E-learning: Which Effects on Socialization in a Work Team?

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Abstract. E-learning tools appear to be an attractive way to help HR become a real business partner. The argument the most often developed to support this linkage derives from the fact that E-learning might propose a new way of dispensing training which would be more effective than the classic one. With several case studies carried out in a number of large French Banks, this paper attempts to demonstrate that to be effective this tool requires a strong reflection on the socialization process of learners.

1 Introduction

Over the past fifteen years or so, work on the factors of corporate competitiveness has established that Human Resource Management (HRM) is a strategic lever for the improvement of the performance [3], [17]. So as to respond to this challenge, HRM is making the effort to develop new tools. In this domain, the Information and Communication Technologies (ICT) would seem to be the most promising. Indeed, the HR intranets, cooperation tools or E-learning enable HRM to propose to its customers – internal or external – individualized contents, adapted to their individual needs. But the effectiveness of those tools is globally uncertain. Some researchers attribute their effectiveness to the fact that they propose a new way of organizing, others link it to their capacities of costs savings, etc.

From the example of E-learning, a literature review and several case studies¹ realized in some French Bank will enable us to show that the socialization of learners must be taken into account to develop a bit further the reflection on E-learning tools effectiveness.

2 Literature Review

After a brief definition of e-learning, we will show that the supposed superior effectiveness of e-learning is usually justified by the fact that it propose a new kind of

Data used in this paper have been collected with F.Delay (CM International), C D'Esterno (CM International), Gérard Godefroy (Alpha-Secafi) and Alain Petitjean (Alpha-Secafi).

"training model". By underlying that this new "training model" has effects on socialization of learners process, we will propose the idea that this fact must be taken into account if we want to propose a global evaluation of e-learning effectiveness.

2.1 Definition and Potentialities of E-learning

The American Society for Training and Development's E-learning glossary defines E-learning as "a wide set of applications and processes, such as web-based learning, computer-based learning, virtual classrooms, and digital collaboration" [16]. E-learning hence covers all the tools which enable an individual to train learners at a distance [12]. But this definition shows that behind this term, different tools are to be found [11] which give rise to uses which do not have the same effect on the individual learning process. Nevertheless, beyond this diversity, certain common features may be identified. E-learning enables the learner to avoid the stumbling block of the unit of time, place and action which is an extremely limiting feature of the classic mode of training: a training course takes place at a precise moment in time, in a single place and with an identical content for all the learners.

E-learning, in fact, enables each learner to train himself when he wants to, where he wants to, when his own professional and/or personal constraints allow him to do so, with the greatest degree of effectiveness. E-learning is also typically referred to as an asynchronous learning environment [27]. E-learning also allows learners to train themselves without necessarily being restricted to the same place [19]. It is thus very interesting to train a small number of people dispersed throughout a country or even at the scale of a continent or the world (experts, for example) or on the other hand to train a large number of people spread out in a network (the counter clerks in a banking network, for example). Finally, E-learning above all enables learners to be offered an individualized training content [23], [29]. Placed partly under the control of the learners [9], these tool enable them to decide upon the knowledge that they wish to develop and what they consider they already master. E-learning offers the possibility of a large degree of autonomy for the trainee in the construction of his own training course. E-learning, in this way, enables the trainer to determine, fulfil and even predict the needs of the learner [21]. He thus avoids a major pitfall of classic training: the alignment of the trainer on an «average» learner who, in most cases, does not correspond with any of the learners really present in the group he has in front of him [23].

More fundamentally, E-learning would appear to be the solution which enables the elimination of barriers imposed by the traditional classroom and overcome problems associated with traditional learning. Traditional education has always been very heavily criticized [6], [22] because the model of the classroom is fundamentally considered as dysfunctional [1], [24]. It is in fact characterized by teacher-directed learning where the teacher assumes a dominant role in the learning environment and thus controls the information that is to be "transmitted" to the students [14], [15]. Therefore, it largely ignores the requirements of learners. On the other hand, E-learning offers a learner-centered model where learners develop their capacity to find the knowledge they want to grasp by themselves and thus acquire problem-solving

competences which will be directly useful in their professional life [25]. In this work, it would therefore appear to be clear that the main interest in E-learning is its capacity to act as an impulse for a new conception of training which enables the trainee to go beyond the limits inherent in the classic training model.

