# Defining the individual within ICT learning settings Matters of identity, biography constructions and communities of practice

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#### **Abstract**

Both the individual, and consequently individual learning, and ICT learning settings are regarded as integral to the development of lifelong learning. We examine how the individual copes with the adversities of modernity and how one's identity is reconstructed through one's biography. We explore matters of the learner's identity taking into consideration various facets of the societal approach to learning. We take into consideration the challenges set by technology-mediated learning, the solutions already in place, and reach the conclusion that a community of peers is the most promising setting for a truly individualised education.

**Key words:** Technology-mediated learning, lifelong learning, biography constructions, communities of practice

## 1. Introduction

Over the last years lifelong learning has become a watchword in the educational community and policy-making circles, as is enunciated, for instance, by the European Commission's Communications and Journals. The same holds true for ICT. Technology-mediated learning - I shall henceforth refer to the various types of computer-mediated learning, e-learning and ICT in general as such - claims efficiency in enhancing the learning process, overcoming obstacles of situated learning and bringing the individual to the spotlight. This individualisation process in education is gaining momentum. Individualisation is a process which, although often constructed as an outcome of neo-liberal economics resulting in the privatisation of public and social life, is also viewed as integral to processes of modernisation. However, the centrality of the individual and individual learning to the development of lifelong learning is not without controversy. Rees et al (1997, cited in Edwards et al. 1998) argue that it can be used to mask the incomplete nature of information available and the unpredictability of future trends. Keep (1997, ibid) further claims that it ignores the unequal, structured distribution of opportunities for further development, as individuals are given the responsibility, but not the power to affect change and

maintain control over their own destinies. On the other hand, from a structural point of view, media-based environments promote what Giddens (1990, p.21) calls the "lifting out of social relationships from local contexts of interaction and their restructuring across time and space", the dis-embedding, that is, of people and things from time and space. So how does the adult individual cope with this dissociation, the instability of the environment, and how does he/she define him/herself within an ICT learning setting?

# 2. A theoretical framework

## 2.1 Practice, habitus and opportunities

"At the beginning there was action", to quote Goethe's Faust. Combined action, in turn, creates practice, a notion examined by Bourdieu among others. For Bourdieu practice is located in space and, more significantly, in time. Time is in fact both a constraint and a resource for social interaction. More than that, practice is 'intrinsically defined by its *tempo*'. Similarly, and more immediately, interaction *takes* time—and it occurs in space. "Practice as a visible, 'objective', social phenomenon cannot be understood outside of time/space". We shall revisit this interdependence at a later point in the essay. We must keep in mind, though, that actors are not without the circumstances they confront; rather, they are an integral part of those circumstances, which actually shapes their social identity.

Alexander (1996, cited in Tella et al. 2001) takes the notion one step further and speaks of "good practice". Applied to pedagogy it "can never be singular, fixed or absolute, a specification handled down or imposed from above (of teachers or students) ... it is plural, provisional and dynamic".

A shared body of practices, of dispositions and generative schemes constitute – grosso modo -what Bourdieu calls a *habitus*. The habitus – which he often identifies with *hexis* – can be regarded as embodied in individuals and as a collective, homogeneous phenomenon, mutually adjusted for and by a social group or a class. In the first case, habitus is acquired by individuals through experience and explicit socialisation in early life. "Life and subsequent experience is then a process of adjustment between subjectivity (habitus) and objective reality".

This last observation brings us to the notion of the 'subjective expectation of objective probability'. Bourdieu claims that there is an adjustment between the individual's hopes, aspirations, goals and expectations, on the one hand, and the objective situation in which they find themselves by virtue of their place in the social order, on the other. This position is echoed by Alheit (1992, Alheit and Dausien 1996) who states that "our biography does not entail every thinkable opportunity; however, there are opportunities available within the structurally imposed limits. It falls upon one to decipher the "sense surplus" of one's life".

