

« Didactics, education, collective intelligence, new environments,
training and learning methods.

New horizons in education, in training and in research. »

Call for papers for themed issue of the construction of knowledge and
training system

3rd and 4th December 2015
ESPE Strasbourg

This call for papers is part of the confluence of several disciplines and fields: Information Science and Communication, Educational Sciences and Didactics, Computer Science and Digital Technologies, work-focused analysis within different professional contexts. It is clearly assigned to multi-referenced view (Arduino 1993), a multi-disciplinary, interdisciplinary and broad-based approach.

Supported by the active members of IDEKI Network ((Information-Education-Didactics-Culture-Innovation-Engineering), the research community encompassing practices, and outline the compartments fields of educational research, training, teaching and education, (Lebeaume, 2014).

It is organized in accordance with the key educational issues of LISEC (Laboratoire Interuniversitaire des Sciences de l'Education et de la Communication) which stands for the research in Educational Science and Information Science and Communication focused on the learning spaces, the education and training schemes. "The research in Education has to reinvent construction areas, building methods and learning spaces" (Chamel, 2013). LISEC develops also synergies between university laboratories, learned societies, associations and professional circles.

Such colloquia, designed as workspaces, may transcend category-based and institutional divides focusing on joint research objects. They attempt to connect research to the professional activity dimensions *in order to share knowledge* by crossing the guidelines in didactic(s): the epistemological, praxeological, educational and psychological. « The idea of the need to take into account multiple spaces and different times in construction of knowledge, is more so than the requirement of the research than the development of professional knowledge » (Morandi, 2013).

For Information Sciences and Communication and the Educational Sciences, the major concerns in communities of practice intersect the types of collective intelligence.

This may designate intelligence working groups (Levy, 1997); community's cognitive skills related to the multiple interactions within the group (Rogalski, 2005); an approach that may consist of a contribution to knowledge organization, building knowledge and skills (Frisch, 2014).

The social web and the consumer-centred paradigm in the mid-2000s, led the web designers to consider the information systems relating to the individual's involvement or participation (collaborative indexation, shared and collaborative research...).

« This way the user has the opportunity to develop knowledge resources throughout a group setting or collective context. This is the era of interaction and action rather than just document-based consultation » (EL Hachani, 2014).

It involves conducting the research in Didactics and Educational Sciences and the relationship with the human contact professions

Contemporary forms of post humanity lead us to define the concept of "human contact profession " (Paragot, 2013), in particular the extension of the expression « Impossible Professions » in accepting the difficulties, the unthought related to the intersubjectivity as constitutive elements in every profession as much as the media seeks to help users to embark on relationship with the object (knowledge, common good, care).

We must also consider the interaction between paradigms in other scientific disciplines such as knowledge organization in Information and Communication Science. The developments in the field of digital technologies have an impact on the evolution of indexing models indeed, organizing contents, digital documents, and their uses. (Sidhom, 2013).

Societal transformations related to digital evolution, successive reforms and legislative changes have a significant impact on the professional sectors and their practices which relates on the issue of how these changes should be considered for professionals in charge of the structures involved.

The research, education and training areas see their framework of intervention expanded and at the same time the diversification of knowledge networks (places) and building methods of knowledge create a situation that oblige them to design new training schemes.

The 2015th symposium is part of the two previous symposia and can be seen as key moment of a third movement.

In 2012, the first symposium called "Didactics, human professions and their relevance: new spaces and training schemes in question, new horizons in education and research: research objects and practices in hatcheries", focused its work **on emergences**.

The second symposium held in 2013 under the theme of "Didactics and human profession: new spaces and training devices in questions, new horizons in education and research: research objects, education and problematized, tensioned and redesigned training " placed the topic on **the pathways**.

In two years, we raised the issue of collaborative working as intended by IDEKI⁴, we nourished and studied. We set the issue tools and / or techniques, and on the other hand we enabled reflective postures, with the professional challenge of building something socially constructed and shared. (Zapata, 2014).

It all goes back to our contribution to new professional paradigms, new constructions of knowledge and training schemes interlinked with the research.

We elicited new concepts (oriented activities, accentuated professionalism, interconnected skills, info-diversity reflective effectiveness...) and developed "models" and modelling to think and to act (implementation /non-implementation, integration of interactive digital image in teachers' practices, from the inclusion of the concept to inclusive practices, teaching methods and accentuated professionalism...).

Innovation, and not only mediation, as process of creating, in terms of new input, activities, concepts and models were initiated here. (Frisch, 2014).

These two movements will always be presented at the future symposium. With this conference we would like to open on a third movement by focusing on the construction of knowledge and innovative training and research devices with the intellectual and digital technologies and integrating an intercultural dimension. We analyse and are looking into the development of new learning areas that are also in line with the guiding situations of work »⁵ (Reuter, (Dir.) 2013).