2.2 Socialization of Learners and E-learning Effectiveness

Socialization is usually considered as a resource in a learning process. With elearning, we do not have this resource anymore. In our point of view, the disappearing of this resource must be integrated in the reflection about e-learning effectiveness. To investigate more precisely this situation, we propose to use Dubar's conceptualization [10]. This author showed that training was a succession of extremely singular moments for employees, singular moments in their professional career. Indeed, training is not only a moment when they acquire new knowledge, they are also moments when they "socialize" themselves, that is to say when they develop their social and professional identity. At the end of a training session, they know a little more about a given subject, but they also know a little more about themselves and the others. They are therefore different, they are other people. For this transformation of social and professional identity is not produced simply through an individual reflection about oneself, it is essentially produced through an interaction with others, these others being as much colleagues in the working team that have been left behind, when the individual to "goes off to training", the work colleagues - the same or others - who will be there after the training session as well as the trained group itself.

Claude Dubar [10] thus describes training as a process of socialization which breaks down into a double transaction:

- a transaction with oneself, referred to as biographical, where the individual reflects about himself and makes the effort to build a coherence in his career between his past (before the training), his present (what he acquires during the training) and his future (what he will be or wants to be after his training) and
- a transaction with third parties, called relational, where the individual compares the vision he has of himself with the representations that the others send back to him of himself. The articulation is often delicate because the third parties (in particular work colleagues, as well as the family) often have a deformed image of what we consider ourselves to be. The training itself reinforces this difference since it helps the individual to develop in his knowledge, in his representations and in his identity (the biographical transaction contributing to make him envisage other futures) while the third parties (work colleagues, the family, friends) do not themselves evolve. As in most cases, they do not follow this training or any training, they do not themselves develop their own identity. It is also fairly unlikely that they may make the representation that they have of AN Other or AN Other, evolve.

In this relational transaction, the only really effective support for each individual who is living it is the community of learners themselves. Even if they are not all on the same socialisation trajectory, the learner most often finds within the group of learners, one or several persons who are living the same type of identity evolution and the same

type of shift – often painful– between what they consider they have become and the way in which third parties consider them [8]. This cohesion between the trained constitutes a resource to enable them to pass this finally difficult obstacle which is the training process.

3 Research Objective, Approach and Methodology

Neville K., Heavin C. and Walsh E. affirm that "E-learning is regarded as the "silver bullet" solution to training issues faced by organizations, despite little quantitative evidence to support claims of its effectiveness" (p.119) [21]. Sometimes e-learning is not simply considered as a new training medium among others, it is considered as the tool which will make the traditional model disappear for it is considered as more effective for the teaching of learners. From our point of view, this over-rated expectation, as far as E-learning is concerned, harms the objective evaluation of its effectiveness.

This research study has analyzed the E-learning tools developed by four large French banks. Those banks are quite similar. One of them is mutualistic, the three other ones are strictly private. We studied only retail banking and distribution activities. They all regroup few thousand of employees (from 14 000 employees for the smallest and 92 000 employees for the biggest). This sector have always had particularly ambitious HR policies, especially in the training domain [4]. Thus they have for long time recruited candidates with a limited level of education, proposing them a wide range of internal training which would enable them to acquire product knowledge as well as integrate the culture specific to each of these firms and finally proposing them important career progression. Over the past twenty years, these French banks have gradually raised the level of diplomas required (recruitment of tellers is thus today at the BAC + 2 stage (2 years out of high school) but they retain a policy of meaningful training [4]. One of this bank (Bank B) is clearly in the position of leader in the use of e-learning tools. For example, they initiate a "E-learning project" since 1995 but we find comparable practices in all of them and they adopt the same kind of argumentation about e-learning: they develop it because they are convinced that it is a more efficient way of organizing training policies.

Banking sector is probably a bit in advance in use of e-learning tools. It is therefore probable that the use of "virtual classes" or "interactive television" that we about to mention below would have been impossible to analyze in all sectors of industry or services. This multi-case study therefore enables the analysis of the most advanced effects of E-learning and thus the anticipation of the effects which there may be in future in other sectors of the economy.

In order to provide the data necessary to achieve the objective of the study, formal interviews were conducted with Heads of the Training Department and main

facilitators of the system². The findings that emerged from interviews (16 different people) conducted are presented in the following sections. A number of advantages have been identified in the use of elite interviews for qualitative research, "valuable information can be gained from these respondents because of the position they hold in social, political, financial or administrative realms" [18]. Semi-structured interviews were used in this study facilitating the context and flow of the interview process [2], [28], enabling the researchers to deeply explore the key issues that emerged during the course of the interviews [5].

With regard to this study, we have benefited by the use of coding techniques and derived 13 code labels from the interview tapes and have spread the data between these different themes (see Appendix A). Throughout the coding analysis stage, the author made a number of changes to the list of codes; the coding stage was a interactive process through which patterns from the interviews emerged [20]. Initially, first-level coding was carried out as a data reduction technique summarizing large segments of data, and finally pattern coding was employed as a way of identifying core themes across the interviews [20]. The following sections provide a description of how the effectiveness of E-learning is envisaged and evaluated by the different players in these large French banks.