These opportunities, however, are not equal, nor equally accessible to all, as as we have noted in the introduction. This was first stated in the theory of the *noncontemporaneity of the contemporary*. Art historian Pinder's concept focuses on the notion of the generation. Pinder diversifies this notion, as it was approached in the first half of the 20th century, postulating the parallel condition of generations on a common social and historical background. Whereas Dilthey understands the phenomenon of contemporaneity as the experience of the same cultural developments and socio-political reality -not so much a chronological factum but a similarity of the historical determination at hand, Pinder stresses that there actually live different generations within the same timeframe; a generation is identified by the unity of its targets, the similarity of its sense of life and reality, i.e. it forms a qualitative entity (Beck, 1997). So, one tries to climb up the social ladder, according to Bourdieu, to increase one's opportunities.

### 2.2 The new social environment

In advanced countries a full cycle of secondary education is now commonplace. After that, persons regarded as adults would engage in organised educational processes, such as tertiary education (Tuijnman, 1999). Yet in the last years adult education has broadened its horizons and the concept of lifelong learning is now prevalent. Despite the difficulty of providing a unanimous definition, there is consensus in categorising it as 'formal, non-formal and informal learning' (E.C. Communication, 2001)), that is, learning within education and training institutions, leading to recognized diplomas and qualifications, alongside the mainstream systems of education and training and not necessarily intentional learning respectively. Moreover, the individual needs face the "erosion of traditional lifeworlds" and the "disappearing of "normal" life course scripts" (Alheit, 1999). Alheit (1995) coins the term of *biographicity* to argue that individuals try to adapt using biographical reconstructions.

Biographicity means that we can always reshape our lives in the context we live in and that we experience these contexts as prone to representation and construction"(p.15).

Although starting from a different point of interest, his taxinomy can aptly be applied with regard to learners. Individuals can be seen as (i) a "networker", the type that tries to find a replacement of his/ her former lifeworld, constructing a new network, 'new traditions, new obligations and new certainties';(ii) a "patchworker", who invents 'biographical constructions against the threatening consequences of social differentiation and the loss of social integration in a traditional milieux' (ibid), alternating between or even among milieus to cope with the new situation; (iii) a "designer", biographical freelancers, if I may call them so, who 'stage and aestheticise their own biography'. They all do habitual reconstructions in terms of Bourdieu's habitus concept, reconstructions dependent on experience, which in turn

produces new experience. And this experience, according to Beck's *own life* theory (1997), this "reflexive modernisation" entails not only our accomplishments, but also our "non-decisions, missteps and failures" (ibid, 12). So, if biographisation indicates the necessity of dissent and the shaping of one's own biography, biographicity means, as a key qualification, the dealing with biographical discontinuity in an unstable world.

According to Alheit, it falls upon adult education -which enables biographical learning- to use the sense surplus meaningfully. He discerns three levels of educational stakeholders and shapers, the macro-, meso- and microlevel, which correspond to the three types of lifelong education. He is convinced that learning societies are not characterised by changes in the macrolevel of governments or social systems, nor in the microlevel of individual actors, but in "the mesolevel of learning environments", that is within institutional and non-institutional communities. He sees this mesolevel as a manifestation of Habermas' (1962) *Öffentlichkeit*, the "public sphere", or Gramsci's (1977) "civil society", since they are, or should be, based upon consensus among participants. He argues that "there is increasing evidence to suggest that it is the individuals themselves that have to create their own action environments on their own terms first of all".

## 2.3 Theories of learning

At this point it would be useful to see how this concept of participation and interaction has evolved in pedagogy. Vygotsky sees interaction as leading to the construction of *joint* understanding (Rogoff, 1990, p.72, italics added). Respectively, people for Piaget are providers of social information, which the individual then proceeds to categorize independently, while social information for Vygotsky is a tool for cognitive development shared among people; and it is this interaction, and social practice which leads to cognition in the first place. Von Glasersfeld (1992) uses a psychological approach to show the importance of interaction. According to the psychoanalytical approach, our psychic organ is formed by urges, needs, desires, and the perturbations caused by the conflict between our desires and those of others or the social entourage. Interaction and perturbation are linked by von Glasersfeld who suggests that, since interaction is a source of perturbation, it constitutes a driving force for cognitive development. However, he still focuses on the individual rather than society. Bauersfeld (1988) carries this notion of interaction beyond the individual way of cognitive construction and promotes the notion of 'negotiation' whereby personal knowledge is contrived through an interactive filter. For him perturbations are not clearly set out but may also be caused by implicit meanings. They, in turn, generate a process of 'mutual adaptation' of the participants of a microculture such as a classroom (cited in Cobb, p.138-9). Bauersfeld seems to be somewhere in between constructivists and socioculturalists. The latter claim that negotiation is a process of cooperation whereby meaning is jointly constructed (Newman et al, cited in Cobb, p.139). The teacher, in this case, is a mediator, helping students grasp a broader, socially established meaning, not just a meaning within the confines of a classroom. This echoes Leontev's sociocultural approach to appropriation as well as Vygotsky's mediation theory.