We wish to emphasize **the successful construction**. We therefore propose this new title: "**Didactics, Human Professions, Collective Intelligence: construction of knowledge and teaching devices**".

And the research issue is: **what kind of knowledge construction, learning situations, education and training schemes are required to build a collective intelligence and/or with the digital technology?**

Taking into account the constant changes, we can therefore ask....

1. Effectiveness / appropriation

What forms of effectiveness is needed? A performative, procedural, metacognitive or reflective effectiveness? (Benabid-Zarrouk, 2015). Forms of assessments based on the performative effectiveness suited the human professions v/s the production professions. What issue of temporality is required to integrate effectiveness into professional skills?

What are the outcomes of appropriations? How does each of us build his own professionalism? With what kind of media? Which forms of support are most appropriate, which working methods and which kind of documentation? And through which combination of artefacts"? (Marquet, 2013).

1. The relationship between school and society

What is the relationship with knowledge at school?

False pretences about learning but the extraordinary human adventures related to the authentic relationship to real knowledge. What sort of anthropology of what is learnt at school after the digital technology wave? (Levine & Develay, 2003). The relationship to knowledge and the process of learning and the needs of learners' process in the current learning situations...

What is the society's relationship with knowledge? Following the launch of the « slow food » the « slow learning »? Out of noises, info-service in order to spark different forms of debates, comprehension, understanding and otherness.

Which migration of traditional knowledge for the society? Habits should be (re) built in the relationship with oneself, the relationship to knowledge, the relationship with other people, one's relationship to the world (Morin, 2000).

1. Constructing interconnections

What will be the role for the interdisciplines: science of education and information-communication in society? Can these categories, meta-knowledge, rhizomes (Deleuze, 1980), conceptual fields (Vergnaud, 1980), concepts (Astolfi, 2008), new models (Hassan & Lahanier-Reuter, 2013; Galluzzo -Dafflon, Rosine, 2015) be developed to clearly increase renovated and effective connections.

1. Communities and intercultural practices

Which communities of shared and shareable practices in a cultural and intercultural dimension? How does the concept of Media of technical-cultural interactions (Debray, 2001) and media spheres can help think of new community or societal levels?

In which way a « didactic of Information-Documentation » (Frisch, 2014), « the document in the light of the digital environment » (Pedauque, 2006), « a documentation of educational practices » (Perla & Schiavone, 2013), « new digital media » (Gossin, 2013; Piquard-Kipffer, 2010) and « information literacy » (Maury, 2013) can contribute renewing teaching practices?

These symposiums provide recurrent orientations and these issues will be crossed and followed during our work sessions.

The first orientation is « IDEKI new space and new challenges to build and innovate in Didactics ». Constructs of education, concepts, models and currently modelling.

The second is « IDEKI new space and new challenges for the transition from a culture of information to a knowledge construction and a knowledge organization ».

The third « IDEKI new space and challenges for a tailored didactic and accentuated professionalism to people with learning difficulties (in particular with digital technology).

Bibliography

Ardoino, Jacques (1993). « L'approche multiréférentielle (plurielle) des situations éducatives et formatives ». *Pratiques de formation-analyses*, 25-26.

Benabid-Zarrouk, Sandoss. (Dir.) (2015). *Estimer l'efficacité en éducation*. (pp.69-104). Paris : l'Harmattan, 231p.

Chalmel, Loic. (2013). Discours d'introduction au colloque « *Didactiques et métiers de l'humain. Nouveaux espaces et dispositifs en question, nouveaux horizons en formation et en recherche : Objets de recherche et pratiques « en écloséries »* ». (pp. 17-19). Paris : L'Harmattan.

EL Hachani, Mabrouka. (2014). Les dispositifs collaboratifs en contexte professionnel : Mutualisation et unités documentaires, entre dynamique collective et réflexion individuelle. In Muriel Frisch (Dir.). *Le réseau IDEKI. Objets de recherche d'éducation et de formation émergeants, problématisés, mis en tension, réélaborés* Paris : L'Harmattan.

Frisch, Muriel (Dir.). (2014). « Conclusion » In *Le réseau IDEKI. Objets de recherche d'éducation et de formation émergeants, problématisés, mis en tension, réélaborés*. Paris : L'Harmattan.

Frisch, Muriel (2014). « Didactique de l'information-documentation : épistémologie plurielle et statut des savoirs en question » In FRISCH, Muriel (Dir.) *Le réseau IDEKI. Objets de recherche, d'éducation et de formation problématisés, mis en tension, réélaborés*. (pp.169-203). Paris : l'Harmattan. Préface de Joel Lebeaume.