4 Empirical Findings on Socialization and E-learning Effectiveness

After logistical costs savings and technical difficulties, the third difficulty mentioned by our respondents has not already be investigated by the classic literature on elearning. In the four banks studied, it was mentioned that the FLSs had difficulty in supporting the fact that their employees were being trained in their place of work, most often on the computer with which they worked every day. A member of the Elearning project at Bank C confirmed this to us:

... We have received feedback that the FLSs are often on the backs of the employees when they are being trained on their computer within the agency itself. They often insist that the employees receive customers, that is that they work rather than get involved in E-learning.

² In each bank, we met the "Head of E-learning project" (4 peoples) and members of this project that this "head of the e-learning project" designate as members who know the best the content of e-learning tool and uses that are really done of it (6 people). In each Bank, we met "HR Managers" (4 Peoples) and when it was necessary to complete our informations, we met "head of the Training Department" (2 people).

All those people were principally asked about HR policies, especially training policies and tools used to develop those policies. A comparison between new tools of e-learning and classic training tools was systematically asked. As far as possible, interviewers try to collect informations based one real uses of tools and not only declarations of intentions, wishes, etc.

Considering that training is not directly productive work, the FLSs often consider this training time as time lost, at least from their point of view as head of a team responsible for meeting objectives. The mid-term benefits that this training may produce (including in terms of appointments with customers) would appear to be negligible compared with the immediate benefits of directly productive work of the customer advisers.

The paradox is even more dramatic than that. As is underlined by the same Head of Elearning project in Bank C:

...we often repeat to the FLSs that if the training were to take place "presentially" and not by E-learning, that would have been worse. The employee would have been absent from his/her place of work for a whole day or even more given the distances that he/she most often has to cover to reach the place where the training is given. But they reply that, at the limit, they prefer that. At least when the person is not there, he/she is not there. Here, what is difficult for them, is to say to themselves "AN Other is at the branch but he he/she is not working...", it is harder for them to accept to say "AN Other is not there, he is on training".

5 Discussion

This study is undoubtedly limited because empirical findings lay on only four cases of firms from only the banking sector. Nevertheless, this difficulty that the FLSs have in allowing an employee to be trained at the work place is a phenomenon which is:

- Recurrent. We have found it more or less clearly in all the organizations polled. They all make efforts to find solutions to overcome this difficulty,
- Paradoxical. While E-learning enables employees to be less absent from their place of work for they save the traveling time and may be trained by respecting the rhythm of their professional activity, the FLSs would often enough seem to prefer training in classroom form, that is to say which obliges the employees to travel and therefore be absent for a longer time
- Badly understood. The literature developed above would not yet seem to have analyzed this problem. To our knowledge, it has not even been envisaged as such and even less considered as one of the major limits to the effectiveness of E-learning.

It seems to us sufficiently important to attempt to better understand it. To do that, we compare it with two new elements: the observation shared by all those we spoke to that "full E-learning" is not an effective solution and the conceptual point of view of Dubar on training [10].

By affirming that E-learning proposes a more effective training model, the literature mentioned above would have us believe that it was intended to completely replace the classic training model in classroom form. In time, so as to be more effective, the organizations seemed then to centre themselves on "full E-learning", that is to say the use of the E-learning tools to publish the set of their training modules. Whereas all

our interviewees converge towards the idea that "full E-learning" is not an effective solution, the head of the E-learning project at Bank D affirms as follows:

...distance learning is only a complement to traditional training. It is in no way intended to be the complete substitute for traditional training.

As a matter of interest, these people nevertheless reject "full E-learning" often for different and at times contradictory reasons. For example, The head of the project at Bank B rejects "full E-leaning" for he considers that:

...certain training such as behavioral training cannot be envisaged by E-learning. It can only be done by classroom training...

while Bank A would seem to be satisfied with the planning of management training (which includes some behavioral training) by E-learning for its SLSs and its FLSs.

Despite a common rejection of "full E-learning", our respondents do not all support their viewpoint in the same way. We make the hypothesis (which has to be confirmed or denied by other works) that these divergences in point of view may be explained by the fact that those we interviewed still do not see the source of their difficulties clearly.

