, it functions somehow, but I think it is just something we have to have”(I.12.F.IN.2, EFT-R-TC).

“The training committee makes trade union representatives happy. Thus, they do not disturb and we get rid of one problem” (I.7. M.CT.4, EFT-R-TC).

“I think that in my company the training committee is just a way to have us happy and busy. The decisions are not relevant at all. We are a consulting committee but not an operational one” (GD.2.M.4.TU, EFT-R-TC).

“There is a training committee and Trade Union representatives form part of it. We talk about everything and we do consider what the unions have to say” (I.20.M.CT.4, EFT-R-TC).

“It depends, it varies a lot amongst companies. Sometimes, there is a consensus with the Trade Union representatives to define the course content and other times they ask us to make proposals in line with major training topics already set by the company.” (G.D. 2.M.Tf., EFT-R-TC).

“No, no, Trade Union representatives do not decide. Those who know well what kind of training is needed in the firm are the managers not the unions. There is no point on that. ...” (I.38.F.IN.2, EFT-TU-N).

“The company knows the capabilities it wants from its workforce, but it does not ask them nor their representatives about the best ways to achieve them.” (G.D. 2.M.TU, EFT-R-TC).

Catalogue 6: Problems in the evaluation process

Despite training is perceived as an investment by most firms (either because it allows for the acquisition of new competencies and capabilities in the workforce or because it allows for the achievement of a good social climate in the firm), managers consider its evaluation entails assuming great costs due to the difficulties to quantify its incidence (frequencies 40 and 55). Managers and trade union representatives perceive that, in theory, evaluations are made but, in the reality, there are no objective instruments or mechanisms that facilitate this assessment (frequency 25). Therefore, training costs are known (the trainer, the location and the working time devoted to), but it is more difficult to determine its benefits or uses. Its effectiveness or efficiency is not visible. This is the largest problem of the evaluation process.

“I think assessing the impact of any training programme on the economic results of the firm is almost impossible. You do not really know how to measure it. Well, in some cases you can measure the reduction in health and safety risks and accidents, but generally, the effects of any training programme are difficult to seize.” (I.30.F.SR.2, EFT-P-LI).

“There are evaluations and in the performance reviews we are asked questions about the training and its effects, but I guess there is no formal way to perceive the real benefits of any training programme. They have to trust what we -and middle managers- say. Sometimes, I think that they say they evaluate, but in fact they do not really care. It is something that has to be done anyway.” (GD.2.M.3.TU, EFT-P-LI).

“It is costly, non objective and might create an upheaval. Don’t you think so.....?” (GD.1.M.2.TU, EFT-P-HC).

“The truth is that nobody cares. In order to check the effectiveness you should compare the past and the present. If there is no initial diagnosis and you cannot measure easily the effects, you rely on satisfaction tests and informal perceptions. Why should you bother?” (GD.1.F.3.TU, EFT-P-NID).

“We evaluate the impact of our training programme by analyzing the reduction in incidents with our production instruments and the reduction in the use of inputs. The truth is that after the trainings we do reduce both.” (I.11.M.SR.2, EFT-P-LI).

Catalogue 7: Suggestions for improvements

The managers propose that a good methodological instrument for the design, implementation and evaluation of training programmes should be designed. It should consider all stages of the training programme from the beginning of the training process, it should be related to other human resource management practices and it should help to determine clearly how to evaluate competencies, knowledge and skills. In other words it should be useful for the initial assessment of attitudes skills and capabilities, what is expected with the training programme and how should be performed the evaluation process. Managers consider that a subjective assessment of capabilities might originate legal problems if used for promotions or economic rewards.

“We should have a clear instrument to assess the training programme. Until now, we rely on the basic questions related to course satisfaction, but we should have a new methodology to assess both knowledge skills and, the most difficult, attitudes. A methodological programming of the training programme should be the roadmap” (I.21.M.CT.1, EFT-I-OM).

“It all depends what you want to do with the training assessment. Is it going to be the decision criteria to grant a pay increase or job promotion?, If so, the instrument should be objective and measuring attitudes is mostly subjective.” (I.13.F.IN.3, EFT-I-OM).

“I would not like to be in the position of someone who has to measure such an intangible aspect as the level of achievement with a training programme. It is certainly easy to measure knowledge -all of us were assessed that way at school-, but what about skills and attitudes?... A non measureable assessment would not stand. We would certainly fight all this back.” (GD.1.M.3.TU, EFT-I-QT).