Rogoff, also transgressing the fundamental differences of the two trains of thought – though more akin to the situational - denotes the key role of intersubjectivity, that is the a common frame of reference in social interaction (p.72). This intersubjectivity may be expressed by means of shared thinking – presumably among peers. This cooperational, shared activity would greatly facilitate socialization and cognition (p.80-1).

Von Glasersfeld is interested in a process which is viable thus finding the happy mean between symbol-processing and situated theories. Yet the differences between radical and social constructivism remain. Whereas radical constructivism claims that information is tested against experience to make personal meaning, thus placing the axis on the individual, social constructivism promotes the notion of a collective agreement on meanings resulting from social processes within a cultural and historical context, a product of negotiation among the members of the community. He further stresses the importance of community of practice as 'an analytic tool for understanding knowing and learning' (p.16). He is straightforward when he says that

"In communities, knowledge can no longer be considered as a property of individuals that can be quantified, assessed, or transferred ad libidum. Rather knowledge is distributed, situated in both physical, psychological and social contexts' (p.16)

This idea of co-participation and mutual agreement is echoed in Lave and Wenger (1991). Their position is clear

'A learning curriculum is essentially situated. It is not something that can be considered in isolation, manipulated in arbitrary didactic terms, or analysed apart from the social relations that shape legitimate peripheral participation. A learning curriculum is thus characteristic of a community' (p. 23).

And by community they mean a community of practice where there is a set frame of relations and shared values which evolve through time, rather than a monolithic, unaltering structure. But this community is not uniform. For instance, science teachers are not necessarily participants in the community of practice of scientists. They are participants in the community of practice of science teachers, and with this comes associated knowledge. So, actually we have a compilation of communities which co-participate in the structuring of the whole. Practice, and therefore action, leads to knowledge.

The choice of pedagogy or of its manifestation, the curriculum, 'is not innocent' as Bruner puts it. It is primarily a matter of ideology. It reflects the ideas and beliefs

present in different cultures and our view of what an educated person is, to put it in terms of the Alexander Framework. Bruner goes on to say that

'it is crucial for the pedagogical theorist and teacher alike to help [the learner] to become more meta- cognitive -to be as aware of how she goes about her learning and thinking as she is about the subject matter she is studying. Achieving skill and accumulating knowledge are not enough. The learner can be helped to achieve full mastery by reflecting as well upon how she is going about her job and how her approach can be improved' (Bruner, 1996, p.18)

## 3. The new, virtual environment

## 3.1 Time, space and 'scapes'

The rapid expansion of virtual educational settings brings forth a change in the way we see not only matters of pedagogy, but time and space itself. Unlike Bourdieu, Giddens describes a process which "tears space away from place by fostering relations between 'absent' others, locationally distant from any given situation of face-to-face interaction" (Giddens 1990, 18). In other words, time and space become more abstract and the relationships between them diminish. This distantiation and discontinuity of time and space does not refer only to geographical place – and time-but to social space as well. Yet, instead of treating this as another obstacle the individual must overcome, theorists (Harvey, 1989, cited in Kynaeslahti, 2003) emphasize the "global simultaneity" that information and communication technologies have brought about. Cutler (1995, cited in Tella et al, 2001) claims that traditional communities based on location are fading away and distributed communities inhabited by distributed selves of persons in cyberspace keep replacing them.