The Dubar conceptualization about socialization in training [10] develop above underlined that when an employee become a learner, he is socialized in a new group: the group of learners. He also lives a process of socialization different from his classic one, that means socialization in his team work. By analyzing the training process in this way, we immediately perceive that training by E-learning deprives the learners in large measure of this resource which the "group of trained individuals" constitutes. Isolated individuals, being trained asynchronously and with individualized contents, those trained by E-learning are doubtless less well supported in the process of the construction of their identity that those trained according to the classic method of classroom training. The importance of the "community of learners" is at times mentioned in literature [7], [13]. It is also sometimes understood by those we spoke to. The Head of the Training Department of Bank D said the following:

...The people who are undergoing training also have a need to rediscover themselves, to exchange ideas on their difficulties and that cannot simply be done on a forum. We have observed that, to be able to exchange ideas, people need to have got to know each other previously. One does not speak about one's doubts on a forum with strangers, people with whom one has not had a coffee during the break.

But this importance of the "group of trained individuals" would seem to us to be insufficiently well spelt out and taken into account. Indeed, it would seem to us that it is indeed this diffuse feeling that training is also a moment for the construction of the identity and creation of social bonding which causes our interviewees to reject "full E-learning" and not only because of problems of content which will more or less effectively disappear when faced with the constraints of this type of training. It is also doubtless, to a certain extent, for this reason that the FLSs have a problem supporting

the fact that members of their team undergo training at their place of work on their normal computer in the sight and knowledge of all their workmates. In fact, this situation creates an ambiguity (the employee is present but escapes from their line management control, he integrates the group of trained people while he is physically in the group of work colleagues) which may effectively put them in difficulty.

In the transformation of the social bond which E-learning training induces, the transformation of the pedagogical model is a type of transformation of the social bond (the works [21] and those we interviewed thus observe that E-learning transforms the role of the trainer) but this is perhaps not the main transformation. The evolution of the bond with the other trained persons and that of the bond with the working team are doubtless just as important.

6 Conclusion

E-learning is a new tool available to the HR Department to help better respond to the demands of its internal customers and help them make HRM really strategic. It is no more and no less than that. As with the other tools, it has to comply with the economic demands of profitability and the technical features of the computer networks of organizations. But, as is shown by the example of the French banks, mentioned above, on the condition that these aspects of effectiveness of a HR policy are envisaged serenely, E-learning reveals itself to be perfectly capable of meeting these challenges.

E-learning may also revolutionize the training model in force in organizations, but that is not the most current phenomenon and above all, it is not necessarily the most important. Indeed, the specificity of the tool – E-learning enables distance training, in asynchronous mode and on an individualized basis – should not have us forget that it is faced with the classic obstacles of training. This particular moment in the life of employees is not only a period when they acquire supplementary knowledge which will enable them later to be more effective in their work, it is also a moment when they redefine their identities, their bonds with third parties, these third parties being at the same time the learner colleagues or their work colleagues on a daily basis. By making the notion of "group of trained personnel" disappear in place and in time, Elearning poses a new problem to the trained and to the organizers of this training. The support of the group of trained people would, in fact, appear crucial for the optimal success of a training session. This collective dimension should be taken into account in the organization of E-learning so that its effectiveness is strengthened. An articulation between the classic mode of training and E-learning training would appear to be a channel of stimulating action to follow to improve the effectiveness of these tools and make HRM a really strategic entity.