“The problem is to quantify learning. If an official certificate is granted things are easier. Workers take it more seriously and accept an examination. It has got some value to them. But if there is no official programme, everybody should know how and when they are going to be evaluated. That is difficult to say beforehand. And if someone fails in the training, should he or she be punished?..” (I.32.F.SR.2, EFT-I-QT).

Final considerations and implications

After the interviews, it is confirmed that the surveyed firms are not engaging in a “continuous training” model due to the large emphasis on traditional job analysis, rule

systems and internal labour markets as sources of the needs to be solved with their training programmes. This was adequate for stable environments but do not respond any longer to modern times. In fact, the firms are adjusting their training practices to the new environment; though it takes time. The most relevant aspect arising from the interviews is the lack of a methodological and andragogical approach to the training process. This conditions both its implementation and its evaluation. In fact, the only firm that controls the impact of training on business results possesses updated information of all the workers' characteristics and provides a clearly defined training programme within the company. Unfortunately, it is the exception and not the norm. Our assumption that there is a lack of andragogical analysis is confirmed. At least there is not a formal plan for the training process, in the sense that there are no predetermined objectives that can be used to measure the training effort (i.e. lack of knowledge about the departing levels, how the results are measured or who should be in charge of evaluating the programme). This does not imply that firms do not have a strategic perspective of training, but, its positive effects could be enhanced should there be a pedagogical programme.

There are two key aspects found:

- a) Most of the training effort tries to comply with legal requirements i.e. environmental hazards, work related safety and health or other certificates needed to perform the job tasks.
- b) The job analysis and not the worker's existing competences is the starting point of the competencies required to perform a job. This conditions the whole programme as it is not person centred but job centred.

In either case, there is no initial assessment of the competencies possessed by workers at the starting point of the training. Therefore, the acquisition of the competencies needed to perform the job is not necessarily integrated with the workers' competencies and their long life learning project. This fact isolates the training programme from other personal development activities. Accordingly, the evaluation effort is put on the final evaluation -maybe due to the fact of being compulsory- and on the informal verification by middle managers who seek to assess the trainee's capability to implement and apply the knowledge and behaviours acquired to the job. In this sense, there is an evaluation, but is not directly related to business outcomes. The largest problem of the evaluation process is that the effectiveness and efficiency of the training programme is largely invisible. Training costs are known (the trainer, the location and the working time devoted to), but it is more difficult to determine its benefits or uses.

From a strategic perspective, employees benefit of training for personal development, though its effects are not assessed. This is done because training is perceived as

tool to reduce labour conflicts and to create a favourable labour climate in team works, or to give some sort of compensation from a paternalistic perspective. Being positive, it would be better to align individual needs with the organisational goals.

Finally, sector conventions do not consider training provisions and programmes. In some cases, there are training committees; though with reduced attributions. Unfortunately, trade union representatives do not channel the training requirements into the conventions and thus, training remains a decision performed by the firm in isolation from the social part. In order to solve the above mentioned problems, a good methodological instrument should be designed. It should be implemented from the beginning of the training process, related to other human resource practices and should determine clearly how to evaluate competencies, knowledge and skills prior and after the training programme. Most training managers do not possess pedagogical skills. Their academic background is business, law or engineering, so the pedagogical aspects are left to the trainer or the training organisation. This tool should allow firms to quantify the competencies related to attitudes towards the correct job performance. Being based on objective measurements, the instrument would reduce any legal problem of implementing at the promotion or wage levels the training efforts. This paper is part of a broader study on the training efforts by firms and only the relevant aspects related to training evaluation have been presented here. Nevertheless, the structured interviews have allowed the researchers to access to broader information that allows us to explain the reality of the evaluation process. Interviews provide more information than questionnaires and it is more comprehensive. In the future, mail questionnaires will be delivered to firms performing training investments in Spain, so a statistical analysis can be done.

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NOTES

1. Other relevant forms of acquiring expertise are learning by doing, observing co-workers, participating in teamwork and speaking with supervisors. Because they are informal, these forms of learning may not be perceived as training; but they are important in organisations, albeit being harder to measure.
2. Public support for work-related training in Spain is subsidized by Tripartite Foundation for Training and Employment. This Foundation was created in 1980 by the Spanish Administration, trade unions and companies' associations. A 0.7% levy on monthly wages (0.6% paid by companies and 0.1% by workers) was set to finance the worker's skills acquisition and requalification. The Foundation's budget is financed with the levy and money from the Spanish Government money, though firms are able to recover all the amounts paid. Not all work related training is financed through the Tripartite Foundation, however, both firms and trade unions can also offer training financed by the European Social Fund or other resources.
3. Frequencies refer to the times the segment appears in the documented material. It is not a count of the number of firms confirming a sentence.

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