Galluzzo-Dafflon, Rosine. (2015). Organisation de la journée d'étude « Modèle et didactiques » à l'université de Nantes en janvier 2015.

Gossin, Pascale. (2013). Le manuel numérique, un nouveau concept ? In Frisch Muriel (Dir.) *Didactiques et métiers de l'humain et de la relation. Nouveaux espaces et dispositifs en question. Nouveaux horizons en formation et en recherche : objets de recherche et pratiques « en écloséries*. Paris : L'Harmattan (p. 35-45).

Hassan, Rouba, Lahanier-Reuter (2013). Des modèles aux pratiques et des pratiques aux modèles. *Recherches en Didactiques*. Les Cahiers Théodile, déc. 2013, n°16.

Lebeaume, Joël (2014). Préface in Frisch, Muriel (Dir.). *Le réseau IDEKI. Objets de recherche d'éducation et de formation émergeants, problématisés, mis en tension, réélaborés*. Paris : L'Harmattan.

Levy, Pierre (1997). *L'intelligence collective : pour une anthropologie du cyberspace*. Paris : La découverte.

Lévine, Jacques, Develay, Michel (2003). *Pour une anthropologie des savoirs scolaires. De la désappartenance à la réappartenance*. Paris : ESF.

Marquer, Pascal (2013). Enseigner les TIC : innover sans se tromper est-ce possible ? En ligne :

<http://webcom.upmf-grenoble.fr/lodel/innovacs/index.php?id=136>

Maury, Yolande. (2013). De la culture de l'information à la culture informationnelle : au-delà du « penser, classer, catégoriser ». Dans M. Frisch (Dir.). *Didactiques et Métiers de l'Humain et de la Relation. Nouveaux espaces et dispositifs en question, nouveaux horizons en formation et en recherche : objets de recherche et pratiques « en écloserie »*. Paris : Ed. L'Harmattan, (p. 125-148).

Morandi, Franc (2013). Préface in Frisch, Muriel (Dir.). (2013). *Didactiques et métiers de l'humain et de la relation. Nouveaux espaces et dispositifs en question, Nouveaux horizons en formation et en recherche : Objets de recherche et pratiques « en écloserie »*. Paris : L'Harmattan.

Morin, Edgar. (2000). *Les sept savoirs nécessaires à l'éducation du futur*. Paris : seuil.

Pedauque, Roger T. (2006). *Le document à la lumière du numérique*. Caen : C&F éditions.

Paragot, Jean-Marc (2014). *Parcours d'un responsable de formation. Du métier à la formation*. Paris : L'harmattan.

Paragot, Jean-Marc (2013). « Invariants professionnels des métiers de l'humain et professionnalité accentuée : comment les situations d'inclusion à l'école obligent-elles à une forme d'accentuation de la professionnalité enseignante ? » In Frisch, M. (Dir.), *Didactiques et Métiers de l'humain et de la relation. Nouveaux espaces et dispositifs en question, Nouveaux horizons en formation et en recherche : objets de recherche et pratiques « en écloserie »*. (pp.189-210). Paris : l'Harmattan. Avec Préface de Franc Morandi.

Perla, Loredana, Schiavone, Nunzia. (2013). *Documenting at school: the research training "Scrittura Bambine" between transmedia storytelling and mapping*. Proceeding of SIREM 2013 International Conference "ICT in Higher Education and Lifelong Learning" – Bari, November 14-15.

Piquard-Kipffer A. (2010). A Writing Software for Dyslexic and SLIs Children on a PC Tablet. *Finnish Center of Excellence in Learning and Motivation* - (Finlande, Jyväskylä). 15 janvier 2010.

Reuter, Yves (Ed.). (2013). *Dictionnaire des concepts fondamentaux des didactiques*. Bruxelles : De Boeck.

Rogalski, Janine (2005). « Le travail coopératif dans la résolution des tâches collectives ». In Lautrey, J., Richard, J.-F., *Traité des sciences cognitives : l'intelligence*. Paris : Hermès, pp.147-159.

Sidhom, Sahbi (2013). Conjoncture des processus d'indexation et de gestion des connaissances : vers la réindexation par les usages. In Frisch Muriel (Dir.) *Didactiques et métiers de l'humain et de la relation. Nouveaux espaces et dispositifs en question. Nouveaux horizons en formation et en recherche : objets de recherche et pratiques « en écloserie*. Paris : L'Harmattan, (p.85-125).

Vergnaud, Gérard (1990). La théorie des champs conceptuels, *Recherches en didactique des mathématiques*, vol.10, n°2-3, pp.133-170.