References

- Banathy, B.: Designing educational systems: Creating our future in a changing world. In: Reigeluth, C.M., Garfinkel, R.J. (eds): Systemic Change in Education. Educational Technology Publications, Englewood Cliffs NJ (1994) 27-34
- Bouchard Jr., T.J.: Field Research Methods: Interviewing, questionnaires, participant observation, systematic observation, unobtrusive measures. In: Dunnette, M.D. (ed.): Handbook of Industrial and Organizational Psychology. Rand McNally, Chicago USA (1976) 363-413
- 3. Bowen, D.E., Ostroff, C.: Understanding HRM firm performance linkage: the role of the "strength" of the HRM system. Academy of Management Review, Vol. 29 (2004) 203-221
- 4. Brun-Hortado, E.: Tous commerciaux ? Les salariés de l'agence dans les transformations de la banque des années 1990 2000. (All salespeople ? The employees in the branches of banks in the years 1990-2000). Thèse en Sociologie, Université de la Méditerranée, (2005)
- Burgess, R.G.: Field Research: A sourcebook and field manual. George Allen Irwin, London (1982)
- 6. Cuban, L.: How Teachers Taught. 2nd Ed, New-York Teachers College Press (1993)
- 7. Davie, L., Wells, R.: Empowering the Learner through Computer-Mediating Communication. American Journal of Distance Education, Vol. 5 1 (1991) 15-23
- 8. Dejours, C.: Souffrance en France. Banalisation de l'injustice sociale. (Suffering in France. The banalisation of social injustice). PUF, Paris (1998)
- 9. DeRouin, R.E., Fritzsche, B.A., Salas, E.: Optimizing e-learning: research-based guidelines for learner-controlled training. Human Resource Management, Vol. 43 (2004) 147-162
- Dubar, C.: La socialisation. Construction des identités sociales et professionnelles. (Socialization. Construction of social and professional identity). Armand Colin, Paris (1991)
- 11. Federico, P.: Hypermedia environments and adaptative. Computers in Human Behavior, Vol. 15 (1999) 653-692
- 12. Harasim, L.: Computer Learning Networks: Educational applications of computer conferencing. Journal of Distance Education, Vol.1 1 (1990) 59-70
- 13. Harasim, L., Hiltz, S.R., Teles, L., Turoff, M.: Learning Networks: A field guide to teaching and learning on line. The MIT Press, Cambridge MA (1995)
- Holmes, G., Abington-Cooper, M.: Pedagogy vs Andragogy: A false dichotomy? The Journal of Technology Studies, Vol. 26 2 (2000) 50-55
- 15. Huddleston, P., Unwin, L.: Teaching and Learning in Further Education: Diversity and Change. Taylor and Francis Books Ltd, London (1997)
- 16. Kaplan-Leiserson, E.: E-learning glossary, Learning circuits site, http://www.learningcircuits.org/ glossary.html (2002) Accessed March 15th 2006
- Lawler, E.E.: From human resource management to organizational effectiveness. Human Resource Management, Vol.44 (2005) 165-169
- Marshall, C., Rossman, G.: Designing Qualitative Research. Sage Publications, Beverley Hills CA (1989)
- 19. McCormack, C., Jones, D.: Building a Web-based Education System. John Wiley and Sons Inc, New-York (1997)
- Miles, M.B., Huberman, A.M.: Qualitative Data Analysis. Sage Publications, Beverley Hills CA (1994)
- 21. Neville K., Heavin C., Walsh E.: A case in customizing e-learning. Journal of Information Technology, Vol.20 (2005) 117-129
- 22. Neville, K., Adam F., McCormack C.: Mentoring Distance Learners: An action research study. Tenth European Conference on Information Systems, Gdansk, Poland, 6-8 June 2002

- 23. O'connor, T.: Using Learning Styles to Adapt Technology for Higher Education. CTL Learning Styles Site, http://web.indstate.edu/ctl/styles/learning.html (1997) Accessed March 1st 2006
- Reigeluth, C.M.: Introduction: An Imperative for System Change. In: Reigeluth, C.M., Garfinkel, R.J. (eds): Systemic Change in Education. Educational Technology Publications, Englewood Cliffs NJ (1994)
- Relan, A., Gillani, B.B.: Web-based Instruction and the Traditional Classroom: Similarities and differences. In: Khan B.H. (Ed.): Web-based Instruction. Educational Technology Publications Inc., Englewood Cliffs NJ (1997) 41-46
- Ruël, H.J.M., Bondarouk, T., Looise, J.C.: E-HRM: Innovation or irritation. An explorative empirical study in five large companies on web-based HRM. Management Revue, Vol.15 3 (2004) 364-381
- 27. Selix, G.: Improving blended learning. E-learning, Vol.2 48 (2001).
- 28. Stone, E.F.: Research Methods in Organisational Behaviour. Goodyear Publishing, Santa Monica CA (1978)
- 29. Sulcic, V., Lesjak, D.: DE in Slovenia: Where are we? Ninth European Conference on Information Systems Bled, Slovenia, 27-29th June (2001) 1087-1097.

Appendix A

Template used for coding interviews

(Name of Interviewee). (Name of Interview).

This section was used to collect main informations about characteristics and evolutions of markets, technologies, etc., global strategy of the firm, HR politics. It was also used to ascertain each interviewee's background, including their level of understanding and use of e-learning tools, objectives and results.

Significant points made

This section summarises the important relevant points made by the interviewees.

Interview coding

The main themes extracted from the interviews were organized based on the following:

HRM human resources management considerations

TP training policies considerations

DDC design and development considerations

support and commitment in the implementation of e-learning tools

FF features and functionality of e-learning tools

L limitations in use of e-learning tools

TC Technical complexities involved in development and use of e-learning tools

E Effectiveness of e-learning tools

EE Evaluating the effectiveness of e-learning tools

F Future developments of e-learning tools

EDW Effects on dynamic of work shift

FLS First Line Supervisors reactions to use of e-learning tools RT Roles Transformations linked to use of e-learning tools