Drawing upon the anthropological concept of "scapes", a tool to investigate a variety of phenomena which link people from different localities, cultures and nations together, Kynaeslahti (2003) proposes the term of "eduscape" to describe a "space of education which has been divorced from its context, flowing through technologies, to be taken in use by people within their own context". This is the playground, if I may say so, of virtual classrooms.

## 3.2 Learning in a virtual classroom

There have been several debates on whether technology-mediated learning suggests a new pedagogy or merely a new method for the delivery of knowledge, which would lead as far afield. There have also been many attempts to create on-line material such as *Classroom 2000*, *Camstasia Studio*, *E-Chalk*, *Lecturnity*, *MIT Lecture Browser* and the Mistral Project of the Graz Technical University to name but a few (Safran et al, 2007). One can even find Berkeley lectures on Youtube. However, they are merely

providers of material, not unlike a typical frontal lesson. There is also great support for LMS (learning management systems) which give learners the possibility to communicate through forums and e-mails (Tong, 2004).

It would seem that we are overlooking a critical aspect of learning, albeit in a virtual setting. The interaction that takes place is real, not simulated or virtual. It is a shared or joint interaction "based on a series of individual(ised) and autonomous decisions each participant has to perform in order to follow up what precedes the communication act" (Tella et al, 2001).

Following his 2001 *Dissemination* project, Mayes (2002) proposes the creation of new courseware or databases comprised of recorded questions, answers and comments of previous tutors and learners, which can now be put into effect and expanded with the use of Web 2.0 tools. Thus, it shifts the focus from the traditional subject matter and the central role of the teacher towards learning within a community of practice, thereby enhancing the learner's motivation and self-esteem.

Moreover, Brindley et al (2009) drawing upon Siemens' *connectivism* theory, report that collaborative learning processes, utilising the web tools available with live interaction being the focal point, have proven most effective, even in course where assessment was not a driving factor. They conclude that in such an environment "learners are not passive receptacles but are active in their process of knowledge acquisition as they participate in discussions, search for information, and exchange opinions with their peers".

## 4. Conclusion

We have stressed the importance of participant-oriented education and how it is enabled by the flexible ways of learning that technology-mediated learning can provide. The qualifications of learners – acquired in different phases of biography - increasingly resemble a "mosaic". However, the practice of belonging to a group of learners and the experience of using computer-mediated tools helps us create a new competence of a transformative, virtual community of peers (Wenger, 2000) and the experience of deterritorialized yet interactive and negotiative learning. To paraphrase Schön (1983), who saw teachers as "reflective practitioners" observing and analysing problematic situations to produce knowledge-in-action, we now have the learner-practitioner who dialectically expands his/her knowledge. So we come to a point where a trans-local and trans-temporal setting becomes the new "locus" of a community of peers, each contributing their own opinions, their own successes, even their own failures, in other words aspects of their "own life" in Beck's sense, thus creating new meaning and enriching each other's biography. This, in turn, becomes to them at least - the new habitus.

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## Περίληψη

Το άτομο μεμονωμένα, και συνεπώς η εξατομικευμένη μάθηση, και τα μαθησιακά περιβάλλοντα ΤΠΕ θεωρούνται καίρια στην ανάπτυξη της δια βίου μάθησης. Η παρούσα εργασία εξετάζει πώς το άτομο αντιμετωπίζει τις αντιξοότητες της σύγχρονης εποχής και πώς αναδομείται η ταυτότητα κάποιου μέσω της βιογραφίας του. Διερευνά, επίσης, θέματα που άπτονται της ταυτότητας του εκπαιδευόμενου υπό το πρίσμα της κοινωνικής προσέγγισης της μάθησης. Λαμβάνουμε υπόψιν τις προκλήσεις της τεχνολογικά υποστηριζόμενης μάθησης, τις λύσεις που εφαρμόζονται ήδη, και καταλήγουμε στο συμπέρασμα πως μια κοινότητα ομοτίμων χρηστών είναι το πιο πρόσφορο περιβάλλον για μια πραγματικά εξατομικευμένη εκπαίδευση.

**Λέξεις-κλειδιά:** τεχνολογικά υποστηριζόμενη μάθηση, δια βίου εκπαίδευση, βιογραφικές δομές, κοινότητες πρακτικής